14. ABSTRACT

Management of joint theater logistics is challenging to Combatant and Joint Force Commanders across the range of military operations. Many of the lessons learned during Operation Enduring Freedom and Operation Iraqi Freedom in the Central Command area of responsibility arguably support the establishment of a functional Joint Force Support Component Commander responsible for all joint theater logistics support to Combatant and Joint Force Commanders. However, most of the supporting arguments for a Joint Force Support Component Commander are based on experience and challenges observed during major combat operations supporting primarily land-centric forces. Other combatant commanders face different challenges in both scope and primary medium. As such, they require joint theater logistics management solutions that are flexible, scalable and that effectively and efficiently coordinate support. In view of the success of the Joint Deployment and Distribution Operations Center concept, it is questionable if the Joint Force Support Component Commander concept retains its viability. This paper briefly describes joint theater logistics management problems experienced during past conflicts, considers current U.S. law and doctrinal authorities affecting joint theater logistics management, analyzes the Joint Force Support Component Commander concept, and examines the Joint Deployment and Distribution Operations Center both in concept and execution. Finally, this paper offers Combatant Commanders and Joint Force Commanders conclusions and recommendations for improving joint theater logistics management.
JOINT THEATER LOGISTICS MANAGEMENT: IS THE JOINT FORCE SUPPORT COMPONENT COMMANDER CONCEPT A VIABLE OPTION?

by

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The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: ____________________

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Management of joint theater logistics is challenging to Combatant and Joint Force Commanders across the range of military operations. Many of the lessons learned during Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) in the Central Command area of responsibility arguably support the establishment of a functional Joint Force Support Component Commander responsible for all joint theater logistics support to Combatant and Joint Force Commanders. However, most of the supporting arguments for a JFSCC are based on experience and challenges observed during major combat operations supporting primarily land-centric forces. Other combatant commanders face different challenges in both scope and primary medium. As such, they require joint theater logistics management solutions that are flexible, scalable and that effectively and efficiently coordinate support. In view of the success of the Joint Deployment and Distribution Operations Center concept, it is questionable if the JFSCC concept retains its viability. This paper briefly describes joint theater logistics management problems experienced during past conflicts, considers current U.S. law and doctrinal authorities affecting joint theater logistics management, analyzes the Joint Force Support Component Commander concept, and examines the Joint Deployment and Distribution Operations Center both in concept and execution. Finally, this paper offers several conclusions and recommendations for improving joint theater logistics management concepts.
# Table of Contents

Introduction 1

Discussion / Analysis 2

*What is Joint Theater Logistics (JTL)?* 2

*Pertinent Issues for Joint Theater Logistics Management (JTLM)* 3

*Current U.S. Law and Doctrinal Authorities Affecting JTLM* 6

*Joint Force Support Component Commander (JFSCC)* 10

*Joint Deployment and Distribution Operations Center (JDDOC)* 13

Recommendations 15

Conclusion 17

Notes 20

Bibliography 22
INTRODUCTION

Management of joint theater logistics (JTL) is challenging to Combatant and Joint Force Commanders (CoCOMs and JFCs) across the range of military operations (ROMO). The U.S. Pacific Command (PACOM) commander must manage JTL in an area of responsibility (AOR) that covers more than 50 percent of earth's surface (approximately 105 million square miles), is primarily a maritime environment, crosses 16 time zones, contains nearly 60 percent of the world’s population (in 42 countries, 20 territories and possessions, and 10 U.S. territories) and the world's six largest armed forces (Peoples Republic of China, United States, Russia, India, North Korea, South Korea). Many of the lessons learned during Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) in the Central Command (CENTCOM) AOR arguably support the establishment of a functional Joint Force Support Component Commander (JFSCC) responsible for all JTL support to CoCOMs and JFCs. Proponents of the JFSCC concept, having first proposed this idea in the years following DESERT SHIELD/DESERT STORM (DS/DS), have long extolled the virtues of such an organization to resolve JTL issues and point to the U.S. Army Theater Support Command (TSC) as the basis for organizing a JFSCC. However, most of the arguments for a JFSCC are based on experience and challenges observed during major combat operations supporting primarily land-centric forces. Other CoCOMs face different challenges in both scope and primary medium. For example, the PACOM commander and his designated JFC(s) support air- and sea-centric military forces engaged in multiple (and simultaneous) crises at lesser levels of intensity via primarily sea and air lines of communication over a much larger physical area. As such, they require joint theater logistics management (JTLM) models/solutions that are flexible, scalable in both size and number to support simultaneous
contingencies and that effectively and efficiently coordinate support in and on the sea, air and land. In view of the success of the Joint Deployment and Distribution Operations Center (JDDOC) concept, it is questionable if the JFSCC concept retains its viability for JTLM. The JDDOC appears to address many of the issues that initiated discussion of the JFSCC concept following DS/DS. This paper briefly describes the JTLM problems experienced, considers current U.S. law and doctrinal authorities affecting JTLM, analyzes the JFSCC concept, and examines the JDDOC both in concept and execution. Finally, this paper offers CoCOMs and JFCs conclusions and recommendations for improving JTLM conclusions.

There are two elements integral to any discussion of JTLM, but which are beyond the scope of this paper: the effects JTLM on the Department of Defense (DoD) Planning, Programming, and Budgeting System as it relates to the Service’s Title 10 responsibilities and cross-leveling of supplies between services; and, the current and on-going development of specific information technology systems to enable greater collaboration, visibility, planning and management of JTL. The former is an issue best researched and addressed at the Strategic-National level. The latter also affects JTLM, but the scope of this paper does not allow for detailed comparison of individual IT systems. While this paper will address in broad fashion IT-related attributes of the JFSCC and JDDOC, it will not address specific program advantages and disadvantages.

DISCUSSION / ANALYSIS

What is Joint Theater Logistics (JTL)?

While Joint Publication 1-02 does not provide a specific definition for JTLM, the Joint Warfighting Center Pamphlet 8 defines it as:

The capability for the joint force commander (JFC) to apply logistics resources to generate and sustain force employment that spans the range of military operations
(ROMO) throughout an assigned theater or joint operations area. JTL includes organization, authorities and processes over assigned and attached forces to achieve desired joint and combined effects and operational objectives. It involves the management of a collective and synchronized set of activities, operations, organizations and tools which enable the application of joint logistics capabilities from strategic resource partners to tactical commanders (to include contractors, logistics civil augmentation exploitation of captured materiel and support capabilities) in support of two or more military department components. ¹

The DoD Focused Logistics roadmap refers to JTL as “the adaptive ability to anticipate and respond to emerging theater logistics and support requirements. JTL allows the JFC to apply logistics resources to generate and sustain full spectrum theater operations. It includes directive authority, processes, and tools to achieve desired joint and combined effects and accomplish operational objectives.” ²

Pertinent Issues for Joint Theater Logistics Management (JTLM)

A review of the literature suggests that the historical problems JFCs have experienced with JTLM relate to prioritizing, directing, redirecting, synchronization, integration, and coordination of common-user and cross-service logistics materiel and functions. During DS/DS, issues such as this directly affected CENTCOM’s ability to determine the timing and feasibility of defending Saudi Arabia and liberating Kuwait. ³ The type of logistics information that logisticians need to properly manage support for the commander’s intentions, but which were woefully lacking included what forces and unit equipment had arrived, that sustainment stocks were adequate to support operations, what intra-theater transportation assets were available for movement of personnel and equipment, what was expected to arrive in theater and when it could be expected. ⁴ General Schwarzkopf assigned Major General (later Lieutenant General) Pagonis the task of managing JTL for DS/DS. General Pagonis thus became the ascribed Chief Logician for the Gulf War and his “22d Support Command’s (SUPCOM) daily logistics situation report (LOGSITREP) largely
represented the joint commander’s logistics picture throughout DS/DS.” However, the 22d SUPCOM LOGSITREP did not provide a complete picture of JTL as it did not include any Navy logistics information, and only data concerning rations, water, and petroleum products for the Air Force and Marine Corps. It is fair to extrapolate that since the 22d SUPCOM was subordinate to U.S. Army, Central Command (USARCENT) it seems unavoidable that the composition of the logistics picture was land-force centric on Army logistics and Army common-item support commodities (rations, water, petroleum) to those other Services located ashore.

Briefly, other JTL problems experienced during DS/DS included lack of control in sequencing and synchronization of material and personnel into theater through limited numbers of air and seaports. This resulted in an overburdened transportation system; large stocks of frustrated cargo with no final destination; the arrival of combat units prior to combat service support units to receive them were in place; and no method for anticipating requirements or force capabilities with which the JFC could base operational decisions. These problems were caused by several factors: the JFC’s lack of confidence in the ability of the logistics system to support him which led him to require 60-days worth of supply on the ground vice the normal 30-day requirement; Service-specific logistics pipelines; lack of both in-transit visibility and related analysis to transform raw data into meaningful and actionable information; abuse of the priority system; and an inability to prioritize and efficiently control both inter- and intra-theater movement. One would assume that in the years between DS/DS and OEF/OIF, the lessons learned from DS/DS would have had a positive impact on efforts to improve JTLM. However, such is not the case.
The Government Accounting Office audit of logistics activities during OIF provides a comprehensive and enlightening summary of problems:

Although major combat operations during the initial phases of OIF were successful, our preliminary work indicated that there were substantial logistics support problems in the OIF theater, as evidenced by
- a backlog of hundreds of pallets and containers of materiel at various distribution points due to transportation;
- a discrepancy of $1.2 billion between the amount of materiel shipped and the amount of materiel ...activities acknowledged they received;
- millions of dollars for late fees on leased containers or replacement of DOD-owned containers due to distribution backlogs or losses;
- a potential reduction of equipment readiness due to the unavailability of parts that ...could not be located because of inadequate asset visibility;
- duplication of many requisitions and circumvention of the supply; and
- accumulation at the theater distribution center in Kuwait of hundreds of pallets, containers, and boxes of excess supplies and equipment that were shipped from units redeploying from Iraq without required content descriptions and shipping documentation.

We noted a number of factors that...may have contributed to the logistics support problems:
- Poor asset visibility
- Insufficient and ineffective theater distribution capability
- Failure to apply “lessons learned” from prior operations

From the above, we can generally characterize JTLM problems as:

- Deployment related: Unsynchronized supplies and forces from multiple Service, national-level logistics organizations, commercial firms, as well as interdepartmental agencies flow into theater without prioritization along separate and uncontrolled lines of communication from various shipping origins to a limited number of ports and distribution staging areas.

- Staff related: Service component oriented headquarters staff elements and subordinate organizations are not manned with the right organizational and level of representation, grades, expertise, and numbers of personnel.
- Joint Tactics, Techniques, and Procedures (JTTP) related. The various stakeholders lacked JTTP to manage and/or control JTLM.  

- Seams related. Ineffective management and/or control of the transitions between strategic-national and strategic-theater, and strategic-theater and intra-theater resulting in wasted time, losses, demurrage, and failure to achieve maximum throughput.

**Current U.S. Law and Doctrinal Authorities Affecting JTLM**

U.S. law and joint doctrine provide direction and guidance for CoCOMs and the Service Secretaries with respect to logistics authorities. Under 10 USC 164(c) 1, authorities of a CoCOM are as follows:

Unless otherwise directed by the President or the Secretary of Defense, the authority, direction, and control of the commander of a combatant command with respect to the commands and forces assigned to that command include the command functions of—

(A) giving authoritative direction to subordinate commands and forces necessary to carry out missions assigned to the command, including authoritative direction over all aspects of military operations, joint training, and logistics;

(B) prescribing the chain of command to the commands and forces within the command;

(C) organizing commands and forces within that command as he considers necessary to carry out missions assigned to the command;

(D) employing forces within that command as he considers necessary to carry out missions assigned to the command;

(E) assigning command functions to subordinate commanders;

(F) coordinating and approving those aspects of administration and support (including control of resources and equipment, internal organization, and training) and discipline necessary to carry out missions assigned to the command...

The above Federal law prescribes Combatant Command (Command Authority) (COCOM). Of note, COCOM authority may not be delegated below the Combatant Commander.

Under 10 USC 3013(b), 5013(b), and 8013(b), the Secretaries of the Service departments, subject to the authority, direction, and control of the Secretary of Defense are
responsible for recruiting, organizing, supplying, equipping (including research and development), training, servicing, mobilizing, demobilizing, administering, maintaining their Services. Additionally, under 10 USC 3013 (c), 5013 (c), and 8013 (c) the Secretaries of the Service departments, subject to the authority, direction, and control of the Secretary of Defense are responsible for carrying out the functions of their Departments so as to fulfill the current and future operational requirements of the unified and specified combatant commands.\textsuperscript{16}

Two executive department documents also define the CoCOM authorities: the Joint Strategic Capability Plan (JSCP) and the Unified Command Plan (UCP). The JSCP apportions Service department forces to each CoCOM. While the general rule is that forces are assigned to only one CoCOM who exercises COCOM authority over those forces, the same force may also be directed to support another CoCOM.\textsuperscript{17} The receiving commander is usually given Operational Control (OPCON) authority over these forces. OPCON is a doctrinal term that will be discussed later. The UCP establishes the missions and geographic boundaries of the CoCOMs. Concerning authorities, these missions and boundaries are important in that they determine when a CoCOM is the supported or supporting commander. Deployment orders of forces from a supporting to a supported commander must be approved by the Secretary of Defense and will specify what authorities, such as OPCON, will be given to the supported commander.\textsuperscript{18}

Current joint doctrine delineates authorities that are pertinent to JTLM. JP 0-2, Unified Action for Armed Forces (UNAAF), describes how Title 10 authorities, the JSCP, and UCP are to be implemented and states that the level of authority vested in a commander must be commensurate with the responsibility assigned.\textsuperscript{19} Having already
discussed COCOM for assigned forces above, the other three types of command relationships are operational control (OPCON), tactical control (TACON) [which will not be addressed here], and support. Other authorities of interest are coordinating authority, administrative control (ADCON), and direct liaison authorized (DIRLAUTH). JP 1-02 and JP 4-0 also address Directive Authority for Logistics (DAFL) and Common User Logistics (CUL). Finally, other vehicles which are applicable to this discussion include DoD Directives, instructions, inter-Service support agreements (ISA’s), executive agency, theater lead agency, and acquisition and cross-Service support agreements (ACSA’s).

Before reviewing the UNAAF and joint publications definitions for these authorities, an important distinction between assigned and attached forces must be made clear. Assigned forces are those in which placement under a commander is “relatively permanent, and/or where such organization controls and administers the units or personnel for the primary function, or greater portion of the functions, of the unit or personnel.” A CoCOM exercises COCOM over assigned forces. “Attached forces are those in which the placement under a commander is relatively temporary.” A CoCOM does not exercise COCOM authority over attached forces, unless requested by the CoCOM and specified by the Secretary of Defense for those aspects of administration and support considered necessary to carry out missions assigned to the command. As force assignment or attachment affects the level of authority for the JFC, JP 0-2 recommends that when the transfer of forces to a joint force will be permanent (or for an unknown but long period of time) forces should be reassigned. Specific definitions of command and other authorities, per the UNAAF, are:
OPCON is inherent in COCOM and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. OPCON includes authoritative direction to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions; it does not, in and of itself, include authoritative direction for logistics [emphasis added] or matters of administration, discipline, internal organization, or unit training. Operational control is command authority that may be exercised by commanders at any echelon at or below the level of combatant command and may be delegated within the command.

Support is a command authority. A support relationship (general, mutual, direct, or close) is established by a superior commander between subordinate commanders when one organization should aid, protect, complement, or sustain another force. Support may be exercised by commanders at any echelon at or below the level of combatant command.

ADCON is the direction or exercise of authority over subordinate or other organizations with respect to administration and support including organization of Service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations. This is the authority necessary to fulfill Military Department statutory responsibilities for administration and support and is retained by the Services.

Coordinating authority is the authority delegated to a commander or individual for coordinating specific functions and activities involving forces of two or more Military Departments, two or more joint force components, or two or more forces of the same Service. The commander or individual has the authority to require consultation between the agencies involved, but does not have the authority to compel agreement.

DIRLAUTH is that authority granted by a commander (at any level) to a subordinate to directly consult or coordinate an action with a command or agency within or outside of the granting command. 26

Concerning directive authority for logistics, JP 1-02 and JP 4-0 defines directive authority for logistics as “COCOM authority to issue directives to subordinate commanders, including peacetime measures, necessary to ensure the effective execution of approved operation plans.” 27 “Essential measures include the optimized use or reallocation of
available resources and prevention or elimination of redundant facilities and/or overlapping functions among the Service component commands.”  

In considering the legal and doctrinal authorities and other vehicles available to CoCOMs to command and manage JTL, the question remains as to how best to do so. Two concepts to consider are the JFSCC and the JDDOC.

**Joint Force Support Component Commander (JFSCC)**

In the intervening years between DS/DS and OEF/OIF, a popular subject for military researchers was dissection of the JTLM problems experienced during DS/DS to serve as a basis for the establishment in doctrine of a JFSCC organization. The most common model proposed by researchers for a JFSCC has been the Army TSC.

Early papers written in the years just after DS/DS address the need for better methodology for addressing JTL. One in particular recommends that a “standing Joint Task Force for Support be established under (then) U.S. Atlantic Command...with a joint material management center and joint movement control office would operate under the joint support command headquarters.”  

Another research paper continues the idea of a single JTL manager reporting to either the Service with the preponderance of forces or the JFC directly. While no specific recommendation as to what organization on which a single JTL manager should be based, the author does note in his paper that “the Theater Support Command initiative being implemented by Army’s Combined Arms Support Command (CASCOM) is under review and revision in order to further explore the viability of a JTL command and control organization.”
Later research by others also recommends that the answer to JTLM lies in a single theater logistics manager with the proposed title of Joint Theater Support Commander (JTSC). At this point in the evolution of the JFSCC concept, the Army TSC model has caught on as the organizational basis for the JTSC organization and is envisioned as reporting directly to the JFC to provide priority of support, total asset visibility, and transportation management.  

From a point in the mid-1990’s, JTLM discussion and research appears to decrease until the logistical support experiences of OEF/OIF serve as a reminder of the topic. Following this reawakening, research efforts further refined the concept. Two research efforts in particular refer to use of the Army TSC as a model organization for a JFSCC reporting to the JFC. Notable is that these studies both offer viable alternatives as well. In one case, the author proposes a Joint Force Air Component Commander (JFACC)-based model for a JTL manager, whereas another author proposes a standing Joint Logistics Command under each of the combatant commands.  

The most recent and strongest JFSCC initiative has been undertaken by U.S. Joint Forces Command (JFCOM) working in conjunction with U.S. Forces Korea (USFK) since 2004. The development of the concept of operations (CONOPs) and requirements documents as well as staff work in adding detail to the general JFSCC concept is impressive. The CONOPs development does a commendable job of addressing in detail how the organization will address each of the JTLM issues that plagued DS/DS and OEF/OIF. The USFK JFSCC CONOPS describes a standing modular organization expandable in size to fit the operational need. In armistice, a “warm base” core element composed of the Army’s 19th TSC staffs the JFSCC. In a
crisis, this warm base receives in-theater augmentation from both the Service components and a PACOM DDOC Forward cell (an element of the PACOM-specific JDDOC organization which will be discussed in detail later). Should the crisis move to conflict, national support level augmentation is requested via a standard Request for Forces (RFF).

On the surface, the USFK JFSCC CONOPS appears to be the right solution to the JTLM riddle. However, there are several aspects which the author believes are fatal to the current effort. First, while the USFK JFSCC CONOPS does address the issue of including all Service-specific logistics into a common picture, it does so by referring to an as yet non-existent information technology solution it terms as the Logistics Common Relevant Operating Picture (LOGCROP) into which all Services’ logistics-related data will be captured and transformed into actionable information for the JFC. While there are several on-going initiatives in each of the Services and the Joint arena concerning logistics common operating picture, none are even close to the robust level required to implement the USFK JFSCC CONOPS as described. Second, the JFSCC as described will be given OPCON over the forces assigned, but is tasked with executing DAFL. DAFL resides with the CoCOM as a COCOM authority and cannot be delegated as a general authority. U.S. Code and joint doctrine prescribe that the Secretary of Defense authorize the delegation of DAFL and, even then, must be formally requested and formally authorized in both function and scope. Finally, the USFK JFSCC CONOPS does not address the business rules that will affect funding, accounting, and reimbursement for Service resources such as cross-leveled materiel, funds, personnel, and facilities. It is the author’s opinion that Service components will
loathe to consider and support the USFK JFSCC initiative as a valid solution until basic business rules are negotiated and approved by all stakeholders. This includes Service departments and all strategic national support partners.

**Joint Deployment and Distribution Operations Center (JDDOC)**

U.S. Transportation Command (TRANSCOM), in its role as the Distribution Process Owner (DPO), was tasked by the Secretary of Defense in September 2003 to improve the overall efficiency and interoperability of distribution-related activities throughout the range of military operations. TRANSCOM’s first initiative was to determine the feasibility of establishing JDDOCs at each of the geographic combatant commands. The JDDOC mission is:

- to support the geographic combatant commander’s operational objectives by synchronizing and optimizing the inter-theater and intra-theater distribution aspects of deployment and multi-modal transfer of resources to integrate the proper mix of flow of forces, materiel, and other forms of sustainment in support of the geographic combatant commander missions. Its ultimate goal is to maximize the geographic combatant command’s operational effectiveness through integrated support to joint force projection, improved end-to-end (E2E) distribution, and asset and intransit visibility.

TRANSCOM proposed the concept to CENTCOM in October 2003. The proposal was accepted 60 days later and the CENTCOM JDDOC (referred to as CDDOC) was stood up 30 days after that in January, 2004. Since then, the JDDOC solution has gained popularity among all the geographic CoCOMs and have been fully implemented. There are several main reasons for this strong acceptance. First are the six focus areas through which the JDDOC improves support to the CoCOM:

- Provide staff supervision to support the geographic combatant commander's intent and his deployment, employment, redeployment, and sustainment requirements and priorities;
- Provide expert knowledge, reach back, and liaison to the supported combatant commander and staff, to include Asset Visibility (AV) of force movements, logistics sustainment and retrograde;
- Manage the theater distribution architecture in coordination with theater organizations, national-level support organizations, the Service departments, multinational/coalition military capabilities, and the interagency;
- Synchronize between strategic-national (SN), strategic-theater (ST) and operational (OP) levels of movement and distribution among national support organizations and operating forces in the AOR/JOA;
- Develop relevant strategic lift and E2E distribution performance measures responsive to the requirements and priorities of a geographic combatant commander; and,
- Manage intermodal equipment oversight (i.e., such systems as the 463L pallet and radio frequency identification (RFID)/in-transit visibility technologies for the AOR, and containers). 44

In support of JDDOC, USTRANSCOM has established business rules and processes linking sustainment, distribution, and movement of unit and non-unit requirements. Additionally, the JDDOC uses emergent joint tactics, techniques, and procedures (JTTP) to link deployment and distribution movement requirements and make them visible to the warfighter. In doing so, the warfighter knows the details of what personnel and material is in the deployment and distribution pipeline to sustain a joint operation. 45 Organizationally, the JDDOC is a cell of 67 personnel placed under the direction of the CoCOM’s Director for Logistics (J4), but may be placed under other command or staff organizations. 46 The JDDOC is scalable to meet emerging crisis and conflict. Similar to the USFK JFSCC, in a crisis, the JDDOC is augmented with staff from in-theater components per pre-arranged agreements. For a large-scale conflict, the JDDOC is further augmented with personnel from National-Strategic partners. While in-theater augmentation may be a “Deputy-to-Deputy” agreement, a conflict will necessitate transmission of a formal RFF. 47 As an example of how the JDDOC mitigates a land-centric focus, the Sea Service Cell Chief of the CDDOC Service Sustainment Division is a Navy O-5 Supply Corps Officer. This officer represents all Navy
and Marine Corps sustainment and retrograde support requirements for all classes of supply. He is assisted by Navy and Marine Corps logisticians who are considered experts of their profession. In short, the JDDOC offers a solution to the majority of the JTLM issues experienced in previous conflicts. The JDDOC is enabled by current and spirally developed information technology solutions and agreed upon business rules and JTTP. Finally, the JDDOC concept is not hindered by command authorities as is the JFSCC. As for how successful is the JDDOC, the record speaks for itself.

In August of 2006, the Federal News Service reported on Several CDDOC achievements:

- A 44 percent decrease in median monthly cargo waiting to be shipped and a 13 percent reduction in cargo held longer than 72 hours.
- Cost avoidance savings of $200,000 per day during the first week following the development of the Commercial and Government Air Program (CGAP) system which allows the user to quickly calculate the transportation cost associated with a particular type of cargo.
- Airlift cost avoidance of more than $392,000 in only 3 months following implementation of a Multi-modal Optimization program.
- Implementation of the Director for Mobility Forces-Surface (DIRMOBFOR-S) is imminent. Theater-wide surface movement will be via the Surface Tasking Order concept (the same way air assets are managed under the Air Tasking Order concept).

Other success stories for the JDDOC concept include the PACOM DDOC (PDDOC) which provides invaluable support during the Indian Ocean Tsunami relief effort, and Operation Unified Assistance, only a few weeks after completing its assessment phase; and the U.S. Northern Command (NORTHCOM) DDOC (NDDOC) deploying to Ft Gillam Georgia in support of JTF Katrina.

RECOMMENDATIONS

My research has led me to several recommendations for JTLM and for future areas of research and study.
First, for the near- and medium-term, combatant commands should continue to leverage the JDDOC concept and support the development of new information technologies that provide the DDOC with enhanced capabilities for support and theater logistics visibility. Several reasons support this recommendation:

- The DDOC may not be the perfect answer for all JTLM issues, but it appears to provide the 80 percent solution for most of them without waiting for development of an all encompassing information solution that will link logistics information from Service components and National Strategic support partners into one logistics common operating picture.

- The DDOC solution is not mired down in legal and doctrinal command authority issues, such as DAFL, as is the JFSCC concept.

- Because TRANSCOM has developed and gotten acceptance from the stakeholders for a set of business rules and JTTP in support of the DDOC concept, distribution-related issues for funding, accounting, and reimbursement for Service resources are minimized.

Second, for the medium-term, it is recommended that CoCOM staffs focus on coordinating development of ISAs, ACSAs, theater lead agent assignments, use of the various command authorities provided by law and doctrine, and other coordinating vehicles that can be exercised during peacetime and called upon during crisis and conflict for managing and implementing JTL.

Third, development of the JFSCC concept should continue with a view for implementation in the long-term. The USFK JFSCC concept is a masterful piece of staff work that is hindered by current law, doctrine, information technology, and lack of business rules. The JFSCC is an idea well ahead of its time. The author has no doubt that in the
future there will be a single JTL manager reporting to CoCOMs and JFCs, probably as a merger of the JFSCC and JDDOC concepts. However, for this to become a reality, several difficult key issues require resolution. Changes must be made to U.S. law and joint doctrine concerning COCOM authority and DAFL that will support the JFSCC concept. DoD information technology solutions, capabilities and implementation must “catch-up” to the vision presented by a JFSCC concept. In addition, business rules and JTTP in support of the JFSCC concept will need to be developed and approved by all stakeholders.

Finally, the study of JTLM provides several opportunities that were beyond the scope of this paper. Further study is needed as to how effects of JTLM on the PPBS process can be mitigated and/or what changes might be necessary to fully implement a single JTL manager with acceptance from the Service departments. Further study is required concerning information systems that would provide a CoCOM or JFC with an integrated logistics common operating picture. Finally, it was noted by the author that there is a paucity of research related to the integration of multi-national and interagency partners into theater logistics management. Perhaps this is currently a bridge too far considering the challenges of integrating the military services into JTLM, but it is never too soon to start considering solutions.

**CONCLUSION**

In researching the material for this paper, it is clear that while discussions and research concerning solutions for JTLM problems were taking place, little was being applied to effect change to the process of JTLM. U.S. forces experienced the same problems with JTLM in OEF/OIF as were experienced over a decade before in DS/DS.

Two concepts are offered as solutions to the JTLM problems. One is for a single
functional JTL manager, a JFSCC, working directly for the CoCOM or JFC. The other is that of a JDDOC notionally assigned as subordinate to the CoCOM’s Director for Logistics (J4), or wherever the CoCOM deems within the organization as most beneficial to supporting the mission.

The JFSCC has been proffered as a concept in one form or another for nearly 15 years, with most proponents modeling it after the U.S. Army TSC organization. In its current form, developed as a CONOPS in a joint partnership between USFK and USJFCOM, the JFSCC is still based on the Army TSC organization, but has evolved to include the other Service logistics information in the solution set. The USFK JFSCC CONOPS offers a robust 100 percent solution for JTLM problems, but is greatly constrained in moving beyond the CONOPs stage by Federal law, joint doctrine, DoD-wide information technology gaps, a lack of agreed upon business rules for cross-servicing Service resources and JTTP.

In comparison, the JDDOC was proposed in October 2004 and established as a functioning organization less than 90 days later. Already having gained wide-acceptance by all geographic CoCOMs and achieved solid and meaningful results for several of them, the JDDOC offers the 80 percent solution to most JTLM problems, is unhindered by Federal law and joint doctrinal issues, utilizes current and spirally developing IT capabilities, and has an established and agreed upon set of business rules and JTTPs under which to operate.

In the short- to medium-term, the JDDOC offers the best solution for CoCOMs and JFCs seeking to maximize operational effectiveness through integrated support to joint force projection, improved end-to-end distribution, and asset and intransit visibility. However, in the long-term, the JFSCC concept will provide the 100 percent solution to JTLM for the CoCOM and JFC, once the issues affecting its viability are resolved and DoD information
technology catches up to the vision it offers for JTLM. Consequently, the most likely course is that a merger of the two concepts will occur to bring about the establishment of a single JTL manager supporting CoCOMs and JFCs.
Notes

4 Ibid., 52-53.
5 Ibid., 53.
6 Ibid., 54.
9 Ibid., 3-4.
10 For example:
- The distribution of supplies to forward units was delayed because adequate transportation assets, such as cargo trucks and materiel handling equipment, were not available within the theater of operations.
- Lack of an effective process for prioritizing cargo for delivery precluded the effective use of scarce theater transportation assets.
- One of the major causes of distribution problems during OIF was that most Army and Marine Corps logistics personnel and equipment did not deploy to the theater until after combat troops arrived, and, in fact, most Army personnel did not arrive until after major combat operations were underway.
- Logistics personnel were not adequately trained in various logistics functions, such as operating material handling equipment and managing theater distribution centers. U.S. General Accounting Office. Defense Logistics: Preliminary Observations on the Effectiveness of Logistics Activities during Operation Iraqi Freedom.
The failure to effectively apply lessons learned from Operations Desert Shield and Desert Storm and other military operations may have contributed to the logistics support problems encountered during OIF. Our prior reports, as well as DOD and military service after-action reports and other studies of prior military operations, have documented some of the same problems that appear to be occurring in OIF.” (Washington: 18 December 2003), 2-4.
12 Ibid., 2.
13 Ibid., 3.
15 Ibid.
16 Ibid.
18 Ibid., 52-53.
20 Ibid., x.
21 Paparone, 52-53.
22 U.S. Joint Chiefs of Staff. Unified Action Armed Forces (Joint Publication 0-2), xi.
23 U.S. Joint Chiefs of Staff. Unified Action Armed Forces (Joint Publication 0-2), xi.
25 U.S. Joint Chiefs of Staff. Unified Action Armed Forces (Joint Publication 0-2), xi.
26 U.S. Joint Chiefs of Staff. Unified Action Armed Forces (Joint Publication 0-2), xi-xii.
27 U.S. Joint Chiefs of Staff. Unified Action Armed Forces (Joint Publication 0-2), x.
31 Ibid., 19.


Ibid., 6.

Ibid., 6.

Ibid., 7.

Ibid., 6-7.

U.S. Joint Chiefs of Staff. *Doctrine for Logistics Support of Joint Operations* (Joint Publication 4-0), I-6


U.S. Joint Forces Command. “*Doctrinal Implications of the Joint Deployment Distribution Operations Center (JDDOC), The Joint Warfighting Center, Joint Doctrine Series Pamphlet 8*, 3

Ibid., 4.

Ibid., 8.

Ibid., 9.

Ibid., 7.

Ibid., 9.


Additionally, the DIRMOBFOR-S intends to link transportation requirements via a "single ticket" process allowing a piece of cargo to be scheduled for movement from a national depot to a Forward Operating Base under one request (ticket) as opposed to being re-booked at every Aerial Port of Debarkation or Surface Port of Debarkation, waiting for the next transport mission to materialize. U.S. Federal News Service (Washington), 17 August 2006.

U.S. Joint Forces Command. “*Doctrinal Implications of the Joint Deployment Distribution Operations Center (JDDOC), The Joint Warfighting Center, Joint Doctrine Series Pamphlet 8*, 4."
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