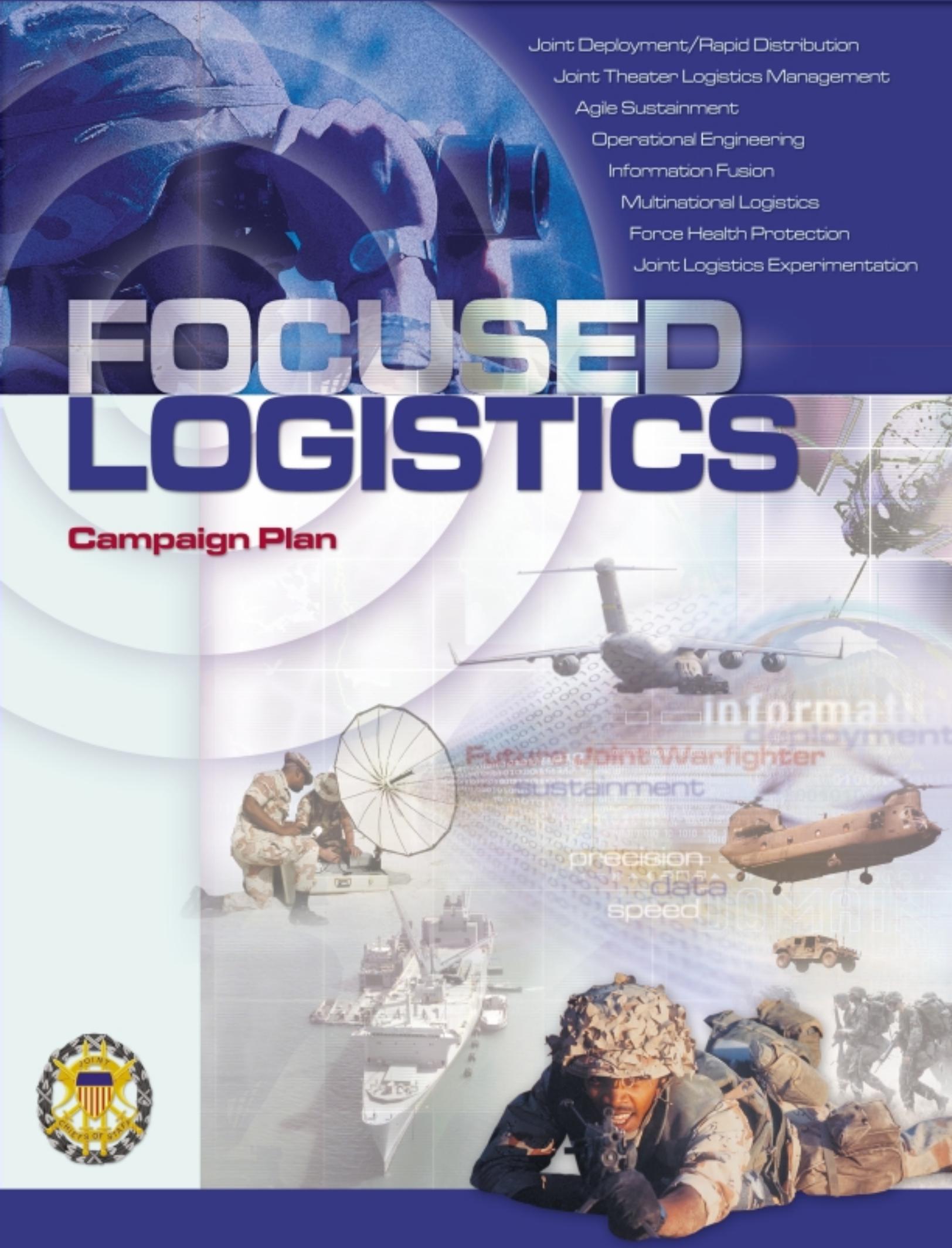


- Joint Deployment/Rapid Distribution
- Joint Theater Logistics Management
- Agile Sustainment
- Operational Engineering
- Information Fusion
- Multinational Logistics
- Force Health Protection
- Joint Logistics Experimentation

FOCUSED LOGISTICS

Campaign Plan





Focused Logistics
Focused Logistics
Focused Logistics
Focused Logistics



Foreword

On 11 September 2001, terrorists attacked our citizens, our institutions, and our way of life. We received a brutal, bloody reminder that a strong military is vital to preserving and defending our freedom.

Logistics is the foundation for a strong military. From the national to the tactical level, logistics is essential to our nation's ability to project combat power. Even though no other country can match our capabilities to move and sustain military forces, our capabilities don't fully meet all the challenges we face today or will face in the future. Of necessity, our operation planning is becoming more time-sensitive, and our logistics planning and execution must become both more streamlined and more precise.

This Focused Logistics Campaign Plan lays out our "logistics azimuth" for a changing strategic and operational environment. It addresses how we must transform our systems, processes, and organizations to support combatant commanders across the full spectrum of military operations. This Campaign Plan identifies key challenges—challenges we face today, not in the distant future—along the path to focused logistics. It envisions desired operational capabilities to meet the challenges, identifies strategies for attaining the capabilities, and describes actions to implement the strategies.

We must win the war on terrorism while rapidly improving our joint warfighting capability and laying the foundation for defense-wide transformation. This Campaign Plan articulates an integrated approach in which logisticians and operators work as partners to provide combatant commanders the operational capabilities and benefits of focused logistics.



G. S. HOLDER
Vice Admiral, USN
Director for Logistics
The Joint Staff



Table of Contents

Foreword	1
Table of Contents	3
Introduction	5
Background	7
Building Blocks	11
Joint Deployment/Rapid Distribution	17
Joint Theater Logistics Management	27
Agile Sustainment	33
Operational Engineering	43
Information Fusion	47
Multinational Logistics	55
Force Health Protection	61
Joint Logistics Experimentation	69
Keeping Focused Logistics on Track	75



Focused Logistics

Campaign Plan

Focused Logistics means doing logistics **right**.

We will provide the future joint warfighter

- the **right** personnel, equipment, supplies, and support
- in the **right** place
- at the **right** time and
- in the **right** quantities

across the **full spectrum** of military operations.

- **Full Spectrum Support for the Future Joint Warfighter**



Introduction

Campaign Plan Purpose

This campaign plan articulates a comprehensive, integrated approach for achieving full spectrum support for the future joint warfighter.

Joint, service, and agency leaders at all levels should use this plan to guide the continuing transformation necessary to achieve the full potential of focused logistics.

Overview

This plan describes how we will achieve the full potential of focused logistics through revolutionary changes to information systems, reengineered processes, innovation in organizational structures, and advances in transportation technologies.

The first section provides background information on focused logistics and how it relates to the Joint Vision and overall defense transformation.



The second section describes two building blocks for focused logistics—**Logistics Transformation** and the **Future Logistics Enterprise**. These initiatives represent a paradigm shift from a supply-based logistics system to a leaner, more agile, distribution-based logistics system.

The next seven sections describe significant challenges we face along the road to focused logistics: **joint deployment/rapid distribution, joint theater logistics management, agile sustainment, operational engineering, information fusion, multinational logistics, and force health protection**. Each section addresses five key questions:

- What's our challenge?
- What's our vision?
- What's our strategy?
- What have we already done?
- What are we doing now to shape the future?

The next section describes the role of joint logistics experimentation in achieving the full potential of focused logistics as well as the other desired operational capabilities of Joint Vision.

The final section describes the process for keeping focused logistics on track by managing change proactively, obtaining resources to implement our programs, demonstrating meaningful progress in our programs, and sustaining support within the logistics and operations communities.

Background

- **Focused Logistics** is the ability to provide the joint force the right personnel, equipment, supplies, and support in the right place, at the right time, and in the right quantities, across the full range of military operations. This will be made possible through a real-time, web-based information system providing accurate, actionable visibility as part of a common relevant operational picture, effectively linking the operator and logistician across joint forces, services, and support agencies. Through transformational innovations to systems, processes, and organizations, focused logistics will provide the joint warfighter with support for all functions.





Background

Joint Vision and Transformation

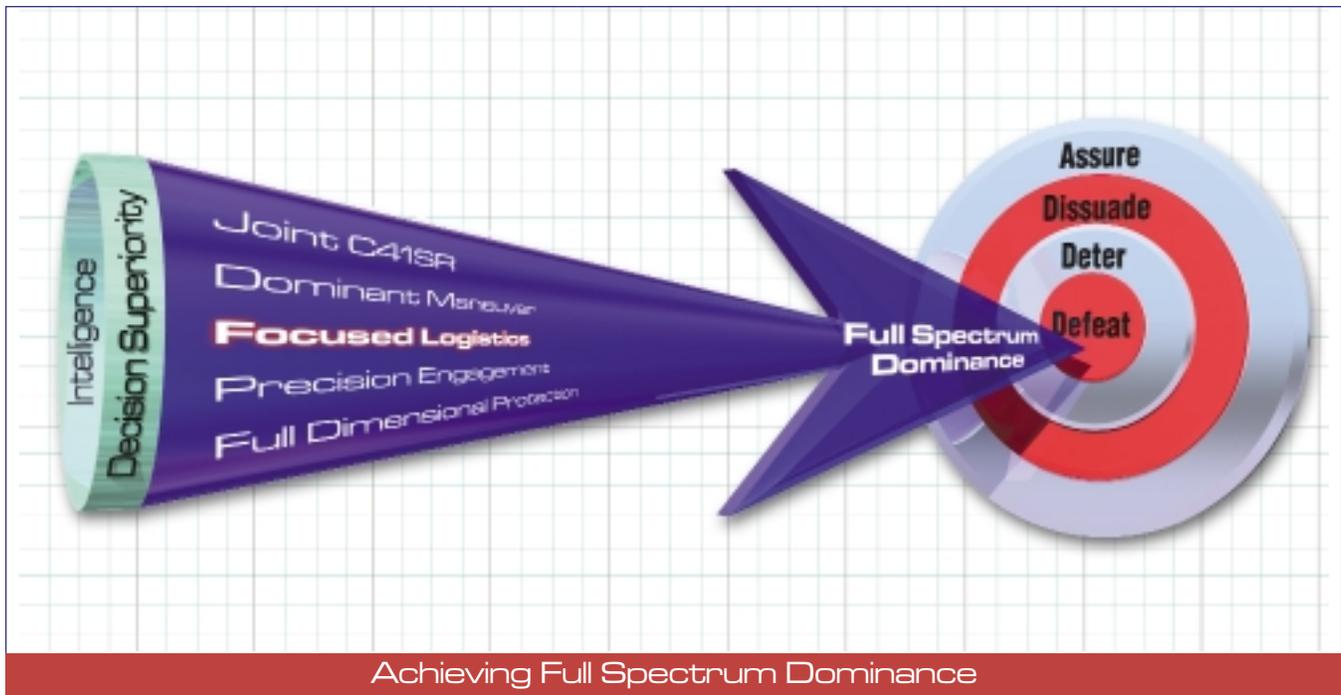
The focused logistics concept was first articulated in Joint Vision 2010 (JV 2010) during the mid-1990s. JV 2010 established a conceptual template to guide the ongoing transformation of America's armed forces, and we have continued to build upon and extend that template.

The objective of continuous transformation of America's armed forces is to dramatically increase their responsiveness, operational speed, reach, and effectiveness, making them increasingly more precise, lethal, tailorable, agile, survivable, and sustainable.

Reaching the objective hinges on several factors:

- U.S. armed forces will continue to rely on our nation and its people for intellectual and technical innovation.
- Continued progress in information technology as well as other technologies will substantially change the conduct of military operations.
- The Department of Defense will make balanced investments that include a steady infusion of new technologies to modernize and replace equipment.
- Dedicated men and women will change doctrine, organization, training, materiel, leadership and education, personnel, and facilities to take advantage of the new technologies.

Through the synergy of these factors, we will further develop and integrate the innovative concepts and capabilities that will change the character and conduct of joint warfare in the 21st century: **joint C4ISR, dominant maneuver, precision engagement, full dimensional protection, and focused logistics.** In addition, we will leverage **decision superiority, intelligence,** and the U.S. capacity for innovation. Each of these will contribute to achieving full spectrum dominance for the future joint force.



Achieving Full Spectrum Dominance

In transformation planning, we will focus on how an adversary might fight rather than on specifically who the adversary might be or where a war might occur. We must identify the capabilities required to deter and defeat adversaries who may range from non-governmental terrorist organizations to rogue states to major powers, and who will rely on surprise, deception, and asymmetric warfare to achieve their objectives. This capabilities-based approach necessitates that we concurrently maintain our military advantages in key areas, develop new areas of military advantage, and deny asymmetric advantages to our adversaries. It entails adapting existing capabilities to new circumstances while experimenting with new capabilities.

Transformation will also require long-standing commitment from our country and its leaders. Of necessity, our efforts will begin small but will grow significantly in pace and intensity. Over time, we will realize the full promise of transfor-

mation as we divest ourselves of legacy forces and move resources into new concepts, capabilities, and organizations that maximize our warfighting effectiveness.

Operations and Logistics Partnership

The relationship of focused logistics to the other capabilities of Joint Vision is important. While its contribution has been widely recognized throughout U.S. military history, **this is the first time logistics has been formally designated a full partner in the joint warfighting process.** This partnership reflects a link between operations and logistics that is essential for precise, time-definite delivery of resources to the warfighter. This partnership has tangible benefits for all participants.

Working as partners, operators and logisticians can assure that future systems have the

designed-in deployability, reliability, maintainability, supportability, and interoperability to meet readiness requirements.

For operators, achieving the full potential of focused logistics means

- faster deployment of mission-ready forces and their essential support to destinations specified by the supported joint force commander;
- reduced, right-sized, combat support/combat service support footprint in the combat zone; and
- reduced logistics costs—without degrading warfighting capability or readiness.

For logisticians, achieving the full potential of focused logistics means

- more responsive, agile logistics support structures, capable of support from afar;
- more accurate, timely logistics information; and
- more reliable, supportable systems.

Most important, for soldiers, sailors, airmen, and Marines, achieving the full potential of focused logistics means assurance of receiving

- the right support,
- at the right place,
- at the right time, and
- in the right quantities.

Substantially improved logistics effectiveness, efficiency, and speed—combined with warfighter confidence in these new capabilities—will reduce sustainment requirements and the vulnerability of logistics lines of communication while appropriately sizing and potentially reducing our logistics footprint. Focused logistics will effectively support the joint force in combat and provide the primary operational element to perform stability operations or other activities across the range of military operations.



Building Blocks

- **By building** on the foundation these initiatives will provide, we intend to progress from web-enabled logistics processes to network-centric logistics to our ultimate goal of collaborative logistics planning and execution.





Building Blocks

Two initiatives—Logistics Transformation and the Future Logistics Enterprise—help lay the foundation for focused logistics. These initiatives represent cooperation between the Joint Staff Directorate for Logistics, J-4, and the Office of the Secretary of Defense (OSD), and they represent a shift from supply-based logistics to a leaner, more agile distribution-based logistics system.

Logistics Transformation

The U.S. has the most effective logistics system in the world. No one does a better job of providing the warfighter with logistics support. But the current U.S. logistics system lacks the flexibility, agility, mobility, efficiency, and interoperability necessary for supporting Joint Vision operations. Combatant commanders and joint task force (JTF) commanders do not have an integrated logistics information system, nor is there a source of accurate, real-time, seamless logistics information on which to base such a system. Traditionally, service logistics information systems have been service- or function-specific stovepipes, invaluable to the service component but fragmented at the JTF level.

We want to provide the future joint warfighter with real-time logistics situational awareness. Our Logistics Transformation initiative helps provide the foundation for this awareness and helps instill warfighter confidence by

- optimizing logistics business processes,
- transitioning to a logistics system open architecture that provides interoperable and actionable logistics information, and
- enhancing logistics response to the joint warfighter.

Logistics Transformation has started establishing the foundation for focused logistics capabilities on four pillars:

- **Customer Wait Time (CWT).** This pillar replaces the use of historic averages as the metric for measuring satisfactory delivery. CWT is a metric that measures the total elapsed time between

when a customer's requirement is documented and when that customer acknowledges receipt of the materiel requested. Efforts are underway to institutionalize customer wait time in DOD Instruction 4140.1-R as the DOD metric for assessing the effectiveness of the supply chain. As in commercial sectors, our customers will determine if the chain is effective.

- **Time-Definite Delivery (TDD).** The second pillar is a change to current requisition and distribution processes. Using a simplified priority ordering system, TDD will give the customer a high degree of confidence that assets will be delivered within a geographically based time

frame established by the customer. We are analyzing data to help develop realistic, responsive TDD standards. TDD will instill warfighter confidence and allow the customer to make informed decisions. In turn, it will enable us to measure our success in supporting the warfighter.

- **Total Asset Visibility.** The third pillar provides visibility of all assets in process (being acquired or in maintenance), storage, or transit. We will use automatic identification technology (AIT) at critical nodes for accurate source data collection and a shared-data operating environment for the exchange of action-



able information. We will continue fielding fixed and deployable AIT along with information systems capable of providing total asset and in-transit visibility.

- **Web-Based, Shared-Data Environment.** The final pillar leverages web technologies to obtain real-time, accurate information directly from source systems. This rapid access to actionable information helps operators and logisticians achieve real-time situational awareness. We will begin fielding this capability first to early-deploying forces and then to later-deploying forces.

Future Logistics Enterprise

The Future Logistics Enterprise (FLE) is DOD's mid-term vision (2005-2010) to accelerate logistics improvement, enhance support to the warfighter, and align logistics processes with the operational demands of the 21st century. The primary objective of the FLE is to ensure consistent, reliable support that meets warfighter requirements through enterprise integration and end-to-end customer service. The FLE builds upon and accelerates specific, ongoing service and agency initiatives to meet the requirements of the Quadrennial Defense Review and the National Defense Strategy.

There are six initiatives associated with the FLE.

- **Depot Maintenance Partnership.** The primary intent of the depot maintenance partnership initiative is to enhance depot support to the warfighter by enabling and empowering the DOD organic depots to develop appropriate partnerships with the commercial sector, while recognizing the legitimate national security need for DOD to retain depot maintenance capability. The desired end state is a dramatic increase in depot maintenance public-private partnerships, resulting in greater private
- **sector investment in facilities and equipment, better facility utilization, reduced cost of ownership, workforce integration, more efficient business processes, greater credibility, and a more collegial working relationship with Congress.**
- **Condition-Based Maintenance+ (CBM+).** CBM+ focuses on inserting into both new and legacy weapon systems, technology to support improved maintenance capabilities and businesses processes. It also involves integrating and changing business processes to dramatically improve logistics system responsiveness. Under consideration are capabilities such as enhanced prognosis/diagnosis techniques, failure trend analysis, electronic portable or point of maintenance aids, serial item management, automatic identification technology, and data-driven interactive maintenance training. The ultimate intent of this initiative is to increase operational availability and readiness throughout the weapon system life cycle at a reduced cost. The desired end state is a force of maintainers who have the knowledge-skill sets and tools to maintain complex systems at the optimal time through the use of available technologies that improve maintenance decisions and integrate the logistics processes. Assessment of current guidance, programs, technologies and processes is an ongoing action, as is incorporating CBM+ into the requirements and acquisition review/approval process.
- **Total Life Cycle Systems Management.** The primary intent of total life cycle system management is to improve weapon system sustainment by establishing clear responsibility and accountability for meeting specified warfighter performance requirements within the program management office. Program managers will be held responsible for the overall management of the weapon system life cycle to include: timely acquisition of weapon systems, meeting

warfighter performance requirements, integration of sustainability and maintainability during the acquisition process, and weapon system sustainment to meet or exceed warfighter performance requirements throughout the life cycle at best corporate value to the services and DOD.

- **End-to-End Distribution.** The end-to-end distribution initiative is directed toward streamlining warfighter support by providing materiel, including retrograde and associated information, from the source of supply or point of origin to the point of use or disposal, as defined by the combatant commander, military service, or characteristics of the commodity, on a worldwide basis. The intent of the initiative is to influence acquisition, sourcing, positioning, and transportation to facilitate the flow of materiel to the end user, ensuring that deployment and sustainment are synchronized. To preclude a “business as usual” solution to distribution-related problems, bold new “out of the box” initiatives must be introduced to pro-

vide a mechanism to pull all the parts together to resolve process problems spanning functional and organizational boundaries. The desired end state is an integrated, synchronized, end-to-end distribution system to meet warfighter requirements for information and materiel.

- **Executive Agents (EAs).** The primary intent of the EA initiative is to assess and align EA designations with warfighter requirements arising from the National Defense Strategy. The desired result of this initiative is a formal assignment process focusing logistics EA responsibilities on support of warfighting requirements; EA assignments that support the warfighter across the full spectrum of operations, including support on an end-to-end basis and rapid response to all deployments; improved crisis/deliberate planning to include EA responsibility and alignment of the resource (budget, force structure, etc.) responsibilities associated with the EA.





- **Enterprise Integration (EI).** To accelerate development of a logistics EI, this initiative builds upon efforts underway within the services and Defense Logistics Agency (DLA). These efforts are developing successful uses of commercial enterprise resource planning and other commercial off-the-shelf tools for modern, integrated solutions to complex information requirements across the DOD logistics enterprise. Since changes to commercial software increase cost and risk, the initiative seeks to avoid software change by identifying common, reusable business practices assumed by available software that will support partici-

pants across the enterprise. The initiative is based upon phased implementation with adequate training and the full support of leadership. Collaborative solutions and shared knowledge will be encouraged through policy initiatives and oversight. The desired end state of this initiative is for highly trained and skilled people within the DOD logistics enterprise to have access to near real-time, actionable information provided by modern, commercially-based software products that have been rapidly implemented to enable reengineered logistics processes and business rules.

Joint Deployment/ Rapid Distribution

- **What's Our Challenge?**

We must rapidly deliver combat forces to the joint force commander and link operating forces with viable sustainment systems.

- **What's Our Vision?**

We will provide a fully enabled mobility system to optimize rapid projection, delivery, and handoff of joint forces and sustainment assets worldwide; distribute the required forces and sustainment at the place and time required; support rapid force maneuver within the joint operations area; and return those forces to home station for regeneration and reconstitution.



Joint Deployment/Rapid Distribution

Successful joint deployment/rapid distribution is a critical step toward giving the future joint force commander the means to dominate the full spectrum of potential operations. We will use technology aggressively and partner with commercial industry to create a responsive and flexible global power projection mobility system to deploy and sustain forces to support the joint warfighter.

To meet the challenge, our efforts must achieve the following goals:

- Full-spectrum-capable mobility forces in the right numbers and types, supported with robust infrastructure, to
 - support our military strategy and
 - deploy and distribute the required forces and sustainment at the required place and time with increased accuracy and precision.
- Effective and efficient deployment and distribution processes
 - enabled with interoperable systems and business practices;
 - integrated from the strategic to the tactical levels;
 - empowered with advanced/modern technologies;
 - able to optimize worldwide projection, delivery, and handoff of forces and sustainment assets; and
 - fully embedded in doctrine and training.



What's Our Strategy?

Our strategy is to enhance our mobility forces and infrastructure while revising processes to meet the mobility, deployment, and distribution needs of the warfighter. At the same time, we will reengineer those processes for the future joint warfighter to achieve full spectrum dominance. Four aggressive actions support this strategy:

Use Dynamic Doctrine

The best doctrine is not only accurate for today's operations but also dynamic enough to reflect what the future warfighter will need to fight and win. We will review doctrine regularly with the warfighting communities to ensure that current doctrine hits the mark. We also intend to continue participating in development of the dominant maneuver and precision engagement concepts.

Reengineer Processes

Doctrine can't be implemented without processes to support it. By reengineering processes, we will enhance the ability of the warfighter to be both effective and efficient. As new warfighting concepts are developed, the line between strategic and tactical operations continues to blur. These new concepts envision the delivery of tailored force and sustainment packages with pinpoint precision—from the continental United States (CONUS) or intermediate locations outside the battlespace—to specific forward operating areas. We must transform our processes to improve effectiveness and efficiency and to support these new and different warfighting strategies and tactics.

Develop Interoperable Systems

Mechanisms for transforming a commander's intent into action must exist in the joint environment. Starting from the premise that systems support processes, we will map and analyze current and desired processes to determine leverage

points for future technology, automation, and operational concepts. We must develop concept requirements documents to align and support current and future operational concepts. We will work closely with both warfighting and logistics systems developers to ensure interoperability.

Enhance Our Mobility Forces

Our mobility forces will transport military personnel and materiel to and from operating locations worldwide to support combatant commanders engaged in a variety of scenarios. These mobility forces include transport and tanker aircraft, cargo ships, and ground transportation systems operated by DOD and commercial carriers.

- Airlift rapidly deploys troops and materiel to overseas operating locations, delivering the forces needed in the critical early days of an operation.
- Aerial refueling extends the range and increases productivity of military aircraft.
- Sealift transports combat equipment and other cargoes, efficiently delivering the majority of the materiel needed to sustain deployed forces over time.
- Pre-positioning military equipment and supplies near potential conflict regions reduces response time in contingencies.
 - Land-based pre-positioning enhances crisis response in specific theaters most economically.
 - Pre-positioning equipment afloat and using forward-stationed watercraft reduces theater footprints and expedites getting combat power to the right place at the right time.

Our private-sector partners augment military mobility systems, increasing the efficiency with which we can deploy and sustain forces globally.

We also avoid the costly maintenance of military systems that duplicate capabilities available from the civil sector.

- **Civil Reserve Air Fleet (CRAF).** The CRAF program gives us access to commercial passenger and cargo planes during crises.
- **Voluntary Intermodal Sealift Agreement (VISA).** The VISA program gives us access to commercial shipping capacity and the intermodal capabilities of commercial carriers.

We must shape and evolve these diverse capabilities into an integrated, interoperable solution set that can be rapidly tailored to support a variety of full spectrum dominance operations.

What Have We Already Done? *Improved Our Deployment and Distribution Process Guidance*

These recently issued publications filled major voids in concepts and doctrine for joint deployment, redeployment, and distribution:

- **Joint Publication 3-35, *Joint Deployment and Redeployment Operations.***

This new publication details principles for deploying and redeploying joint forces across the full range of military operations. It provides an objective baseline from which to develop future concepts and automation.

- **Joint Publication 4-01.8, *Joint Tactics, Techniques, and Procedures for Joint Reception, Staging, Onward Movement, and Integration.*** This publication defines joint processes critical to the transition of arriving personnel, equipment, and materiel into

forces capable of meeting operational requirements. The publication ensures common business practices across supported combatant commands, which in turn enables standardized training to improve the overall consistency of support to the warfighter.

- **Joint Publication 4-01.4, *Joint Tactics, Techniques, and Procedures for Joint Theater Distribution.*** With a never-before-achieved level of detail, this publication delineates how the flow of personnel, equipment, and materiel within theater can meet the joint commander's needs. From the viewpoint of a joint commander, it provides both the *why* and *how* of theater distribution, accompanied by clear instructions and explanations of critical processes and responsibilities.
- **Joint Publication 4-01.5, *Joint Tactics, Techniques, and Procedures for Transportation Terminal Operations.*** This publication combines—for the first time—doctrine on land, air, and water terminal operations. It describes the physical layout of land, air, and water terminals



and describes operations at each type of facility. The publication focuses on the supported combatant command level.

- **Joint Publication 4-09, *Joint Doctrine for Global Distribution*.** Global distribution synchronizes all elements of the logistics system to generate and sustain military capability by delivering the right items, to the right place, at the right time. Global distribution is fundamental to joint operations because it links operating forces with the national means for fulfilling their support requirements. This doctrine forms the basis for current and emerging integrated logistics concepts such as joint theater logistics management.
- **Chairman of the Joint Chiefs of Staff Instruction 3202.1A, *Joint Deployment and Distribution Process Improvement*.** This instruction codifies continuous process improvement for the joint deployment and distribution process. It is the benchmark document for all joint deployment and distribution process improvement. It explains how the joint deployment process owner, as the single process owner, ensures that all the “good ideas” and deployment challenges are identified, prioritized, and worked to completion.
- **Chairman of the Joint Chiefs of Staff Instruction 3020.01, *Managing, Integrating, and Using Joint Deployment Information Systems*.** This instruction documents a measurable, objective time standard for validating time-phased force and deployment data during crisis action planning. It is the baseline document for all integrated joint automated information systems that support joint deployment.



Improved Our Deployment and Distribution Processes

Designated a Joint Deployment Process Owner (JDPO). The Secretary of Defense designated the Commander, U.S. Joint Forces Command (USJFCOM), the DOD JDPO. The JDPO leads joint planning and execution community collaborative efforts to improve the joint deployment and redeployment processes, including prioritizing process improvement efforts. This is the first DOD organization of its kind: one organization with the authority and responsibility to lead change across an entire corporate process.

Documented the Revised Joint Deployment Process. We developed and coordinated through combatant commanders, services, and agencies a single document to capture near-term improvements, impacts, and policy implications of the revised joint deployment process. It explains, in operational terms, the near-term improvements of concurrent collaboration, revised Joint Operation Planning and Execution System (JOPES) orders, and integrated joint deployment systems.

Incorporated Deployment/Redeployment and Distribution into the Joint Operational Architecture. Establishing deployment/redeployment as a joint mission area makes it an operational imperative, integral to operationalizing Joint Vision. Future concept developers are just now recognizing the essentiality of deployment/redeployment in any future concept. Positioning deployment/redeployment early in efforts to develop a joint operational architecture ensures this vital area is incorporated into emerging concepts.

Developed Joint Deployment Operational Architecture. We mapped the “as-is” and “to-be” processes and developed the operational, systems, and technical views required for DOD architectures. We also mapped the start and desired end state of the deployment and distribution process from tactical to strategic level. Mapping enabled us to develop the first actionable long-term roadmap. This roadmap was the baseline input in the larger joint operational architecture being developed by direction of the Congress and the OSD. In it, deployment and distribution are postured to a common joint architecture that will enable joint processes in support of the warfighter.

Developed the JDPO Strategic Plan and Implementation Plan Coordinating Drafts. The JDPO is coordinating a strategic plan and an implementation plan. These plans will drive near-, mid-, and long-term objectives and provide a roadmap to Joint Vision. The plans include milestones and programmatics to drive development of concepts and fielding of joint deployment capability. These plans operationalize the deployment and redeployment concepts of Joint Vision.

Integrated Joint Systems and Collaborative Decision Support

Transportation Coordinators Automated Information for Movements II (TC-AIMS II) and Joint Forces Requirements Generator II (JFRG II). TC-AIMS II and JFRG II perform an indispensable function in the flow of unit movement information from deploying units into JOPES. These systems are perhaps the first to be designed and integrated into a tactical-to-strategic joint framework. Unit movement data are captured at the source and rapidly pushed through joint systems for immediate use, analysis, and decision-making at the operational and strategic levels. JFRG II is fully fielded as a Global Command and Control System mission application. The TC-AIMS II unit move module is being tested, with a milestone III fielding decision scheduled in 2002.

Assessed Mobility Force Requirements

Mobility Requirements Study—2005 (MRS-05). MRS-05 was chartered in October 1998 and the results were approved by the Secretary of Defense in January 2001. The most comprehensive DOD mobility study ever undertaken, MRS-05 revealed shortfalls in CONUS transportation infrastructure, strategic airlift and intratheater lift capability, and pre-positioning. Airlift capability must be increased from 49.7 million ton-miles per day (MTM/D) to a minimum of 54.5 MTM/D if we are to support the warfighting demands of the first of two nearly simultaneous major theater wars, followed by a swing to the second. The requirement also includes other concurrent high priority demands that are likely to occur early in major theater campaigns. This study provides a common baseline for funding future lift requirements.

What Are We Doing Now to Shape the Future?

Improving Deployment and Distribution Processes

72-Hour Time-Phased Force and Deployment Data. The 72-hour standard is the first joint, operationally focused metric for resolving long-standing deployment problems and sets procedures for accountability within the process. Under this umbrella, near-term improvements are being engineered in four areas to

- use collaborative tools during crisis action planning and execution to allow simultaneous actions;
- develop a plan repository, using standard definitions and structures for joint force capabilities, to speed effects-based planning when developing a course of action;
- revise JOPES orders to provide appropriate and timely authorities to plan, deploy, and execute; and
- integrate the processes, procedures, and systems for joint deployment and distribution.

Global Distribution Process Owner/Manager. Global distribution is the process of providing materiel from the source of supply to the point of consumption or use. It includes four networks: physical, financial, information, and communications. DOD needs an integrated, synchronized, end-to-end global distribution system to meet joint warfighter requirements for information and materiel. Current distribution processes are fragmented and supported by numerous information systems. DOD is moving toward a number of commercial logistics arrangements and potential new arrangements with allied/coalition partners. A collaborative team composed of OSD, services, combatant commanders, and defense agencies (under the Future Logistics Enterprise

end-to-end distribution initiative) are documenting the roles and responsibilities necessary to establish a global distribution process owner/manager. The process owner would oversee the entire distribution process to improve supply chain decisions on positioning, movement, and delivery of materiel. This concept would improve the distribution process and ensure accountability for customer service. It would also support readiness needs as well as force projection requirements.

These improvements will enable the warfighter to more quickly develop, evaluate, and implement viable courses of action for crises of any type, scope, or duration. They will increase accuracy of planning, achieve time definite delivery standards, improve customer wait time, optimize inventories, reduce deployment times, maximize lift utilization, minimize logistics footprint, and improve visibility over forces and materiel during deployment, sustainment, and redeployment operations.

Improving Air Mobility Forces

C-17 Procurement. C-17 procurement remains our top air mobility priority. Through June 2002, 87 C-17s—of the 120 under contract—had been delivered. The extended range fuel containment system was incorporated into the 71st aircraft and all subsequent deliveries. Boeing and the USAF expect to sign a multiyear contract in 2002 for another 60 C-17s. This would bring the planned C-17 aircraft fleet to a total of 180. We must acquire enough C-17s to meet the validated mobility requirements of our defense strategy. To meet a minimum airlift requirement of 54.5 MTM/D would require procuring 180 to 222 C-17s, depending on the number of C-5s modified under the C-5 Reliability Enhancement and Re-engining Program (RERP).

C-5 Upgrades. Three active programs must be undertaken to improve C-5 mission-capable rates and modernize the fleet for operation well into the 21st century:

- The engine high-pressure turbine modification significantly reduces the rate of blade erosion and doubles the time between engine removals.
- The avionics modernization program installs new flight control systems, increases navigational safety, and upgrades avionics to global air traffic management (GATM) standards—ensuring access to worldwide air navigation routes.
- RERP addresses major C-5 readiness issues by installing new pylons and modern commercial engines plus upgrades to the aircraft skin, frame, landing gear, pressurization system, and auxiliary power units.

GATM Avionics Upgrades. To deal with tremendous growth in air traffic, civil aviation authorities reduced separation standards and upgraded air traffic management procedures for much of the world's airspace. For U.S. air mobility aircraft to operate unrestricted in this airspace, we must upgrade their communications, navigation, and surveillance avionics.

Air Refueling Tanker Force Studies. The KC-135 Economic Service Life Study and the Tanker Requirements Study-05 have been completed. These studies evaluated costs and availability of the KC-135 tanker fleet through FY40 and determined the number of tanker aircraft and crews needed to meet global air refueling requirements. These two studies were to provide a basis for a tanker analysis of alternatives; however, age and heavy use have necessitated a more proactive approach to recapitalizing the KC-135



fleet. The USAF is negotiating a lease of 100 Boeing 767 tanker aircraft. Adequate tanker capabilities will be extremely important when supporting the joint warfighter in the future.

Improving Sealift and Sea-Based Pre-positioning

Large, Medium Speed Roll On/Roll Off Ships (LMSRs). DOD has nearly doubled its surge sealift capacity since 1995, and most ships have the roll-on/roll-off capability critical for moving heavy equipment. Key to this result has been Navy procurement of 20 LMSRs. The total fleet will be on line in FY03: 11 LMSRs are dedicated to surge sealift, 8 to the Army pre-positioning afloat program, and 1 to the Marine Corps.

Joint Logistics-Over-the-Shore (JLOTS) Sea State 3 (SS3) Initiatives. JLOTS operations will give DOD the strategic capability to rapidly discharge vessels, even when ports are overcrowded or rendered unusable by natural disasters or enemy action. The Army and Navy formed a joint integrated process team to review the equipment and future capabilities to support JLOTS operations. The team is working on initiatives for enabling JLOTS operations during SS3 conditions (waves 3½–5 feet, wind 13.7–16.4 knots):

- A review of technical approaches for the interface between theater support vessels and LMSRs
- A review of concepts and designs for improving lighterage in an SS3 environment
- Crane pendulation control to improve discharge from containerships to lighterage in an SS3 environment.

We must complete these programs to achieve the defense planning guidance goal to develop an SS3 discharge capability by 2006 and, more important, to satisfy combatant commander warfighting requirements.

Monitoring High-Payoff Emerging Commercial Transportation Technologies

Ultra Large Airships (ULAs). Several firms have proposed developing helium hybrid lift vehicles that will carry very large payloads and outsize cargo over long distances. DOD must work with major ULA developers to encourage them to identify and incorporate design choices that enhance military utility without compromising commercial viability. We initiated a joint study with the U.S. Army to help meet this goal. We are developing concepts for using ULAs in deployment and distribution operations. We are investigating a concept of operations for integrating ULAs into the CRAF program, including program changes that would be required to incentivize participation.

High-Speed Sealift (HSS). A commercial HSS vessel, HMAS *Jervis Bay*, demonstrated military utility by carrying 600 troops with gear and 200 commercial-size vehicles a distance of 1,000 nautical miles and discharging them in less than 1 hour. One sailing of the *Jervis Bay* can deliver the equivalent of 4½ C-5 loads or 6 C-17 loads.

We are encouraging major developers of high-speed sealift to incorporate national defense features. Examples include features for loading wheeled and tracked vehicles, such as strengthened cargo decks, and features to allow use of austere ports, such as stern ramp systems and additional mooring attachments. These enhancements would enable using high-speed sealift ships as an inexpensive “active ready reserve force.” Other opportunities for military utility include

- Commercial high-speed sealift technology has near-term potential to meet intratheater requirements. Two recently established U.S. shipyards are building HSS ferries, with the first scheduled for completion in 2002. Fast Ship Atlantic has designed a vessel that will carry 10,000 tons at 40 knots for 3,900 nautical miles.
- Intertheater lift vessels are in the concept and design stages, supported in a joint program with the Army, Navy, and Marine Corps. Transporting forces 8,000 nautical miles in 5 days requires a speed of 70 knots. High-speed sealift vessels capable of 50 knots are possible within 5 years, and ships capable of sustaining 70 knots are technologically feasible in 10 years. To design a vessel capable of breaking the 55-knot barrier while providing sufficient lift capacity will require investing in research and development.

Testing Concepts Using Joint Experimentation

Experimentation Venues. The Joint Logistics Warfighter Initiative offers a laboratory that allows distribution initiatives to be simulated, approved, and released for implementation. It also allows exploration of reengineered processes and technological advances that enhance effectiveness and efficiency. On a larger scale,

Millennium Challenge 2000 was the first joint experiment to evaluate the revised joint deployment process. Millennium Challenge 2002 will assess and evaluate additional joint deployment process improvement initiatives.

The Focused Logistics Wargame (FLOW) provides an excellent opportunity to assess joint deployment/distribution and strategic mobility challenges. FLOW 2003 will assess several challenges, including intermodal throughput and asset control, strategic airlift and en route infrastructure shortfalls, intermediate staging bases, and automated synchronization of coalition deployment and sustainment.

Advanced concept technology demonstrations (ACTDs) will make the deployment process more efficient by using technology that enables collaboration and provides interoperable joint decision support tools. These ACTDs include Agile Transportation 2000, developed by U.S. Transportation Command; Joint Force Projection 2010, proposed by USJFCOM; and the Coalition Theater Logistics ACTD, sponsored by U.S. Pacific Command. The joint deployment and distribution processes also will benefit from the Joint Logistics and Joint Theater Logistics ACTDs, discussed in the information fusion section.

Investigating Future Concepts

Full Spectrum Mobility Forces. Mobility forces are essential to focused logistics and dominant maneuver. At times, achieving positional advantage may be a function of

- operational maneuver over strategic distances,
- operational maneuver from locations just outside the battlespace, or
- the capability to maneuver forces more rapidly within the battlespace.

We must remain actively engaged in the development of feasible dominant maneuver and precision engagement concepts that adequately consider the tradeoffs between using limited assets for both deployment and maneuver. We must also stay engaged to match our future support strategy to emerging operational concepts and strategies.

Intermediate Staging and Support Bases.

Intermediate staging and support bases, located ashore or afloat just outside the battlespace, may be able to reduce the logistics footprint in the battlespace or facilitate dominant maneuver. This concept—which could be a breakthrough needed for future operations—has significant lift and security implications that must be investigated in depth.

Integrating Deployment and Distribution.

Integration will maximize the responsiveness of the logistics system. Deployment and distribution share a common “pipeline” and depend on the same multimodal transportation assets. Individual systems are largely effective but lack the efficiencies of an integrated deployment and distribution system. Logistics transformation initiatives that will facilitate dynamic change and provide “value added” to the joint warfighter include

- an integrated, synchronized, end-to-end deployment and distribution process, enabled by interoperable joint decision support tools and advanced technologies;
- a revised management structure anchored by a single logistics process manager to oversee the deployment and distribution process;
- synchronized policies and initiatives; and
- improvements to acquisition rules and requirements.

Joint Theater Logistics Management

- **What's Our Challenge?**

We must develop tools that give the joint force commander the capability to effectively oversee the management of logistics throughout the range of full spectrum dominance operations.

- **What's Our Vision?**

We will give the joint force commander the ability to synchronize, prioritize, direct, integrate, and coordinate common-user and cross-service logistics functions.



Joint Theater Logistics Management

Joint theater logistics management (JTLM) gives the combatant commander or joint task force (JTF) commander the tools to effectively oversee the management of logistics, enabling the commander's directive authority for logistics. JTLM ensures the right logistics—ranging from acquisition to disposal—at the right place and time, and it encompasses all aspects of moving and sustaining the force.

To meet the JTLM challenge, we must give the combatant commander or JTF commander visualization and decision support tools that the selected organization can use to manage logistics assets and processes in the area of operation. Our goal is to have a fully collaborative capability that links logisticians and operators at the supporting and supported combatant commander or JTF level with their counterparts at the component level. We then will link this capability to our interagency and coalition partners.

What's Our Strategy?

Develop the Tools

The Global Combat Support System (GCSS) (CINC/JTF) is the JTLM module of GCSS that will provide the necessary visualization and decision support tools to effectively manage logistics. Our first priority is satisfying the 129 combat service support information requirements identified by the combatant commanders and adopted as the foundation for the GCSS family of systems.

Choose the Right Organizational Structure and Train Combatant Command Joint Logisticians

Exercising directive authority for logistics, the supported combatant commander can establish any organization (choosing from a variety of structures, real or virtual) to use the JTLM suite of tools. For JTLM to succeed, we must train key personnel in peacetime. They must be fully integrated into the concept of support so they can manage logistics functions across service and agency lines—from the factory to the foxhole. Also, training for some operation and concept plans should consider management of combined logistics in multinational coalition operations. The goal is





to provide the joint force commander with the best support by having the enablers and real-time situational awareness to match needs with logistics capability. Just as JTLM depends on information fusion to provide the proper tools, every other focused logistics challenge relies on JTLM to make the most effective and efficient use of available logistics resources. Rapid implementation of JTLM is the key to giving the joint force commander the best support. Rapid implementation of an effective JTLM element requires significant advance planning, training, and coordination.

What Have We Already Done?

Consolidated Combatant Commander Requirements

The combatant commander staffs have identified the processes and information necessary for performing JTLM. This includes 129 logistics information requirements for the logistics functions of supply, maintenance, transportation, medical, personnel, engineering, finance, and acquisition. These “CINC 129” requirements will determine the JTLM tools we develop for the combatant

commanders. Each requirement comprises specified and implied tasks, down to the data element level of detail. Service and agency GCSS systems will provide the information, and the Defense Information Systems Agency (DISA) is working on the suite of visualization and decision support tools necessary to meet the combatant commander staff needs.

Published JTLM Doctrine

Joint Publication 4-0, Doctrine for Logistics Support of Joint Operations, now includes JTLM guidance. The combatant commander selects from

among a number of JTLM alternatives, depending on area of responsibility and mission. Options in Joint Publication 4-0 include

- using a service support organization as a nucleus,
- augmenting the combatant commander J-4,
- delegating JTLM responsibility to a JTF commander,
- establishing a virtual or physical standalone logistics agency,
- selecting the predominant service to manage joint requirements, and
- expanding the combatant commander J-4 logistics readiness center.

Conducted the Joint Logistics Advanced Concept Technology Demonstration (JL ACTD)

The JL ACTD tested a number of significant JTLM initiatives, including joint decision support tools. These tools are the foundation for the ongoing Joint Theater Logistics ACTD, which

seeks to create a collaborative virtual workspace. JL ACTD functionality will be delivered to the combatant commander and JTF staffs through the GCSS (CINC/JTF) applications.

Integrated JTLM into FLOW 01

We included JTLM as a sub-pillar of the Focused Logistics Wargame (FLOW) 01 joint deployment and theater distribution pillar. We examined the authority, functional responsibilities, and capabilities required for JTLM and presented resulting issues to the senior logistics leaders who participated.

Tested JTLM—USJFCOM J-4/J-9 Joint Experiment—Unified Vision (UV) 01

This limited-objective experiment evaluated JTLM processes to ensure the requirements for logistics data and decision support tools are properly articulated. We have combined the results of UV 01 with other experiments to validate or disprove JTLM processes. We are matching changes in processes to the combatant commander informational requirements to ensure we are meeting the combatant commanders' future needs for logistics information.



What Are We Doing Now to Shape the Future?

Developing the GCSS (CINC/JTF) Mission Application

With DISA, we are developing the GCSS (CINC/JTF) tool to link GCCS with service and agency logistics systems for required information. This link will provide access to current relevant information on request, allowing joint theater logistics managers to keep abreast of operational and intelligence developments. This CINC/JTF tool will undergo a series of capability upgrades over the next several years, incorporating the functionality of the logistics ACTDs. The section about information fusion describes the CINC/JTF tool more comprehensively.

Testing JTLM in the Joint Logistics Warfighter Initiative (JLWI)

In the context of JTLM, JLWI is a means to conduct joint and component logistics demonstrations and experimentation in both the lab and real-world operational environments. The goal is to support warfighter readiness by using automatic identification technology throughout the pipeline, inserting new and emerging technology, reducing human intervention, and optimizing business processes through reengineering. JLWI also leverages commercial off-the-shelf solutions by showing how they enhance readiness. The final objective of JLWI is to have the services and agencies incorporate useful changes into their future GCSS systems.

Agile Sustainment

- **What's Our Challenge?**

We must transform sustainment policies, processes, and capabilities to improve the flexibility, agility, and precision with which we sustain the warfighter.

- **What's Our Vision?**

We will create an effective, efficient, and responsive sustainment capability that enables the warfighter to achieve full spectrum dominance through application of decisive force, power projection, overseas presence, and strategic agility.



Agile Sustainment

Agile sustainment encompasses a majority of sustaining functions, including

- materiel management (acquisition, supply, and industrial base);
- pre-positioning and war reserve;
- mobilization and manpower;
- critical commodities (munitions and fuels); and
- force structure (mortuary affairs, combat support, and combat service support).

A joint force capable of dominant maneuver must possess unmatched speed and agility in positioning and repositioning tailored forces from widely dispersed locations to achieve operational objectives quickly and decisively. To support this type of force, we need flexible, tailored sustainment from agile, responsive sustaining organizations.

This requires early and integrated planning among the combatant commanders, services, sustaining organizations, and combat support agencies. Tailoring the deploying logistics organizations and support packages to match the operational situation will help meet the warfighter's needs at precisely the right place and time.

Improved logistics processes; timely, reliable, and actionable information; an accessible common relevant operational picture; and an effective logistics command and control capability will enhance these sustaining capabilities.

Our vision is guided by three main goals: become more efficient, replace mass with speed and precision, and increase the warfighter's confidence in the logistics pipeline to deliver support as required.



Become More Efficient

Our current methods for meeting the warfighter's logistics needs are far too inefficient in terms of logistics force structure, money, materiel, strategic lift, response time, and logistics footprint. To achieve the military transformation envisioned in Joint Vision, we must better respond to the warfighter's requirements by improving the reliability, maintainability, availability, sustainability, and interoperability of our combat systems. In addition, we must reduce consumption by using methods such as improving fuel efficiency and identifying alternative power sources. We must also increase efficiency through innovative sustainment by

- using the power of information;
- using the correct mix of support forces—including host nation support, contractor logistics support, and executive agents; and
- reducing or eliminating redundant capabilities.

Replace Mass with Speed and Precision

Rather than stockpiling large amounts of materiel in the area of operations, we will improve asset visibility and command and control to advance joint deployment and rapid distribution of tailored units and materiel and to provide right-sized inventories in theater.

Increase Warfighter Confidence that the Logistics Pipeline Will Deliver Support as Required

The warfighter must have increased confidence that logistics support will be available when required. To help meet this challenge, customer wait time (CWT) was established as a metric to help ensure we drive to time definite delivery (TDD), a standard that instills warfighter confidence and enables the customer to make informed operational decisions.

What's Our Strategy?

Improve Efficiency by Adopting More Effective Business Processes and Practices

Our approach for improving business processes has three major steps that focus on supply chain efficiency:

- Institute common metrics, standards, and processes that promote simplicity and interoperability across all services. Current nonstandard systems and processes contribute to delaying delivery and reducing warfighter confidence.
- Integrate and synchronize contractor logistics support, host nation support, and executive agents. This integration must include common metrics, standards, and processes throughout the supply chain, regardless of node or responsible activity. The integration also should minimize redundant capabilities and non-value-added processes.
- Field web-based, network-centric, open-architecture systems and logistics information management capabilities that give operators and managers collaborative planning capability and improved visibility and control over assets.

Reduce Logistics Requirements

Logisticians and operators share the responsibility for reducing requirements. Logisticians are pursuing improvements to reliability, maintainability, availability, sustainability, and interoperability to increase readiness and reduce maintenance requirements and costs. Both logisticians and operators are evaluating smaller-sized units and equipment coupled with increased capability derived from reengineered processes and new technologies. Operators should consider the effect of more lethal precision weapons on the size of combat and support units and on munitions requirements.

Improve Joint Tactics, Techniques, and Procedures

Our tactics, techniques, and procedures are key enablers for ensuring we provide effective and efficient logistics support. We will continue to update our doctrine as we develop new ways and technologies to deliver logistics support.

Embrace Enabling Technologies

Technology also continues to drive much of the improvement in logistics delivery. With today's rapid pace of technology improvement, it is important to stay abreast of technology gains and to field technology enablers as soon as practicable.

What Have We Already Done?

Reduced Wholesale Inventories and War Reserve Requirements

Since 1989, we have reduced wholesale inventories considerably and have reevaluated our secondary war reserve requirements based on

defense planning guidance and risk considerations. We have also reduced inventories by expanding prime vendor and virtual prime vendor contracts, and we have begun shifting to greater reliance on long-term contractual relationships.

Enhanced Pre-positioning

To reduce transit time and in-theater footprint, the services have pre-positioned unit equipment and sustainment. Today, the Army has equipment for six heavy combat brigades pre-positioned ashore, and it has equipment for one enhanced heavy brigade along with with 30 days of sustainment pre-positioned afloat on 15 ships. The Marines have three maritime pre-positioning squadrons with sustainment on 16 ships for global coverage, and they have shore-based pre-positioned materiel in support of North Atlantic Treaty Organization contingencies. The Air Force has strategically positioned bare base beddown capability to support forward-deployed air expeditionary forces and has three ammunition sustainment ships to support contingency operations. The Navy has two hospital ships and a pre-positioned fleet hospital afloat. DLA has three fuel tanker ships, two of which are equipped with offshore petroleum discharge systems.

Developed CWT Metric and TDD Standards

To enhance warfighter confidence in the logistics chain's ability to provide support as required, we developed a CWT metric and TDD standards. CWT is the total elapsed time between when a customer's requirement is documented and when that the same customer acknowledges receipt of the materiel requested.





TDD assures that—within a specified degree of confidence—the logistics system is capable of delivering materiel to the warfighter within a specified period of time.

Improved Manpower Mobilization Processes

Decision makers now have more manpower mobilization options. Presidential recall, partial mobilization, and full mobilization provide the Secretary of Defense with greater flexibility in making his recommendations to the President. Additionally, speed for processing mobilization requests has increased greatly. During the initial response to the attacks of 11 September 2001, it took less than 72 hours from initiation of the request to signature by the President. Military commanders had timely access to the reserve components necessary to respond to operational requirements.

Published Joint Doctrine

We published joint doctrine for in-theater contractors in Joint Publication 4-0, *Doctrine for Logistics Support of Joint Operations*, and in Joint Publication 4-07, *Joint Tactics Techniques and*

Procedures for Common-User Logistics During Joint Operations. This doctrine enhances the ability to provide logistics support in joint operations.

Standardized Automatic Identification Technology (AIT) Markings

We conducted a maintenance advanced concept technology demonstration to standardize how AIT will be used in marking components.

Developed Shared Data Environment Capability

In the Joint Logistics Warfighting Initiative (JLWI), we developed the shared-data environment capability necessary for achieving web-based logistics processes. Testing continues and JLWI is showing great promise as a logistics enabler.

What Are We Doing Now to Shape the Future?

Adopting Best Business Practices

By adopting best business practices proven in industry and government, we improve effectiveness and efficiency, save scarce resources, and enhance the logistics response to the warfighter. Ongoing initiatives include prime vendor, virtual prime vendor, direct vendor delivery, paperless contracting, electronic commerce and electronic data interchange, and online catalogs.

Using Contractor Logistics Support

Contractor logistics support (CLS) transfers the responsibility for managing logistics from the government to a contractor, reducing the need for government personnel and facilities. DOD is shifting a substantial amount of its traditional wholesale and retail business to the commercial sector through CLS. The C-17 and F-117 logis-

tics support concepts are examples of large-scale CLS activities.

Using Competitive Sourcing

Competitive sourcing allows commercial and government entities to compete for DOD work. The organization that can provide the most efficient and cost-effective service wins, saving investment dollars. With the exception of inherently governmental processes, almost all activities that government personnel perform are candidates for competitive sourcing.

Encouraging Privatization

Privatization transfers the responsibility for managing government infrastructure to a nongovernment entity, reducing infrastructure management costs. Military housing privatization is well underway, and other efforts—such as utility privatization—are moving forward.

Integrating Supply Chains

Although the services and DLA still operate their own supply systems, web-based requisitioning and stock visibility will enable integration of their supply chains. The services and DLA are working together to ensure their supply chains are highly integrated and can function across service lines.

Better Management and Visibility over Contractors in the Theater of Operation

Contractors play an ever-growing role supporting deployed forces. Increased contractor presence in the theater can be attributed to many factors, including

- downsizing of the military during the past decade,
- growing reliance on contractors to support high-tech weaponry and provide initial or com-

plete life-cycle support for weapon systems, and

- a push to outsource or privatize functions to improve efficiency and apply savings to sustainment and modernization programs.

Increased presence of contractors can result in unintended consequences for the theater commander. Planning is the key to effectively managing contractors in the theater of operations. Joint Publication 4-0, Chapter V, “Contractors in the Theater,” was the first step in developing a comprehensive plan to address these issues. The Defense Acquisition Deskbook now contains a template providing acquisition personnel with guidance concerning deployment of contractors. The Joint Operation Planning and Execution System now has procedures to make contractor personnel and material movement visible in the time-phased force and deployment data. We are developing a new joint publication with tactics, techniques, and procedures for managing contractors in the theater of operations.

Reengineering the Executive Agency (EA) Process

Many studies, reports, and wargames—including Focused Logistics Wargame 01—have identified elements that promote inefficiencies and waste scarce resources. Executive agents render a unique capability by providing and coordinating common support to the warfighter. A robust EA assignment process improves efficiency by minimizing duplication of effort and resources among services and agencies. OSD, the Joint Staff, the services, and the combat support agencies have chartered a working group to review the EA assignment process end-to-end to ensure that it is a more effective tool for supporting logistics transformation.

Improving Subsistence Support

Wartime movement and distribution of food traditionally has been a major effort requiring significant military resources. Several initiatives are underway to improve visibility of subsistence assets and increase the use of commercial distributors. This increased visibility of ration sources will shorten the supply chain for this critical commodity and improve support to the warfighter during contingencies.

■ **Virtual Wartime Visibility (VWV) Program.**

The VWV program allows Defense Supply Center Philadelphia (DSCP) to maintain peacetime visibility over critical commercial food items in the continental United States (CONUS). This supports DSCP's plan to deliver products in response to a surge in military requirements.

■ **Industrial Base Extension (IBEX).**

IBEX maintains global visibility over food items outside the continental United States (OCONUS) that could be used in wartime if required. IBEX is the logistics interface between the CONUS industrial base and theaters of operations, providing coordination and communication capability, plus information about storage, manufacturing, transportation, and other OCONUS logistics capabilities.

■ **Unitization Expansion.**

The Industrial Base Planning Office purchased two assembly lines capable of increasing DLA output of unitized group rations (UGRs) by 33 percent. The equipment is containerized and immediately available to supplement both CONUS and OCONUS capacity to produce UGRs.

■ **Subsistence Prime Vendor (SPV).**

The OCONUS SPV program brings SPV benefits to OCONUS customers while addressing differences in the support required for them.

Privatizing Produce Acquisition and Distribution

The produce acquisition and distribution network is completely privatized. We have established a forward presence through 15 CONUS sites, 3 sites in Germany, and individual offices in Alaska, Hawaii, Guam, Japan, Korea, Okinawa, United Kingdom, and Italy. This forward presence also enables us to make purchases in countries close to these offices and the combatant commander areas of responsibility. Purchasing pure commercial items, such as produce, can facilitate quick reaction to surges in requirements.

Employing the Single Fuel Concept

Minimizing the number of bulk petroleum products that must be stocked and distributed reduces the tactical petroleum infrastructure requirement in-theater. Also, limiting military-unique fuels by requiring the use of kerosene-based products for land-based forces increases operational flexibility because these fuels closely resemble commercial-grade jet fuels, which are available worldwide. This concept will be formally included in the FY02 revision to JP 4-03, *Joint Petroleum and Water Doctrine*.

Employing Subsistence Information Technology

The Subsistence Planning Integrated Data Enterprise Readiness System (SPIDERS) is a web-based tool that will provide item supply availability for any contingency and enable DSCP analysts to evaluate industrial base ability to respond to the services' and combatant commanders' wartime requirements. Further, SPIDERS will support planning analyses for various contingency scenarios.

Improving Fuel Support Worldwide

- **En Route Refueling Infrastructure.** En route refueling infrastructure is a critical strategic lift enabler for the air bridge and air mobility. In response to the degraded state of en route infrastructure in the European and Pacific commands, DLA dramatically increased spending on fuels projects. As en route infrastructure is enhanced, the focus on refueling infrastructure must shift toward power projection platforms.
- **Petroleum.** Adequate, properly positioned, accessible petroleum will still be critical in the future. Two initiatives are improving the process for establishing petroleum requirements and simplifying storage and distribution. The combination of these efforts will reduce the overall petroleum footprint in theater.
 - A standardized method for computing Class III requirements—essential for operation plans (OPLANs)—ensures war reserve material stocks are sufficient to support warfighting combatant commanders. Furthermore, a standardized method ensures accurate requirements are submitted to the Defense Energy Support Center (DESC) and subsequently to suppliers. The services and joint petroleum offices have agreed to standardize the process of developing requirements and to use the Integrated Consumables Item Support Model as a validation tool. The Joint Staff and DESC have developed a joint petroleum seminar course to assist petroleum planners of the services and combatant commanders with understanding and standardizing the Class III requirements processes.
 - In the future, combatant commanders will use a web-based requirements generation



process exclusively to facilitate preparing immediate requirements estimates for DESC. This effort will greatly enhance both deliberate and crisis action planning to ensure timely delivery of Class III.

Focusing Resources on Pre-positioning

The services have pre-positioned unit equipment and sustainment both ashore and afloat to meet OPLAN force closure requirements and to reduce the demand for strategic lift by the early-deploying joint force. During the last decade, services have been challenged to meet the forward pre-positioning requirements during this period of constrained resources. Across the board, the services have prioritized their efforts on forward positioning of the equipment with required infrastructure, followed by the pre-positioning of sustainment. However, pre-positioned capabilities continue to fall short.

The services are actively programming funds to address their shortfalls. The Army will field its eighth heavy brigade (afloat) set in FY03. As part of “Army Transformation,” it is pursuing options to reconfigure existing sets to better support the full spectrum of operations and is exploring the roles of intermediate staging bases.

The Army also continues to address its sustainment shortfalls and overall equipment requirements as it transitions through the “Objective Force.” To be more versatile, the Marines are expanding their maritime pre-positioning ship capability with a naval mobile construction battalion, an expeditionary airfield, a 500-bed fleet hospital, and more sustainment.

All services are committed to program funds for improving their existing pre-positioned capabilities. Pre-positioning will undoubtedly remain a viable near- to mid-term capability, but it must be properly resourced and maintained so that the pre-positioned sets will always be combat ready. In the future, as we transform our logistics system, we anticipate our pre-positioning requirements will decrease as we improve our knowledge management and common relevant operational picture capabilities.

Focusing Attention on Bare Base Assets

Bare base assets have quickly become a strategic asset. Harvest Falcon and Harvest Eagle provide beddown and air operations support from austere locations and are indispensable for Air Force air expeditionary forces. Army Force Provider, with similar capabilities, is used to support both Army and joint operations worldwide. The quantities procured by the Air Force and Army initially were considered sufficient to support future operations, but years of higher-than-anticipated operations tempo have left the remaining assets at low readiness rates.

Both the Air Force and the Army are facing critical shortfalls in availability of bare base assets. Future budgets will require nearly \$750 million to reconstitute depleted assets. As the global war on terrorism (GWOT) evolves, reliance on bare base support may continue to grow.

Enhancing Mortuary Affairs Support

Mortuary affairs personnel learned many lessons as a result of the attacks on 11 September 2001. Selected combatant commanders have received increased funding for operational project stocks. We have increased emphasis on training units and acquiring state-of-the-art equipment, particularly decontamination technology. Sandia foam—a chemical decontaminant—has been authorized for use in theater and for training at the Mortuary Affairs School, Fort Lee, Virginia. Joint Publication 4-06, *Joint Tactics, Techniques, and Procedures for Mortuary Affairs in Joint Operations*, will have updated processes and procedures. To identify ways for improving sustainment operations, we will continue to review joint operations, aid to civil authorities, and integration of contracted support.

Improving Maintenance Operations

The overall DOD maintenance structure consists of depot, intermediate, and organizational levels, but the services use maintenance concepts that best support their warfighters. This flexibility to have maintenance accomplished in the most responsive and effective manner is essential to materiel readiness. Also, keeping costs to a minimum is necessary to free up funds for modernization. Weapon system readiness goals and cost factor constraints determine the best mix of repair strategies.

Several initiatives are underway for improving materiel readiness. These initiatives are the following:

- **Condition-Based Maintenance.** Using advanced sensor technology and wireless local area networks, weapon systems eventually will be able to predict component failures and give maintenance technicians the repair prognosis and repair procedures. The concept, called

autonomic logistics, will be employed on critical weapon systems, such as the Marine Corps' advanced amphibious assault vehicle.

Predictive failure in many cases replaces cyclical maintenance or waiting until a failure occurs. Autonomic logistics, which addresses more than just component prognostics, also speaks to other knowledge management shortcomings (battlefield identification, ammunition reporting, etc.).

- **Joint Business Rules for Repair Parts Management.** DOD has established maintenance concepts that best support the warfighter, using a “best mix” of service, depot, and private-sector maintenance to optimize weapon system repair—based on established metrics for weapon system readiness. These maintenance business rules cross service lines, and service systems must be integrated to implement them.

The Deputy Undersecretary of Defense for Logistics and Material Readiness has developed a materiel readiness operational plan for implementing the materiel readiness oversight capability. The Maintenance Technology Senior Steering Group, a joint-service and DLA general officer/flag officer/Senior Executive Service group, was established to reduce the maintenance burden by reengineering maintenance concepts and operations. The group's purview includes using enhanced prognostics, health management, and automatic logistics techniques, plus leveraging AIT for serial number tracking and maintenance data collection and analysis.

Improving Manpower Mobilization

We have a three-part approach for improving manpower mobilization:

- The first part is to develop policies to ensure reserve component (RC) requirements are met after the initial 24 months of partial mobilization have expired. The GWOT is a prolonged

conflict that requires a comprehensive plan for including the RC. Working with the combatant commanders and services, J-4 will assist OSD with developing this policy.

- The second part is to ensure warfighters have early access to their RC in support of the war plans and GWOT. Again, working with the combatant commanders and services, J-4 will assist OSD in developing this policy.
- For the third part, RC planning must be fully developed in combatant commander OPLANs. Using existing documents, J-4 will assist the combatant commanders with clearly identifying RC requirements and the services with fully resourcing RC needs.

Improving Ordnance Support

Accurate requirements are essential for effective, efficient, and responsive ordnance support to the combatant commanders' order of battle—whether the campaign is ongoing or contemplated, regional or global. Without clearly defined requirements, decision makers face serious challenges with assessing risk and with properly funding ordnance acquisition and sustainment.

Under Joint Staff J-8 lead, J-4 will work with the OSD staff, combatant commanders, and services to facilitate developing and adopting robust joint requirements definition processes across all services. J-4 will help develop standardized ordnance readiness assessment metrics and reports. Readiness assessment metrics will help in balancing standing stockpiles, current production, industrial surge capacity, and technology and lethality enhancements over time. J-4 will routinely assess readiness of preferred munitions and ordnance programs and will advocate appropriate adjustments to sustainment factors. J-4 will also advocate developing collaborative systems and rapidly transitioning to open architecture, web-based ordnance management systems.

Operational Engineering

- **What's Our Challenge?**

We must improve engineer response. This includes developing tools for rapid engineer assessments and contingency planning, enabling combat service support forces to be tailored to reduce strategic lift requirements, and minimizing footprint in the joint operations area.

- **What's Our Vision?**

We will provide effective, efficient, responsive, tailored engineer support to meet combatant commander and warfighter operational requirements and timeframes.



Operational Engineering

What's Our Strategy?

As recent operations have shown, we can no longer presume to know when and where our bases of operations will be established. The Cold War construct of massive, established support bases will not sustain the global war on terrorism. Furthermore, we must be concerned with not only the infrastructure but also the industrial base of regions where we will operate: Lines of communication, mineral products, and even water may or may not be available, and the sites on which we must operate may be contaminated from industrial operations. Engineers furnish the temporary and permanent infrastructure to project and sustain forces. There is no substitute for responsive military engineers when immediate action is needed in a hostile environment. Engineers are essential during the early phase of any operation, whether humanitarian, disaster relief, peacekeeping, or combat.

However, engineer units and equipment require significant lift to deploy. This was evident during the Focused Logistics Wargame (FLOW) 99 and FLOW 01, when engineer support failed to meet operational requirements because it didn't arrive when required. The joint engineer force needs to avail itself of current information technology and ongoing advances in construction technology to minimize its deployment profile while maintaining the capabilities required by the warfighter.



Our strategy to transform engineer support for future warfighters is to

- update joint engineering doctrine,
- improve our joint engineer planning and execution system,
- use pre-positioning as well as contract and host-nation engineers to reduce lift requirements and increase capabilities and capacity,
- incorporate advances in construction materials and technologies to improve our ability to operate in austere locations, and
- streamline Class IV (construction material) vendor support.

What Have We Already Done?

Improved Dissemination of Joint Engineering Information

We established the joint engineer web page, providing the joint force commander and engineer a ready reference on the full range of engineer units, contract support, options, and capabilities.

Enhanced Joint Engineering Interoperability

We institutionalized the Engineer Interoperability Review Board, moving it to the FLOW engineer and construction pillar.

Updated Joint Engineering Doctrine

Joint Publication 3-34, *Engineer Doctrine for Joint Operations*, gives the joint warfighter detailed guidance about the command, control, organization, and use of engineer forces in joint, interagency, and multinational operations.

Joint Publication 4-04, *Joint Doctrine for Civil Engineering Support*, assists the joint warfighter with planning, coordinating, and tailoring civil engineer support across the range of military operations. It also includes guidance on transitioning from military engineers to contract or host nation support.

What Are We Doing Now to Shape the Future?

Improving Joint Engineer Planning and Execution System

We are staged for a two-year effort to completely rewrite the Joint Engineer Planning and Execution System that will commence after it receives funding. This Global Command and Control System-compatible software application will give the joint force planner unprecedented engineer intelligence about the joint operations area and the ability to plan for an engineer force specifically tailored to the objectives of the joint force commander. This integrated planning tool will reduce deployment time, strategic lift requirements, and cost for the engineer force.



Analyzing Joint Engineering Capabilities

We are conducting an engineering capabilities study as a follow-on to the Quadrennial Defense Review. We are analyzing current engineering capabilities from all sources and comparing them to known or expected combatant commander requirements for engineers. The study will provide recommendations for meeting engineer desired operational capabilities.

Streamlining Class IV Vendor Support

As an outcome of FLOW 99, we established a Class IV working group to address this major FLOW deficiency. The working group, chaired by Defense Logistics Agency, is preparing a plan for improving vendor support based on a recently completed survey of combatant commander requirements. A working model of the improved support mechanism is anticipated in FY02.



Information Fusion

- **What's Our Challenge?**

We must provide logisticians and operators a common operational picture that offers reliable asset visibility and access to logistics resources.

- **What's Our Vision?**

We will provide timely and accurate enhanced asset visibility, control, and management through unimpeded access to operational and logistics information for all who need it.



Information Fusion

Information fusion merges operational and logistics information to create a single, integrated, common operational picture. Achieving information fusion is essential to meet every other focused logistics challenge and to achieve logistics transformation. By meeting this challenge, we will have the means for rapidly matching critical logistics capabilities to operational requirements, which will result in

- more effective and efficient use of our resources and, more important,
- the right logistics support at the right place and time.

To meet the information fusion challenge, we must

- develop a robust network-centric architecture capable of giving rapid access to timely, accurate, and synchronized operational and logistics information to all who need it; and
- develop enhanced asset visibility, control, and management applications that turn available data into “actionable” information.

What's Our Strategy?

Joint Vision visualizes information superiority as the key to achieving “decision superiority.” Using a network-centric approach, information fusion promotes information superiority by providing a common operational picture of operations and logistics—a conduit for operators to access logistics information and for logisticians to view the operational situation.



The foundation of the future network-centric logistics environment is the ability to access data at the source. We will eliminate batch processing, data latency, and data warehousing. This will improve data accuracy and asset visibility, thereby setting the conditions for improved collaboration and decision-making.

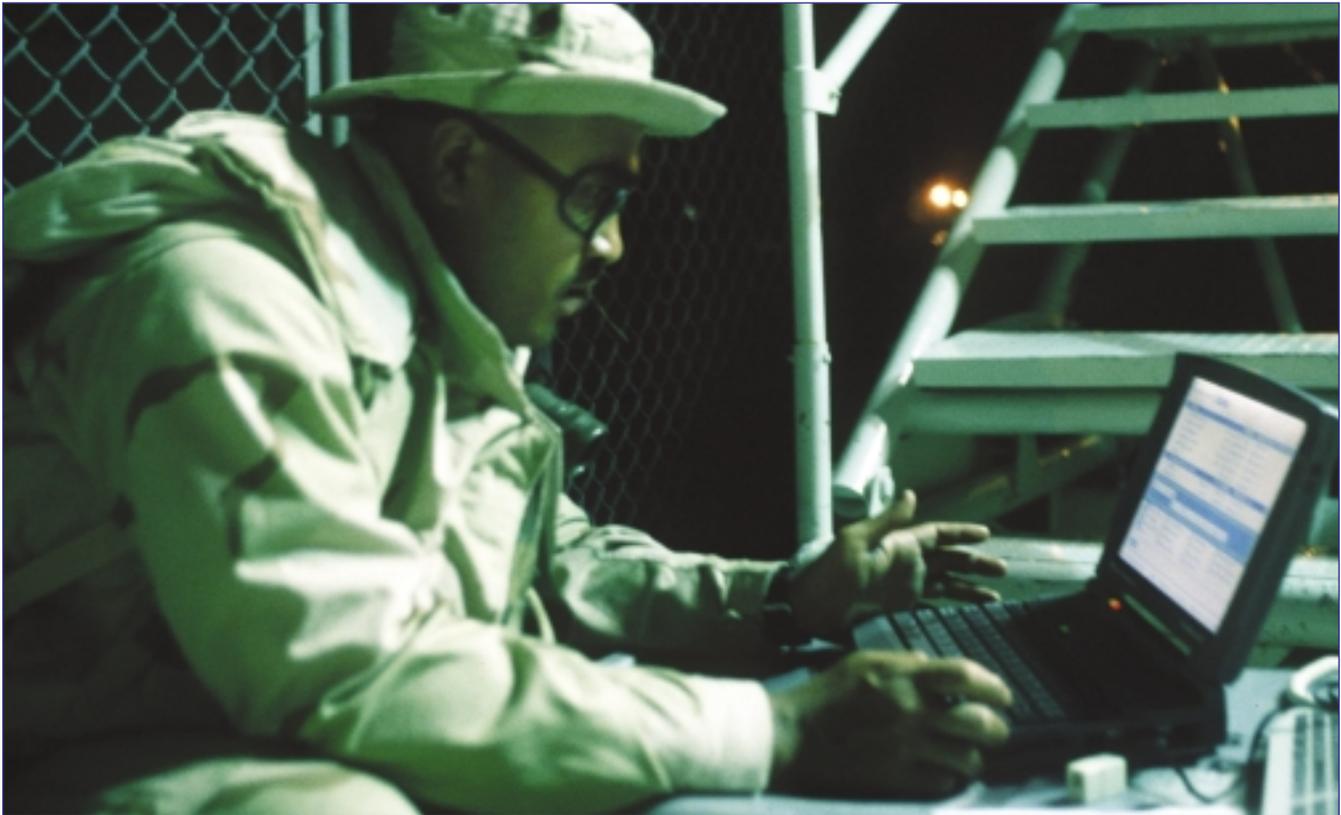
We have set a four-part strategy for attaining information fusion:

- **Part 1: Capture Source Data.** Capture timely and accurate source data.
- **Part 2: Modernize Logistics Systems.** Modernize and web-base logistics systems, resulting in shared data and interoperability and enabling integration of the command and control and logistics support environments into a common operational picture.

- **Part 3: Improve Joint Decision-Making.** Enable real-time command and control of the logistics pipeline by using advanced presentation techniques embedded in decision-support tools.
- **Part 4: Improve Data Integrity.** Ensure high-quality data are available for processing and presentation applications by standardizing and synchronizing the data.

This strategy will allow us to introduce essential near-term capabilities rapidly and still accommodate future course corrections as new technologies emerge and Joint Vision operational concepts—such as dominant maneuver, precision engagement, and joint task force command and control—are more fully defined.





What Have We Already Done?

Captured Source Data

Assessed Information Technology Requirements. We recently conducted a joint warfighting capabilities assessment to gather and verify the combatant commanders' information technology requirements for deployment, force tracking, and sustainment. We used this assessment to formulate a time-phased funding strategy for building a joint worldwide nodal data-collection architecture based on joint warfighter requirements. In addition, we compared combatant commanders' requirements with known or planned information technology capabilities and determined shortfalls for program objective memorandum funding.

Prepared an Automatic Identification Technology (AIT) Concept of Operations (CONOPS). A DOD task force, established in 1997 to facilitate implementing AIT throughout DOD, prepared an AIT CONOPS and made several recommendations, many of which the DOD Logistics AIT Office began implementing in 1998. Since then, DOD established an AIT baseline infrastructure in the U.S. European Command, U.S. Pacific Command, and U.S. Central Command areas of responsibility. In March 2000, the DOD Logistics AIT Office published the Department of Defense Logistics Implementation Plan for Automatic Identification Technology, which provides guidance and direction to the combatant commanders, military services, and defense agencies for fielding and using AIT across DOD logistics applications.

Modernized Logistics Systems

Established the Global Combat Support System (GCSS) Requirements. GCSS is a family-of-systems (FoS) approach that establishes data interoperability across combat support information systems and between combat support and command and control functions. It fuses information from disparate sources into a cohesive common operational picture. The Joint Requirements Oversight Council (JROC) approved a GCSS mission need statement in September 1997, followed by a GCSS capstone requirements document (CRD) in June 2000. The JROC also appointed the Joint Staff J-4 as functional proponent and CRD lead for GCSS. The strategy for developing and fielding GCSS is twofold:

- Integrate Defense Information Systems Agency (DISA)-developed GCSS mission applications into the Global Command and Control System (GCCS).
- Field a non-secure internet protocol router network (unclassified) GCSS capability that leverages an FoS comprising ongoing efforts to modernize service and agency logistics systems.

Improved Joint Decision-Making

Integrated Logistics Information into the Common Operational Picture through the GCSS (CINC/JTF) Tool. DISA developed a GCSS (CINC/JTF) mission application through which combatant commander and JTF personnel can obtain critical logistics management information. The GCSS (CINC/JTF) mission application consists of three components:



- **The Combat Support Data Environment.** This is a behind-the-scenes data mediator, transparent to the user, that makes data and decision-support tools easier to use.
- **The Common Operational Picture—Combat Support Enhanced (COP-CSE).** The COP-CSE adds critical logistics information to the automated situation map that the GCCS COP graphically depicts for an area of operation.
- **The GCSS Web Portal.** This web portal is a combat support web browser that accesses DOD information systems and applications.

By using the GCSS (CINC/JTF) tool, combatant commander and JTF personnel have increased access to critical combat support information that will enable them to more effectively analyze logistics feasibility and courses of action (COA) and improve decision making. The initial version of the GCSS (CINC/JTF) tool has been delivered to the combatant commanders as an application in GCCS. A follow-on version, which the combatant commanders will receive in FY02,

will integrate recently developed Joint Logistics Advanced Concept Technology Demonstration (JL ACTD) decision support tools and the transportation common operational picture.

Demonstrated Tools through the JL ACTD. The JL ACTD focused on providing the joint force commander with a near-real-time operations and logistics capability to support planning, execution, tracking, and assessment. The JL ACTD provided a tool suite that established a collaborative planning environment between J-3 and J-4 staff members, provided analysis in support of COA development, and automated generation and dissemination of the logistics plan. The tool also offered the means to track and assess the logistics situation on the battlefield in order to sustain operations. We are currently integrating the JL ACTD suite of tools into the next version of the GCSS (CINC/JTF) tool and will field it to the combatant commanders in FY02.

Improved Data Integrity

Designated a DOD Logistics Functional Data Administrator (FDAd). To reinvigorate logistics data management and administration, the OSD designated DLA the DOD logistics FDAd. Currently, DLA is preparing a plan of action and milestones to institutionalize a standard functional management and administration process for DOD logistics data.

What Are We Doing Now to Shape the Future?

Capturing Source Data

Implementing AIT. Services and agencies are implementing AIT actions in accordance with the milestones established in the DOD logistics implementation plan for AIT. All service and agency implementation actions are expected to be completed by the end of FY04, and significant portions of the combatant commanders' requirements are currently funded or programmed.

Implementing Common Access Card (CAC). DOD has embarked on an aggressive plan to implement smart card technology, an AIT medium, throughout the department. The department's smart card, known as CAC, will become

- the standard identification card,
- the means to gain physical access to buildings and controlled spaces, and
- the means to gain access to computer networks and systems.



DOD first issued CACs in May 01 and will continue the initial issue through the second quarter of FY03. We must continue to press for aggressive fielding schedules and lead efforts to integrate use of the CAC into the joint warfighter's logistics business processes.

Modernizing Logistics Systems

Implementing the GCSS FoS. As the GCSS CRD functional proponent, we work closely with functional proponents for each member of the FoS to ensure program documentation meets key performance parameters and to resolve issues of interoperability and security. A formal management structure has been established with working groups to address specific issues that occur across the FoS.

Promoting the Evolution to a Network-Centric Environment. Many of the efforts supporting information fusion enable DOD to exploit the value of information and the power of networking. As we leverage emerging technologies and web-base the GCSS FoS, we pave the way for the network-centric environment that enables our decision-makers to share and access common information in near real-time. We are moving away from the current environment—in which we process and disseminate our data in batches and store them in large databases or warehouses—toward one in which our forces are linked or networked and can share and exchange information across geographical and functional boundaries. In this new environment, we will leverage networks to access data at their source and make the right information available to the right people at the right time in the right places and in the right form.

Improving Joint Decision-Making

Continuing to Demonstrate Tools through the Joint Theater Logistics Advanced Concept Technology Demonstration (JTL ACTD).

The JTL ACTD focuses on improving capabilities for operators and logisticians to collaborate on logistics planning, execution tracking, assessment, and replanning. JTL ACTD has three phases:

- **Ops/Log Collaboration.** Delivers a foundation capability for operations and logistics collaboration.
- **Log Plan and COA Analysis.** Delivers a collaborative capability and tools to develop a logistics plan and perform COA analysis. Automatically calculates support relationships and sustainment requirements (on the basis of “drag-and-drop” unit placement) and the adequacy of available resources.
- **Logistics Watchboard.** Delivers a capability to track consumption data and match them to planning estimates to predict potential problems.



The first JTL ACTD military utility assessment, an event for military users to assess and identify JTL employment concepts, tactics, techniques, and procedures, was conducted at the US Joint Forces Command Joint Experimentation Center in Suffolk, Virginia. A second assessment will be conducted in September 2002 at the same location. Products demonstrating military utility will be integrated into the GCSS (CINC/JTF) tool and made available to the combatant commanders in FY03 and FY04.

Demonstrating Tools through the Coalition Theater Logistics Advanced Concept Technology Demonstration (CTL ACTD).

The CTL ACTD will develop and demonstrate a capability that enables a combatant commander, combined task force, or JTF to share automated logistics information and decision-support tools for logistics planning and problem solving across the full spectrum of military operations. The CTL ACTD will seek to integrate successful technologies from the JL and JTL ACTDs into the GCSS (CINC/JTF) tool and adapt those tools to operate in a coalition environment. A CTL ACTD military utility assessment of tools for coalition planning, execution, tracking, and assessment will be conducted in FY04 as part of a coalition exercise with DOD and the Australian Defense Force. Products demonstrating military utility will be integrated into national-level systems in FY05 and FY06.



Improving Data Integrity

Synchronizing Reference Tables and Standardizing Data. The DOD logistics FDAD is leading a proof-of-concept project to begin synchronizing logistics-related data reference tables. The project is a partnership—among the U.S. Transportation Command (USTRANSCOM), the military services, defense agencies, the Joint Staff, and OSD—that builds on the successes of a recent USTRANSCOM effort that synchronized transportation-related data reference tables. The project will synchronize data reference tables across 100 to 150 logistics information systems that support deployment processes. As the executive agent for joint reference data management, DISA will leverage the results of this project to establish and implement policy and procedures for managing and synchronizing data across DOD.

Multinational Logistics

- **What's Our Challenge?**

We must strengthen the support relationship between the United States and its allied and coalition partners.

- **What's Our Vision?**

We will optimize logistics operations across and between all echelons, coalitions, and host nations.



Multinational Logistics

Because multinational operations will become more common in the future, Joint Vision emphasizes multinational interoperability. Although we must maintain the unilateral capability to wage decisive campaigns to protect U.S. and multinational security interests, our armed forces will often fight in concert with regional allies and friends. Coalitions can decisively magnify combat power, effecting a rapid, desired resolution of conflict. We will improve the multinational logistics doctrine and procedures for conducting effective and efficient operations in an international environment. Issues that were previously the purview of a few need to be understood by all as we deal with the political, religious, and ethnic differences and geographical limitations of our coalition partners.



Multinational logistics calls for burden sharing among nations, increased operational efficiency, a reduced multinational footprint, stronger regional contact, and lower costs for international peace operations. A major 21st century challenge in joint logistics operations, particularly for those involving other nations, is to handle sensitive issues as an integrated effort, define clear lines of command and control, develop interoperable logistics communications, improve visibility, and provide accurate and timely logistics status. Joint Vision also emphasizes the need for, and challenge of, interoperability among our agencies.

Only by optimizing logistics operations across and between all echelons, coalitions, and host nations will we achieve multinational interoperability.

What's Our Strategy?

Improving logistics procedures, programs, and planning will enhance our multinational warfighting capability. It is not enough just to be joint in conducting future operations. We must find the most cost-efficient ways to integrate and improve interoperability with allied and coalition partners. Pooling requirements, exploiting mutual support arrangements, and effectively using contingency contracts will lower overall support costs and reduce the combined logistics footprint.

To improve our own logistics support capabilities, we will remove barriers that prevent maximizing benefits during cooperative actions with other nations. By achieving this goal, we will pave the way for U.S. forces to readily engage in operations with our most likely allies—anywhere, anytime. We will approach this goal by concentrating on three areas:

- Establish a framework for U.S. involvement in multinational operations.
- Expand bilateral agreements.
- Leverage multinational capabilities.

Establish a Framework for U.S. Involvement in Multinational Operations

The first step is to compose doctrine with broad strategic and operational guidance on logistics support for multinational operations. Joint Publication 4-08, Logistics Support for Multinational Operations, which ensures a common focus among government agencies, is the starting point.

We must then align our efforts with existing initiatives. An example of this alignment is the Department of State (DOS) and Office of the

Secretary of Defense-sponsored Enhanced International Peacekeeping Capability Program. This program enhances the political commitment, capability, and credibility of selected countries to participate in peacekeeping efforts. We will also emphasize logistics in multinational exercises, wargames, and simulations that facilitate interoperability by practicing, training, and evaluating national logistics systems in a multinational environment.

Some nations are concerned that we prefer to be the “banker” in multinational operations. They believe our financial controls are too stringent for convenient financial interoperability. We must eliminate such perceptions, which inhibit our effective participation in multinational operations.

Finally, we must spread the word about the multinational approach to logistics. We will engage the services, unified commands, individual nations, and groups of nations, explaining our goals and soliciting their support to achieve them.

Implementing focused logistics also requires improving interagency interoperability, particularly for foreign disaster relief and stability operations. Regional combatant commanders coordinate the provision of DOD supplies and services and deal directly with the Defense Security Cooperation Agency for non-DOD movements. The Joint Staff J-4 is the conduit between the DOS, Defense Logistics Agency, and U.S. Transportation Command for moving supplies and equipment when DOD transportation is required. Focused Logistics Wargame (FLOW) 01—which examined multinational and interagency processes, procedures, and systems—identified additional issues to be resolved.

Expand Bilateral Agreements

Expansion of bilateral cooperation, such as acquisition and cross-service agreements (ACSAs) and host nation support (HNS) agreements, increases our logistics reach and flexibility while minimizing duplication of common logistics support. ACSAs further the combatant commanders' strategies of cooperative engagement. They promote interoperability, enhance operational readiness, and provide cost-effective mutual support. They also provide responsive and flexible support during contingencies as well as peacekeeping, humanitarian, and disaster relief operations. Overall, ACSAs reduce the U.S. support tail and theater logistics footprint. ACSAs have proven their value many times. Expanding them to more countries can greatly improve our logistics capabilities.

Similarly, HNS agreements are wartime support vehicles that greatly facilitate joint reception, staging, onward movement, and integration. Like ACSAs, they reduce both our peacetime and wartime logistics footprint and free limited U.S. resources for other requirements. Other benefits of HNS agreements include promoting host nation partnership on common efforts, enabling rapid buildup, and creating combat force multipliers. Pursuing additional bilateral agreements will help our forces and our allies develop confidence in, and reliance on, multinational solutions to common problems.

Leverage Multinational Capabilities

Bilateral agreements strengthen defense cooperation between the United States and its allies, and we can further strengthen that cooperation by improving logistics capabilities of multinational



organizations. Strong multinational logistics organizations reduce our logistics costs by avoiding duplication of common support. Improving the logistics capability of international organizations, such as the United Nations (UN) and the North Atlantic Treaty Organization (NATO), will result in more efficient and economical use of everyone's logistics resources. Areas to pursue include

- continuing assignment of U.S. military logistics officers to the UN Department of Peace-Keeping Operations;
- participating in UN logistics process improvements, including procurement reform;
- asset management;
- developing the Brindisi Logistics Base to refurbish equipment;
- NATO initiatives, such as the Multinational Joint Logistics Center (MJLC) concept; and
- the Pacific Area Senior Officers Logistics Seminar education initiatives.

Contingency contracting supports contingency, humanitarian, or peacekeeping operations by providing facilities, supplies, and services, including maintenance, transportation, and quality of life support. Contingency contracting—which is particularly valuable when no HNS or ACSAs are available—plays a major role in leveraging multinational capabilities. It supports deploying forces and bridges gaps that occur before, during, and after organic support arrives. It also multiplies the effectiveness of active logistics forces in the theater. It provides contractors to supplement or replace active units, freeing them for other missions. During contingency operations, acquisition thresholds increase, simplifying acquisition procedures. Higher thresholds allow contingency contracting for a broad range of logistics support, from port-opening operations to sustaining and maintaining operating forces.

Types of support typically provided by contract include construction and maintenance of facilities; receiving, storing, issuing, and inventory of supplies; food service; transportation; mainte-

nance; sewage and waste removal; water production; and laundry. Planning should identify and integrate operational requirements and civilian sources of supplies and services. Contract support is acquired through local purchase or standing contracts, such as the Army Logistics Civil Augmentation Program, or through similar contracts of other services. By using contract support, whether through a standing contract or an as-required vehicle, military force structure for operations can be reduced.

What Have We Already Done?

Established a Framework for U.S. Involvement in Multinational Operations

Australia, Canada, and the United Kingdom (U.K.) were observers in FLOW 99, which led to their participation as full partners in FLOW 01. In FLOW 01, we renamed the multinational logistics pillar as the multinational logistics and interagency pillar. This pillar evaluated multinational and interagency processes and procedures, identifying problems and shortfalls to be resolved.

Expanded Bilateral Agreements

We completed several multinational logistics initiatives, making considerable progress in negotiating ACSAs. By the midpoint of FY02, we had obtained 56 ACSAs and had another 8 awaiting country signature.

Leveraged Multinational Capabilities

We moved forward in efforts to improve interoperability with NATO, completing NATO Publication MC 319, Principles and Policies for Logistics. Allied Joint Publication 4, Allied Joint Logistics Doctrine, is also complete, and NATO has completed a concept for the MJLC.



Continuous coordination with the UN enables us to remain current with UN processes and capabilities.

Our concept for sharing technology with our allies is a major step toward developing interoperable logistics information systems. We have included multinational partners as either participants or observers in Positive Response, a complex contingency crisis planning exercise.

What Are We Doing Now to Shape the Future?

Continuing to Establish a Framework for U.S. Involvement in Multinational Operations

Publishing Joint Publication 4-08, Logistics Support for Multinational Operations. This publication will ensure a common focus for our allies and our interagency partners.

Continuing to Expand Bilateral Agreements

Holding Bilateral Talks. Canada, U.K., France, and Germany—and later other multinational partners—are scheduled for bilateral talks. These talks have directly and positively impacted the provision of logistics support for various operations. Our increased knowledge of our multinational partners' capabilities and requirements has enhanced the interaction between nations, enabling resources to be made available quickly from the best sources.

Implementing ACSAs. ACSAs apply worldwide and allow the U.S. to rapidly provide and receive support from our friends and allies, on a reimbursable basis, without going through the time-consuming process of negotiating a foreign military sales case. By the midpoint of FY02, 72 countries were eligible to negotiate and 22 were



actually in negotiations. We are making progress toward a goal of concluding 10 new agreements per year.

Continuing to Leverage Multinational Capabilities

Improving Logistics Interoperability with NATO. This improvement requires a number of steps, starting with expanding third-party logistics support. Using the MJLC in exercises is the next step, then implementing NATO asset tracking.

Sharing Technology to Promote Interoperability. This effort promotes use of interoperable logistics information systems with allies. It starts with a technical demonstration, followed by development of an implementation plan. Subsequently, functional and technical solutions will be identified, business rules and processes determined, policy issues and statements developed, and training requirements planned. Development of a U.S./U.K. asset tracking system will culminate this action.

Force Health Protection

- **What's Our Challenge?**

We must protect service members from all health and environmental hazards associated with military service.

- **What's Our Vision?**

We will protect forces from all health threats across the full spectrum of conflict and tailor standardized joint medical systems to provide essential care in theater and enhanced care during evacuation to definitive care.



Force Health Protection

The most valuable, complex weapon systems the U.S. military will ever field are its soldiers, sailors, airmen, and Marines. These human weapon systems require life-cycle support and maintenance just as other, less complex weapon systems do. Force health protection (FHP) is the life-cycle health maintenance program for our human weapon systems. For FHP to succeed, commanders, service members, planners, and even the public must be involved.

To meet the challenge of FHP, the military health system is reshaping itself to provide full spectrum health services that

- emphasize fitness, preparedness, and preventive measures;
- improve monitoring and surveillance of forces engaged in military operations;
- enhance members' and commanders' awareness of health threats before they can affect the force; and
- support the health needs of the fighting forces and their families across the continuum of medical services.

FHP programs are interdependent. For example, superior evacuation, supported by excellent communications, is essential for developing and implementing effective forward resuscitative surgery and is complemented by a smaller, lighter, modular theater hospital. With the success of FHP's interdependent programs, the future military health system will reflect our vision.



What's Our Strategy?

FHP has three pillars—a healthy and fit force, casualty prevention, and casualty care and management—and the infrastructure activities that underpin them.

Promote and Sustain a Healthy and Fit Force

A healthy and fit force focuses on the preventive components of psychological, physical, and occupational health. Building blocks for a healthy and fit force include physical fitness training, health promotion programs, family support services, occupational health programs, periodic health assessments, stress management, and TRICARE-managed programs for all DOD beneficiaries.

Prevent Casualties

Casualty prevention must counter two types of threats:

- **Environmental and Occupational Health Threat.** Disease and non-battle injuries (DNBI) historically have combined to produce the largest number of military casualties. To reduce the occurrence of DNBI, FHP calls for
 - improved global medical intelligence;
 - a system for conducting and maintaining continuous disease, environmental, and occupational surveillance of the force; and
 - active countermeasures, including vaccines, chemo prophylaxis, personal protective equipment, and environmental preventive measures.
- **Enemy Threat.** The enemy usually causes smaller numbers of more serious casualties. However, weapons of mass destruction can produce very high numbers. Joint Vision calls for full-dimensional protection to reduce enemy capabilities to inflict casualties.

Improve Casualty Care and Management

Future casualty care and management will focus on delivery of essential care in theater with patient evacuation to definitive care, preferably outside the theater of operations, as soon as practicable. Casualty care and management will encompass four levels of combat care:

- **First Response.** First responders will provide initial essential care, advise commanders about unit and individual prevention techniques, and request help to control preventable threats that are beyond unit capabilities.
- **Forward Resuscitative Surgery (FRS).** FRS will provide life- and limb-saving surgical procedures to attain clinical stability before evacuation to definitive care.
- **Standardized Joint Theater Hospitalization.** Theater hospitals, lighter and highly flexible, will deploy in modules fully linked to medical evacuation, reporting, and situational awareness systems across all services.
- **En Route Care.** The clinical-capable Joint Evacuation System will support movement of casualties from point of injury or illness to essential stabilizing care and early evacuation to definitive care outside the theater of operations.

Leverage Non-DOD Sources for Infrastructure and Support

FHP is the most comprehensive overhaul of the military health system in more than 50 years. Streamlined military infrastructure, transition from hospital-based care to primary-care operations, and loss of medics with combat trauma experience will mandate innovative approaches for maintaining combat-related medical skills. Developing and maintaining joint medical training standards and combat trauma skills will require partnerships with centers of excellence from both the federal and civilian healthcare sectors.



What Have We Already Done? Prevented Casualties

Injury and Disease Prevention. In 1996, the Defense Intelligence Agency published Medical Environmental Disease Intelligence and Countermeasures (MEDIC), an unclassified tri-service deployment guide that provides comprehensive and standardized medical threat information and preventive medicine countermeasures to combatant commander and service medical planners. This publication ensures that relevant medical intelligence data are available for leaders to assess and communicate risks. The Armed Forces Medical Intelligence Center (AFMIC) updates MEDIC annually, and more than 9,000 CD-ROMs were distributed worldwide in FY02. Future versions of MEDIC, providing the most current medical and environmental information available for our deployed forces, will be available on the classified and unclassified AFMIC web sites.

Defense Medical Surveillance System (DMSS). In 1997, DOD changed the Army's Medical Surveillance System to the DMSS, moving toward a joint, comprehensive standard system. DMSS currently provides an initial operational capability, but it lacks the essential capabilities available in the Global Expeditionary Medical System (GEMS). The Air Force developed GEMS, which will be incorporated into Theater Medical Information Program (TMIP) as the Lightweight Epidemiological Advanced Detection and Emergency

Response System (LEADERS). LEADERS, a modular, web-based application, is designed to enhance the current medical surveillance process and provide the earliest possible detection of covert biological warfare incidents or significant outbreaks of disease. These systems will provide near-real-time medical intelligence and surveillance data to deployed forces and serve as a decision-support tool and repository for important medical data. Full operational capability, as envisioned in TMIP, is anticipated by 2008.

Improved Casualty Care and Management

Standardized Joint Combat Medic/Corpsmen Core Competencies. First medical response involves several tiers of "first responders" in the services. Today, these first responders frequently lack the skills for making a difference in battlefield mortality and morbidity. They need comprehensive medical readiness and trauma training that conforms to national standards and includes military-civilian partnerships. As a key



step in meeting this need, DOD established a prototype Joint Trauma Training Center at Ben Taub General Hospital in Houston, Texas. Forward surgical teams from all services and the Special Operations Command participated in rotational training. From this effort, the DOD concluded that military and civilian trauma training partnerships are viable, and this effort has been expanded with each of the services establishing partnerships with civilian trauma centers at various locations within the United States.

Forward Resuscitative Surgery (FRS). The Army currently has 14 forward surgical teams. The Navy has 9 fleet surgery teams. The Air Force fields surgery-capable expeditionary medical support teams. We are developing joint medical doctrine and standards for these teams.

Established Infrastructure and Support

Command, Control, Communications, Computers, and Intelligence (C4I)

Infrastructure. We are working toward a fully integrated medical C4I capability. The TMIP is being developed as the medical component of the

Global Combat Support System. The Joint Requirements Oversight Council approved the TMIP block 1 operational requirements document in 1999, and limited user testing has been conducted. Full operational capability is anticipated in 2008.

Defense Medical Logistics Standard System (DMLSS).

We are progressing toward full readiness capability for this system at the retail, wholesale, and operational levels. We deployed early releases of DMLSS on a limited basis and expect to fully deploy DMLSS by 2003.

DMLSS, as the medical logistics component of TMIP, will be the military health system's standard medical logistics automated information system, dramatically improving medical logistics responsiveness at reduced costs in peace and war.

What Are We Doing Now to Shape the Future?

Maintaining a Healthy and Fit Force

Occupational and Environmental Health. We are developing and implementing reliable occupational and environmental health programs to better support both deployed and non-deployed forces. Occupational and environmental health is the workplace control of physical, chemical, and biological risk factors to prevent exposure to hazards and maintain the health and safety of the living and working environment. The three components of occupational and environmental health are

- occupational and medical surveillance to identify risks and countermeasures;

- environmental quality to minimize occupational health risks; and
- industrial hygiene to minimize chemical, biological, and physical exposure.
- a device capable of automatically filtering and decontaminating water.

Preventing Casualties

Injury and Disease Prevention. The Army has fielded two forward-deployable Theater Army Medical Laboratories, the Air Force Biological Augmentation Team is scheduled for fielding in 2002, and the Navy's Forward-Deployable Preventive Medicine Unit is scheduled for fielding in 2004. These will evolve into a comprehensive, continuous health surveillance, threat identification, and reporting capability that facilitates implementing countermeasures to minimize DNBI—during pre-deployment, deployment, and post-deployment. The infrastructure required to support integration, real-time collection, and near-real-time reporting of threat and countermeasure data is embedded in TMIP.

Real-Time Analysis and Threat Confirmation. We are standardizing the technology, equipment, and structure for real-time analysis and threat confirmation. Innovative surveillance and countermeasure equipment could significantly decrease the number of casualties, in and out of theater. Research will focus on developing joint state-of-the-art equipment to give preventive medicine professionals enhanced surveillance and countermeasure alternatives. Examples of the technology and equipment include

- individual chemical/biological agent dosimeters;
- small diagnostic test kits for rapid identification of pathogens;
- small, deployable, easy-to-use devices capable of detecting dangerous levels of environmental toxins, pathogens, and vectors in real-time; and

Defense Medical Surveillance System (DMSS).

The TMIP operational requirements document includes medical surveillance capabilities. The Medical Surveillance System has been built and tested and will be deployed as part of TMIP Block 1 in 2002.

Medical Analysis Tool (MAT) Expansion.

MAT—the only Joint Staff-approved medical planning and requirements determination tool—is used for deliberate and crisis action plan development. MAT version 2.0 is currently used by medical planners worldwide. It is envisioned that the next version of MAT will expand medical support requirements determination, including requirements resulting from use of weapons of mass destruction, when funded. The DOD Joint Readiness Clinical Advisory Board approves the data (Common User Database) for MAT. When incorporated into MAT, these data will enable medical planners to accurately ascertain the full spectrum of medical requirements and simulate conventional and unconventional casualties through a medical treatment pathway.

Improving Casualty Care and Management

Communications. Even the most highly trained, best equipped, and technologically empowered en route care provider of the future will depend on the flow of information. The U.S. Transportation Command Regulating Command and Control Evacuation System (TRAC2ES) completed initial operational capability testing in May 2001, and it is now providing web-based patient in-transit visibility and integrated lift-bed planning, among many other functional capabilities. Vastly superior to the legacy systems it replaced, TRAC2ES will be integrated into the

Global Transportation Network. It will underpin and expand in-flight clinical capabilities while ensuring continuity of care from point of injury or illness to definitive care. We must pursue funding for TRAC2ES full operational capabilities, which will include

- global coordination and situational awareness for all network users,
- advanced planning and projection capability, and
- in-transit patient visibility.

Standardized Joint Combat Medic/Corpsmen Core Competencies.

The services are expanding the training required for medics and corpsmen and are requiring basic certification in the National Registry for Emergency Medical Technicians for award of the specialty. Through the Defense Medical Readiness Training and Education Council, DOD and the Joint Staff must ensure funding for programs that provide trauma training opportunities and further development of robust distributed learning programs that offer opportunities for continuing education.

FRS. Joint Publication 4-02, *Doctrine for Health Service Support in Joint Operations*, has been published. The next step is for the Assistant Secretary of Defense for Health Affairs to develop policies specifically addressing FRS. Areas requiring further review and validation include



FRS standards for organization and employment, trauma team training, and support requirements. FRS, including multi-staged surgery, will ensure the provision of emergency surgery and essential care for deployed forces in a resource- and lift-constrained environment. We must work with the OSD to expeditiously complete a comprehensive FRS policy.

Standardized Joint Theater Hospital (TH) Operations.

The Air Force Expeditionary Medical Force Reengineering Initiative is scheduled to be completed in 2005, and the Army's Medical Reengineering Initiative and the Navy's Plug and Pull Initiative are scheduled to be completed in 2010. Future THs must be more easily deployed and the design must be dynamic, flexible, and standard. We must ensure future com-

position includes standardized functional elements capable of operating independently:

- A small initial-response element capable of providing forward, crisis-oriented care
- The core TH
- A mobile breakout element with enhanced, short duration, standalone hospitalization capability.

Strengthening Infrastructure and Support

C4I Infrastructure. Future C4I infrastructure must be based on joint technical architecture, common-operating environment compliance, and defense information infrastructure. We envision a fully operational, seamless, integrated, auto-

ated information system that supports worldwide medical operations across all levels of care. At end-state, TMIP will provide the military health system with a responsive, reliable, and secure C4I information system. We must work with DOD, the combatant commanders, and services to ensure development of comprehensive medical C4I doctrine and policy.

DMLSS. DMLSS readiness capability will be integrated into TMIP block-2, currently scheduled for deployment between FY03 and FY05. We must continue to work toward full development and deployment of this standard medical logistics automated information system.



Joint Logistics Experimentation

- **What's Our Challenge?**

We must iteratively collect, develop, and explore concepts and conduct assessments to achieve advances in future joint operational capabilities.

- **What's Our Vision?**

We will leverage joint logistics experimentation to promote logistics innovation and focused logistics advances in support of full spectrum dominance.



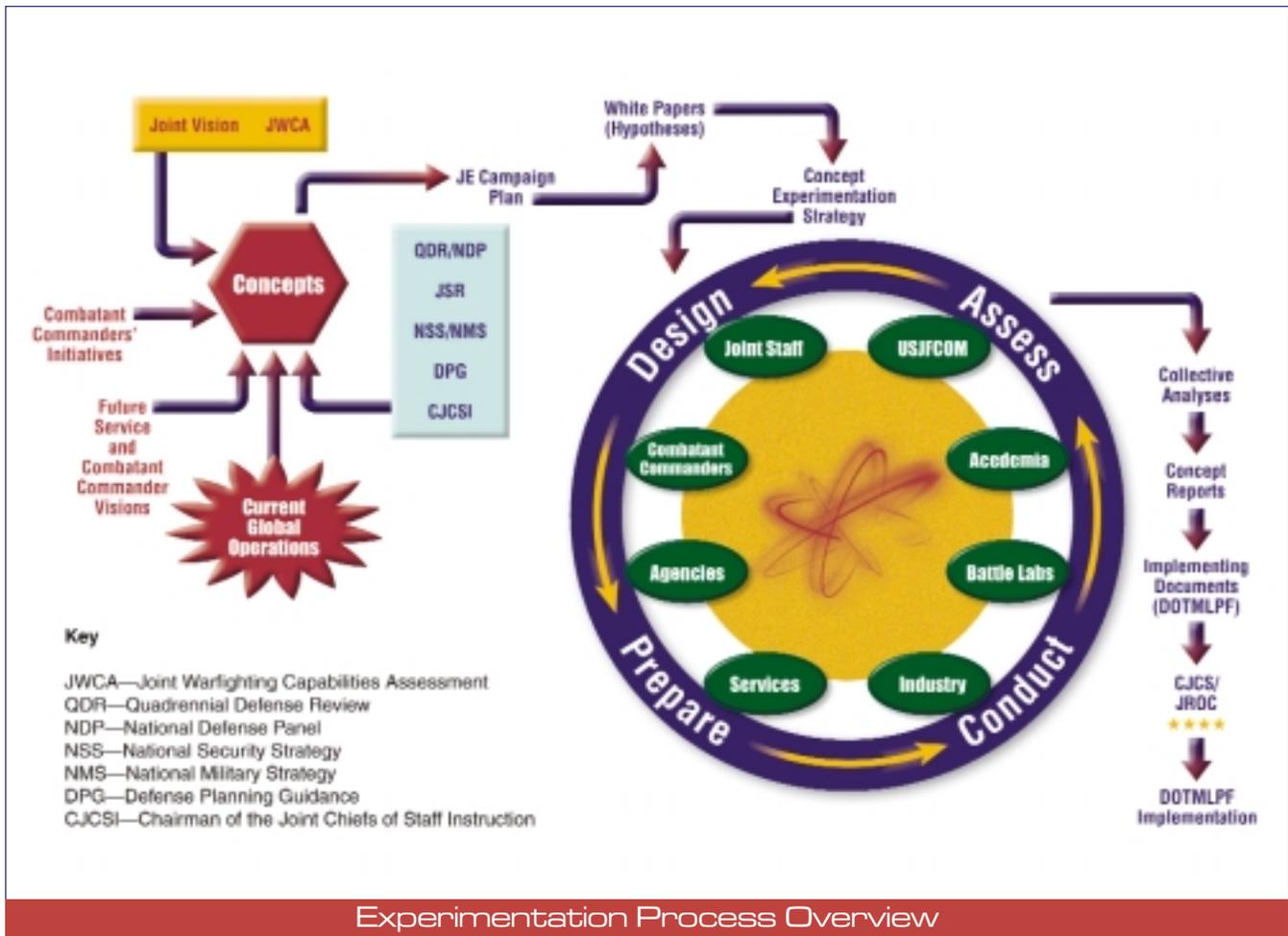


Joint Logistics Experimentation

Joint Vision calls for organizational and conceptual—as well as technological—innovation. Joint experimentation is the process that fosters new ideas. It gives the Joint Staff, the services, and combatant commanders the opportunity to create and cultivate the concepts that lead to breakthroughs. Joint experimentation nurtures, refines, and validates the most relevant original thoughts and repudiates those that do not support force evolution. It sparks new ways of thinking and explores needed changes in doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF). U.S. Joint Forces Command (USJFCOM) is the executive agent for joint experimentation. We, the joint logistics community, will collaborate with USJFCOM to promote logistics innovation and bring about focused logistics advances.

What's Our Strategy?

A vigorous Joint Logistics Experimentation process is critical to our logistics transformation effort. We conceive new concepts by combining visions (joint, service, and combatant commander), studying the global picture, and applying innovative thinking. The USJFCOM Joint Experimentation (JE) Campaign Plan captures these concepts, and concept white papers provide additional detail. A concept experimentation strategy evaluates each concept. Leading thinkers—from the military, academia, and industry—guide the process. They analyze findings from experiments, document them in concept reports, and make DOTMLPF recommendations. The Joint Requirements Oversight Council decides which recommendation to accept and implement. The following figure illustrates the joint experimentation process.



USJFCOM’s campaign plan organizes experimentation around three axes as shown in the following figure:

- The **first axis** explores the use of commercial off-the-shelf (COTS) technologies in new and innovative ways to enhance current platforms and operational concepts. It focuses on near-term enhancement to the current force when needed to underpin achievement of a longer-term transformation goal.
- The **second axis** focuses on supporting the achievement of full spectrum dominance, described in Joint Vision. It explores emerging concepts, technologies, and advanced information systems for use in supporting the evolution of the joint force. Experimentation along this axis looks at the systems, capabilities, and forces needed to meet the challenges of the next decade.
- The **third axis** explores revolutionary concepts and technologies that will result in the complete transformation of the force.

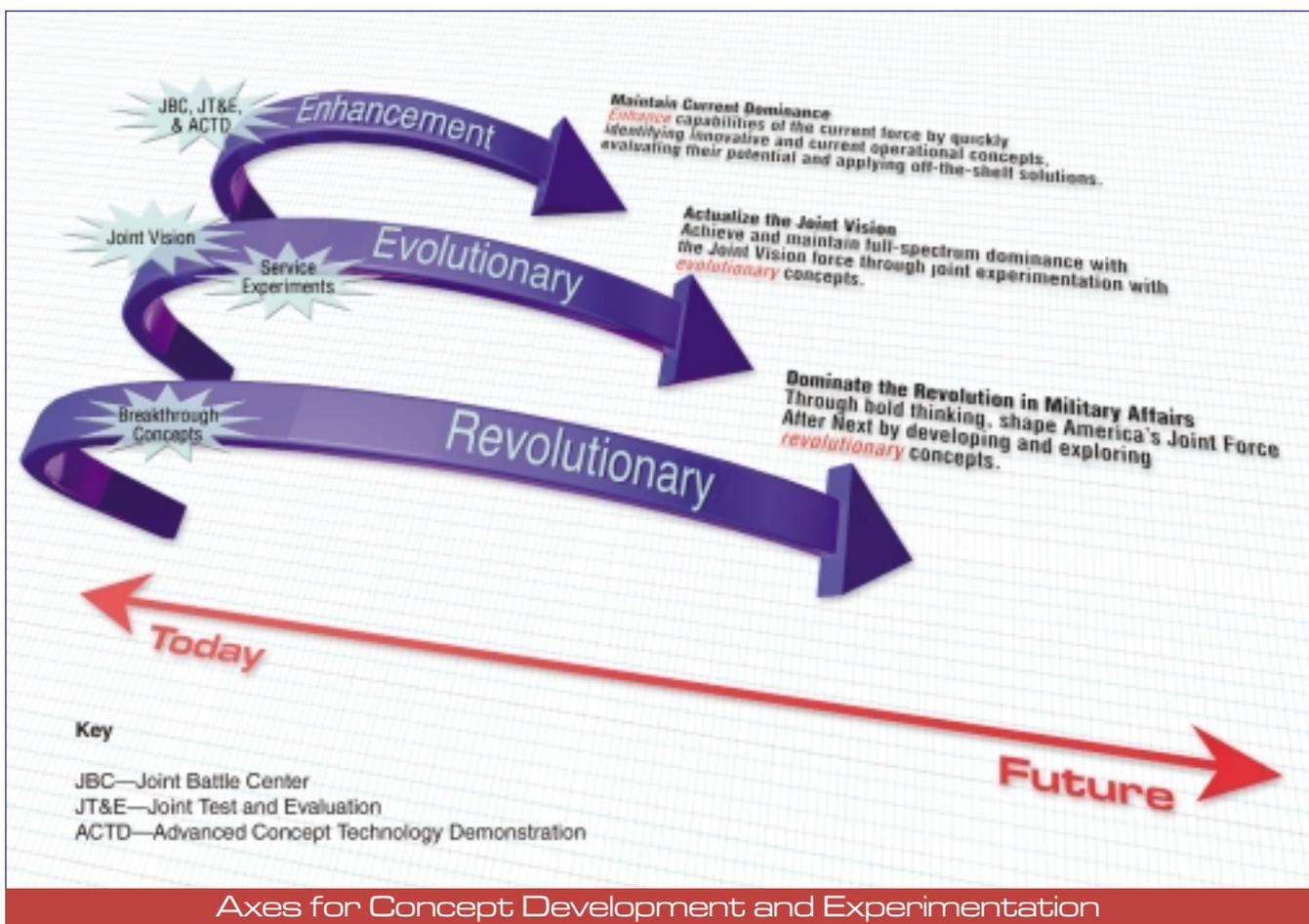
What Have We Already Done?

Developed Concepts

USJFCOM and the joint logistics community developed two concepts that support and expand on the focused logistics program—*Focused Logistics: Enabling Early Decisive Operations* and *Strategic Deployment*. The objectives of the concepts are to develop

- a means for the joint force commander to collect, process, and display logistics information and to visually match logistics capabilities with operational requirements;

- platforms and procedures to rapidly deploy mission-ready forces into the joint operations area;
- the ability to provide time-definite (guaranteed on-time) sustainment support to forces operating in the joint operations area;
- a capability for joint theater logistics management to provide effective logistics support in accordance with priorities established by the joint force commander.



These concepts are continually being refined and revised in the ongoing exploration and experimentation process.

Established the Joint Logistics Warfighting Initiative (JLWI) Lab

We established the JLWI Lab in December 2000. The lab provides an environment to capitalize on service initiatives, COTS technologies, and best business practices. The final objective of JLWI is to have the services and agencies incorporate useful changes into their future Global Combat Support System areas.

Conducted Focused Logistics Wargames (FLOW) 1999 and 2001

FLOW is the biannual Joint Staff J-4 wargame that assesses how well programmed joint logistics capabilities support the national security strategy and evaluates progress toward achieving focused logistics desired operational capabilities. FLOW captures issues for consideration in the USJFCOM, service, and agency experimentation processes. The results of FLOW have influenced service program objective memorandums, Defense Reform Initiative Directive 54, and the Defense Planning Guidance.

What Are We Doing Now to Shape the Future?

Participating in Joint Wargames

FLOW. USJFCOM will continue to leverage FLOW to capture issues for consideration in the joint experimentation process as well as in service and agency experimentation processes.

Conducting Joint Experiments and Wargames

MILLINNEUM CHALLENGE 2002

(MC 02). This experiment will examine requirements for conducting a rapid, decisive operation against a challenging regional threat in the 2007 timeframe. MC 02 will offer the opportunity to analyze strategic deployment concepts, alternatives for sustainment delivery, the accessibility of logistics information, and the application of joint theater logistics management.

OLYMPIC CHALLENGE 2004 (OC 04).

The purpose of this experiment is to prototype, validate, and operationalize the Standing Joint Forces Headquarters (SJFHQ). OC 04 will provide us an opportunity to further refine the logistics elements of the SJFHQ as well as explore emerging joint theater logistics management concepts.

JOINT GLOBAL WARGAME (PINNACLE

VISION 04). The Joint Global Wargame is a USJFCOM “capstone” joint experimentation event that will serve as an integrating vehicle for future concepts and capabilities. The Joint Global Wargame will include multinational/inter-agency participation and offer us the opportunity to analyze advanced joint and multinational logistics concepts in the context of the “next decade” environment.



Keeping Focused Logistics on Track



Keeping Focused Logistics on Track

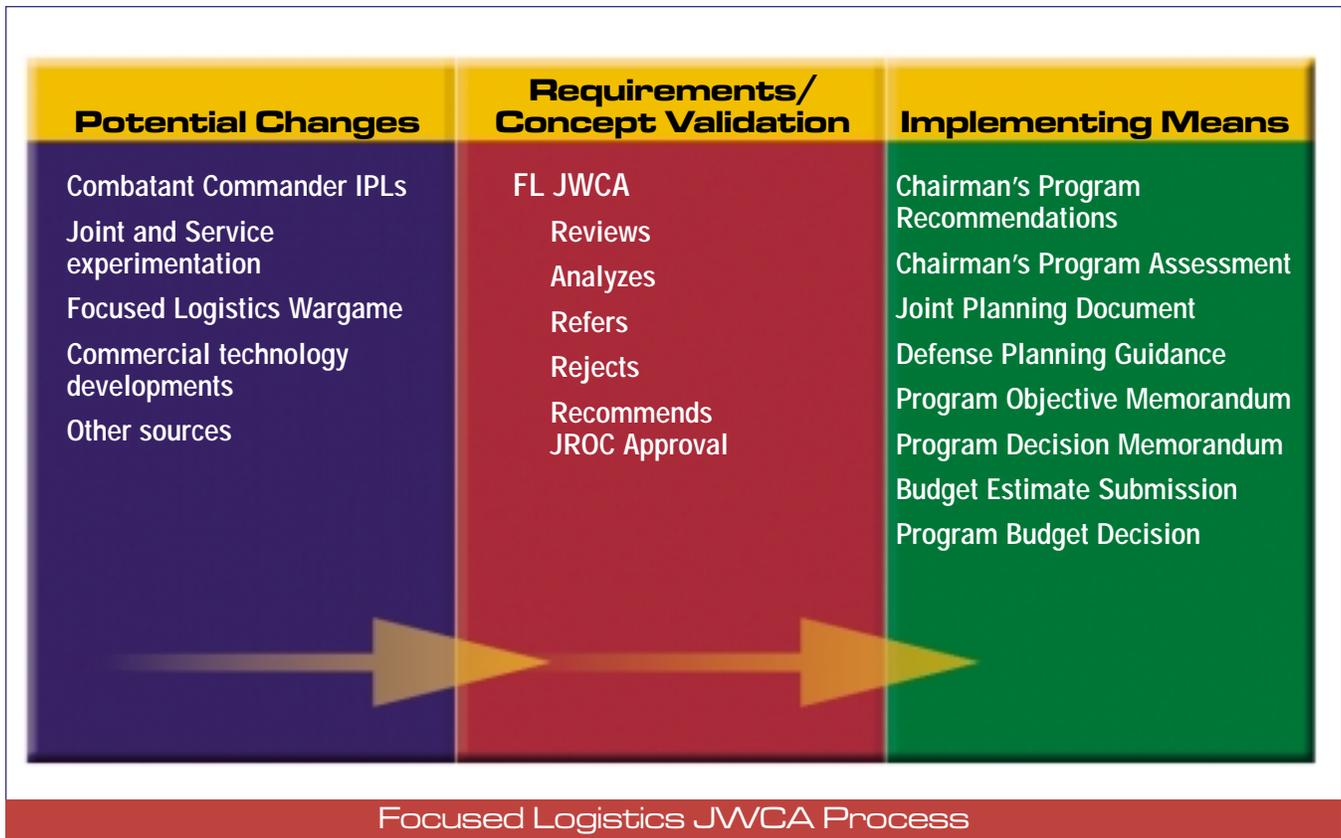
This campaign plan consolidates our most current guidance for focused logistics. However, it is a living document that will need to change as circumstances and technology change. To keep our focused logistics guidance up to date—and more important, to keep focused logistics programs relevant and on track—we must

- manage change proactively,
- obtain resources to implement our programs,
- demonstrate meaningful progress in our programs, and
- sustain long-term commitment from both the logistics and operations communities.

Managing Change

The Focused Logistics (FL) Joint Warfighting Capabilities Assessment (JWCA) team is our focal point for new requirements, concepts, or programs. The FL JWCA team also evaluates how new requirements, concepts, or programs will affect doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF). The Joint Staff Director for Logistics, J-4, sponsors the FL JWCA. It comprises functional area experts from the combatant commanders, services, agencies, Joint Staff, OSD, and others who assess warfighting capabilities and focused logistics requirements. As shown below, proposed changes to focused logistics may originate from a number of sources. The FL JWCA determines which proposed changes to recommend to the Joint Requirements Oversight Council (JROC) for approval, and JROC-approved changes are implemented through a variety of means.





The FL JWCA team's efforts directly support the Chairman of the Joint Chiefs of Staff in meeting his statutory responsibility to submit the Chairman's Program Recommendations (CPR) and Chairman's Program Assessment (CPA) to the Secretary of Defense.

The FL JWCA is also an integral element of the Joint Vision implementation strategy outlined in the Joint Vision Implementation Master Plan. The FL JWCA identifies and proposes future joint experimentation requirements and reviews recommended changes resulting from joint experiments and assessments.

The J-4 and staff continuously monitor the status of focused logistics initiatives to determine

which issues are most critical and require concentrated attention. They also ensure our focused logistics challenges, desired operational capabilities, and implementation efforts are synchronized and fully integrated with JROC-directed strategic topic (such as dominant maneuver, precision engagement, and joint task force command and control) operational concept and architecture development.

Obtaining Resources

Focused logistics will not reach its potential without commensurate resources. Since resources are always constrained, we must prioritize focused logistics initiatives and advocate only those that realistically offer a promising return on investment. The JWCA process is our

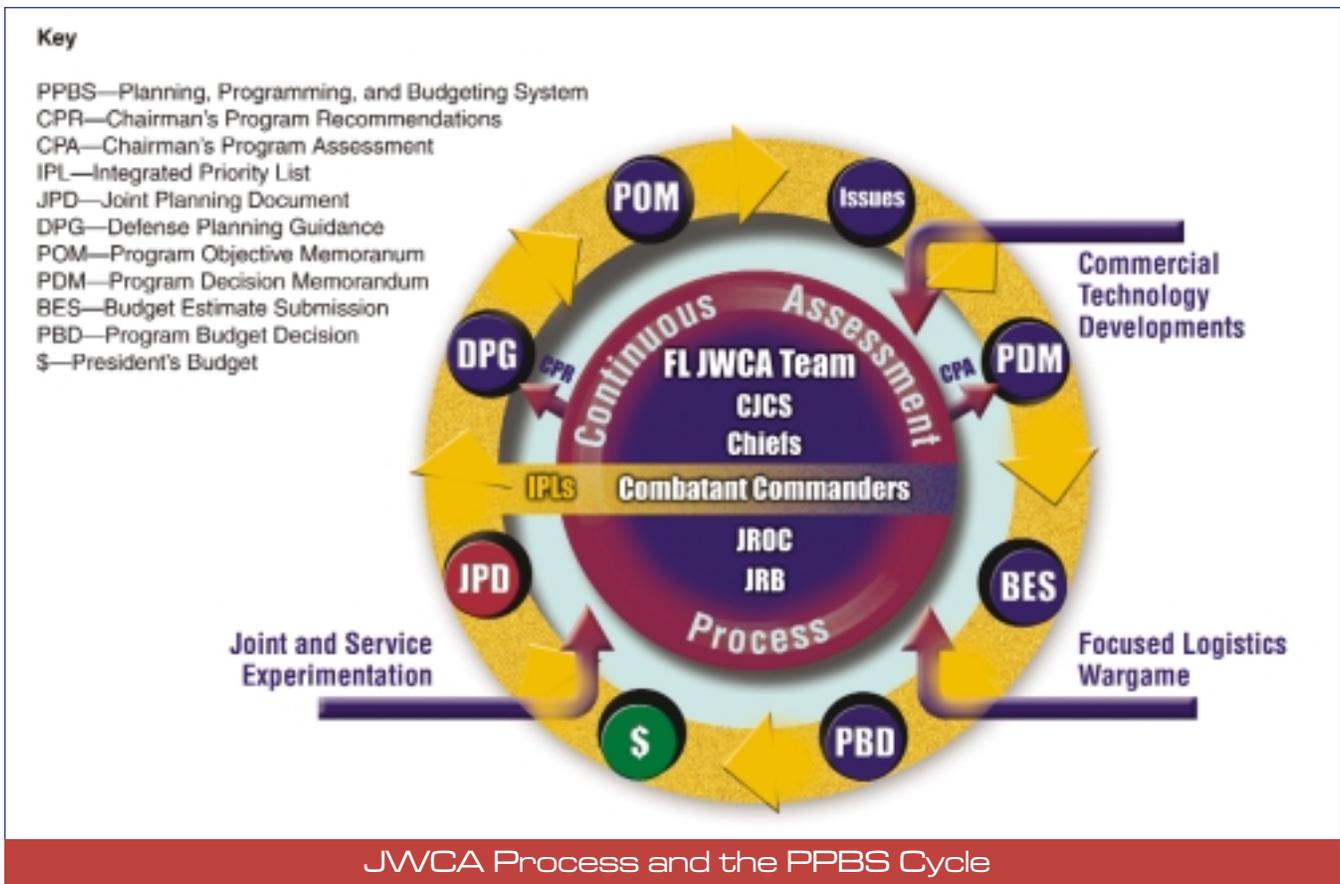
primary tool for influencing DOD resource allocation decisions. Although the JWCA process is not a formal part of the Planning, Programming, and Budgeting System (PPBS), Joint Strategic Planning System, or acquisition process, it links to the

- requirements generation system through the Vice Chairman of the Joint Chiefs of Staff, who is the chair of the JROC;
- defense acquisition management system through the Vice Chairman of the Joint Chiefs of Staff, who is also the Deputy Chair of the Defense Acquisition Board; and
- PPBS cycle through the CPR and CPA. The CPR and CPA are two major JWCA process outputs that provide the Chairman's personal

input to the Defense Planning Guidance and Program Decision Memorandum, both integral components of the PPBS. The combatant commanders' integrated priority lists (IPLs) are common to the JWCA process and the PPBS cycle. The IPLs serve as a joint warfighting input for the JROC JWCA process and the Secretary of Defense PPBS cycle.

In addition, we and our other FL JWCA partners participate aggressively in the program and budget review processes to ensure our focused logistics programs are properly recognized and resourced.

The following figure illustrates the relationship between the FL JWCA process and the PPBS cycle.



Assessing Progress

The biannual Focused Logistics Wargame (FLOW) is one of our principal tools for assessing the capability of US joint forces to support the warfighter over the entire range of military operations. FLOW evaluates technological breakthroughs, joint logistics doctrine, and desired operational capabilities required to meet focused logistics challenges. The Joint Staff J-4 provides game oversight as combatant commanders, services, and selected agencies participate.

Through collaboration with FL JWCA members, we will assess and track progress toward the capabilities necessary to realize the full potential of focused logistics. Through forums such as the annual Conference of Logistics Directors (COLD), we will keep the logistics community leadership informed, involved, and committed to a unified effort.

Sustaining Support

We need long-term commitment from both the logistics and operations communities if we are to achieve the full potential of focused logistics.

We use a number of forums to keep the logistics community involved and informed. For example,

- our J-4 staff collaborates with the community members to favorably influence planning and programming documents, such as the Defense Planning Guidance, program objective memorandums, and program decision memorandums that affect focused logistics programs and funding; and
- we use collaborative bodies—such as the COLD, FLOW, and the Future Logistics Enterprise—as forums to develop guidance and achieve unity of effort.

We also use as many forums as possible to advocate focused logistics to our operations community partners. We never forget that focused logistics is for the warfighter and it's about successfully transforming our logistics capabilities to meet the warfighter's future requirements. A solid partnership between operations and logistics is essential to assure future weapons systems have the designed-in deployability, reliability, maintainability, supportability, and interoperability to meet those future requirements.

Conclusion

The U.S. has unmatched capability to project and sustain military forces, but we know we must get better.

This document concentrates on how we can improve our logistics capabilities:

- It articulates a comprehensive, integrated approach for logisticians and operators to work as partners in achieving capability for full spectrum logistics support to the future joint warfighter.
- It describes how we will achieve the full potential of focused logistics through revolutionary changes to information systems, reengineered processes, innovations in organizational structures, and advances in transportation technologies.
- It identifies major challenges we face as we transform our logistics capabilities, discusses our vision and strategy for meeting each challenge, and describes our programs to implement our strategy.

Improvements will not occur overnight. While we are transforming our logistics capabilities, circumstances and technology will change, and we will need to update this campaign plan. But with an integrated, long-term operations and logistics commitment focused on joint warfighting, we will be better able to make the right decisions to improve both logistics and operations capabilities.

Focused Logistics

**Our overarching goal is to •
attain the full potential of
focused logistics and
provide our future
joint warfighters**

- the **right** personnel,
equipment, supplies,
and support
 - in the **right** place
 - at the **right** time and
 - in the **right** quantities
- across the **full spectrum**
of military operations.

Focused Logistics Partnership

