

USAWC STRATEGY RESEARCH PROJECT

IS IT TIME FOR A JOINT FORCES LOGISTICS COMPONENT COMMANDER

by

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ABSTRACT

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The Department of Defense is moving away from a logistics system that relies on moving large quantities of equipment and supplies to the theater just in case it is needed, to reduce risk, to a much leaner system that will move equipment as needed on a time definite basis. The Joint Staff Director of Logistics' Focused Logistics Campaign Plan for a joint deployment and rapid distribution system is to provide the combatant commander with "...a system to optimize rapid projection, delivery, and handoff of joint forces and sustainment worldwide." The Air Force, specifically, is reducing its deployment footprint by reducing spares and relying on reach back to the CONUS. The Logistics Campaign Plan and Joint Doctrine list five options for management of Joint Theater Logistics. Current doctrine relies on expanding the capabilities of the J-4 or delegating responsibility to a JTF commander. However, with the change in focus to rapid moving equipment as needed and with the increased risk inherent in this type of system it may be time to establish a Joint Forces Logistics Component Commander (JFLogCC) in doctrine to manage the new logistics systems envisioned in the Focused Logistics Campaign Plan. I will argue that it is time and that the JFLogCC should be similar to the JFACC. The JFLogCC should come from the Service with the preponderance of logistics requirements and the ability to control logistics.

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IS IT TIME FOR A JOINT FORCES LOGISTICS COMPONENT COMMANDER

“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...Through transformation innovations to systems, processes, and organizations, focused logistics will provide the joint warfighter with support for all functions.”

—Focus Logistics Campaign Plan

The logistics environment is changing with the transformation of the armed forces. The Focused Logistics Campaign Plan describes a logistics system that replaces mass with speed of movement and precision.¹ All services are reducing inventory to decrease the size of the logistics footprint and the cost of moving and maintaining material. Future concepts of logistics envisage distribution on the move with combat forces.² These concepts will create an environment that puts a premium on transportation management, inventory control, and precision delivery. History has shown that a system based on speed and control requires centralized direction and prioritization.

Current doctrine does not provide the joint forces commander with a uniform way to control logistics. The Focused Logistics Campaign plan lists five ways a theater commander can manage logistics.³ All are ad-hoc approaches that do not provide real control over theater logistics and do not meet the needs of the Joint Force Commander (JFC) in the logistics environment envisioned by senior leaders.

A velocity based logistics system has characteristics that are similar to airpower the principles that apply to airpower, also apply to logistics. The challenge is how to best control limited assets while maximizing the effects desired by the Joint Force Commander. The Joint Force Air Component Commander (JFACC) must deliver airpower at the right place at the right time with the right effect with limited assets. The JFC needs a method to control logistics across the theater. It is time for a command and control system similar to the one used for airpower. This paper will review theater logistics command and control, examine trends in logistics, and recommend a theater command and control concept. Finally, it will show how this approach will meet the needs of the future logistics environment.

HISTORY OF THEATER LOGISTICS COMMAND AND CONTROL

There were chronic logistical command and control problems in recent operations. These problems include; In-Transit Visibility (ITV); ordering discipline and control of requisitions; and

use of service specific systems. These problems were mitigated by mass and time. Unfortunately, we many not have the luxury of mass and time in the future.

Our logistics system is a mass based just-in-case system, the factors that molded this system were: the industrial revolution, mass production and the U.S. industrial capacity, and primitive transportation and information systems. The weakness of these systems forced logisticians to stockpile equipment as close to the war-fighter as possible and provide the material needed for any contingency.⁴ Industrial age mass production and the simplicity of weapons systems made it cost effective to produce large quantities of spare parts and materials. This system was very successful, thanks to the United States' industrial capacity. We simply overwhelmed our opponents with stuff.

Risk for logisticians is not having the right item when and where it is needed. In the past, risk was minimized by moving much more than the minimum required equipment to the fight.⁵ However, as the industrial age gave way to the information age new possibilities emerged because, for the first time, information systems were available that could provide the visibility to control assets. In an effort to cut costs and improve flexibility the services are also working to reduce inventories and limit the material they moved forward.⁶

OPERATION DESERT STORM

Operation Desert Storm was a mass-based logistics war,⁷ but it was also the first time theater wide control of all Service logistics was attempted. There was no central control of logistics prior to the start of operations.⁸ The plans that did exist envisioned Combat Support and Combat Service Support forces flowing with combat units during a buildup phase.⁹ However, Iraq quickly occupied Kuwait and the possibility that Saudi Arabia was next caused the theater commander to send combat units to the theater first, with out their support units.¹⁰ The force was critically logistically unsustainable for the initial period of Operation DESERT SHIELD.¹¹ In an effort to get control of logistics, General Norman Schwarzkopf, the theater commander, appointed US Army Central Command (ARCENT) as the theater logistics focal point. Lieutenant General John Yeosock, ARCENT Commander in turn appointed, Major General Gus Pagonis and thus also ARCENT Support Command (Provisional) as his logistics coordinator, for the theater commander.¹² Unfortunately, he was playing catch up and MG Pagonis focused on Army logistics requirements and never got control of Air Force or Navy theater logistics.¹³

There was a lack of ITV, low confidence in the system, and over requisitioning. Requirements were based on previous days requests not necessarily actual need because the

logistics information system could not provide that information. Users did not have confidence in the system, so they double and triple requisitioned items in order to get badly needed material.¹⁴ The lack of discipline in requisitions and numerous high priority requisitions created an airlift demand six to seven times capacity.¹⁵

The logistics system accomplished its mission because Iraq gave the United States and its allies time to use mass to overcome problems. Gen John Foss of the US Army noted that “probably the worst decision of Desert Shield/Desert Storm was the decision to stock 60 days of supply. It drove up force structure, it cost the Army lots of money and time and over 90% was back hauled.¹⁶ This would not be the last time the US moved much more material than it needed.

OPERATION RESTORE HOPE

During Operation Restore Hope, in Somalia, there was also no Time Phased Force Deployment Data (TPFDD), combat troops flowed in unsynchronized with support, ITV was not achieved, and users lacked confidence in the system. Combat troops were sent in first; there was an urgent need for combat force to provide security. However they were sent in without the logisticians required to operate sea and air ports of debarkation.¹⁷ This led to even more changes to the TPFDD and cargo was shipped that was not needed. Because there was no ITV, logisticians had to physically check arriving items to determine their owner and destination.¹⁸

People lost confidence in the system and resorted to direct requests to action officers, general officers, and home station through email and phone.¹⁹ There was no joint control of logistics and significant duplication of effort. Again, problems in visibility, control, and confidence in the system were overcome by mass.²⁰

OPERATION JOINT ENDEAVOR

The same problems returned during Operation Joint Endeavor in Bosnia. Operation Joint Endeavor was planned quickly and again combat forces were not synchronized with logistics forces. Conflicts arose over movement of support force supplies and combat forces.²¹ Operation Joint Endeavor was the first operation where logisticians attempted to achieve total asset visibility, but the technology was immature and there was not enough equipment in the field to monitor assets moving into the theater.²² Again, we relied on mass to overcome control problems.

OPERATION ALLIED FORCE

Operation Allied Force was a major theater level logistics effort. For the first time airlift was the prime method of moving forces to the theater.²³ There were multiple task forces with a different foci: one based on the air campaign, another on the humanitarian effort, a third on force support, and finally the Task Force HAWK deployment. Each JTF was given equal priority and there was no one in charge of the overall logistics effort to direct transportation and support for the Combatant Commander.²⁴ Improvements in in-transit visibility did not meet war-fighter's needs, after action reports emphasized fragmented theater ITV and the ad hoc adaptation that resulted.²⁵ This time, constraints on transportation highlighted the fact that a mass based system is not quick or agile.

COMMON HISTORICAL TRENDS

Several common problems in recent operations contributed to the reliance on mass and time. First, in each case logistics planning did not prepare for the actual operation that took place; plans were developed on the run and they changed at execution. When plans changed the system could not keep up and control of material was lost. Second, confidence in the system broke down and units developed their own work-arounds or overwhelmed the system with duplicate requests. These problems were overcome by the sheer weight of the logistics effort. Assets were not controlled, they were moved along in the tidal wave of material moving to the fight. Third, information systems had not matured enough to provide total asset visibility. There has been a steady improvement in ITV since Operation Desert Storm, but not enough to provide commanders with the ability to manage critical assets let alone the overall logistics effort. Finally, although the theater commander always had the authority to control logistics he never had the capability to perform that function, ad-hoc command and control and improvisation were the norm.

TODAY'S LOGISTICS ENVIRONMENT

Operation Iraqi Freedom was fought using the latest logistics doctrine and information systems. While lessons learned are just now becoming available, some things are clear. Doctrine does not provide solutions to key problems; the transportation system is a key constraint; and the theater commander still lacks centralized control.

CURRENT DOCTRINE

Joint Doctrine gives five options for command and control of theater logistics; under the heading of Joint Theater Logistics Management. Joint Pub 4-0, Doctrine for Logistics Support

of Joint Operations, says that Combatant Command (COCOM) includes directive authority for logistics and gives the combatant commander authority to shift logistics as required to accomplish his mission.²⁶ At the same time Title 10 USC gives responsibility to fund for logistics support to each of the Services.²⁷ In current doctrine the combatant commander serves as a facilitator and coordinator of Service requirements; he is expected to facilitate the efforts of the individual Services in his theater and ensure their concepts are feasible and synchronized with his operational plan.²⁸ While the combatant commander is given directive authority for logistics, joint doctrine specifies a role that is managerial in nature and focuses on coordinating and planning to ensure smooth flow of material to the theater. However, this causes problems because the JFC's managerial role is weak and control is lost when the plan changes. In the last five major operations we either don't have a plan or deviated from it. Compounding the problem is the fact that each Service has its own logistics systems for its specialized needs. These systems allow little cross communication.²⁹

OPERATIONS USING CURRENT DOCTRINE

Current doctrine was employed in Operation Iraqi Freedom (OIF) with mixed results. OIF was supported with a combination of prepositioned stocks and material movement from other theaters. According to Brig Gen Robert Cone, "we were able to move about a quarter of the amount of stuff to the theater."³⁰ CENTCOM had a detailed logistics plan based on the combat operations plan. But the plan changed many times, Brig Gen Cone said, "deployment planning demands flexibility and adaptation that exceeded the capabilities of the mobilization and deployment process... When your ability to access basing and overflight is constantly changing you have to have a system that is flexible."³¹ The plan changed at execution, as it has every time since Desert Storm, and the logistics system could not keep up.

In-transit visibility improved to the theater. According to Gen Cone we saw good things at the joint level of logistics and some very good things in terms of in-transit visibility. We didn't have to move an iron mountain, we had iron hills because we could lower the number of days of supplies that we needed in theater because of good ITV.³² However, we were not 100% successful. According to an armor officer writing in Armor Magazine his task force "limped into Baghdad due to extremely limited class IX resupply during the war."³³ Even when they arrived in Baghdad and remained stationary the situation did not improve. Five weeks after arriving in Baghdad 0 of 30 tanks and 7 of 14 Bradley Fighting Vehicles were operational.³⁴ This was the first time the just-in-time concept was tried but users did not have ITV and did not have confidence in the just-in-time system. Users believe that just-in-time systems force them to live

day to day even during combat and stability operations. In the chaotic environment of combat it is extremely difficult to get items to the user reliably every day. Class IX supplies are critical for operations and show the need for complete visibility and control.

The experience of the Marines is instructive as they were successful in supporting the operations of the Marine Expeditionary Force (MEF), but they used a system developed for only this operation and it only supported Marine requirements.³⁵ They did not have in-transit visibility below the division level which, once again, led to work-arounds and multiple off-line requests.³⁶ In fact off-line requests outnumbered automated requests.³⁷ Class IX supply was also a problem for the Marines. An Artillery battalion supply officer during OIF reported that "Management of Class IX in Iraq did not support sustained combat operations." As of 14 April 2003 the requisition fill rate was only 9.7% for his unit. The system for ordering and tracking parts could not keep up with fast moving units, and consequently deliveries could not be prioritized. No one could say what parts went on what trucks, where the trucks went, when they were unloaded, or who signed for the equipment.³⁸ One has to ask if cross Service balancing could have alleviated the problem of class IX supply for both the Army and Marines. However it appears neither branch had the visibility or distribution systems to make that happen.

The results of OIF indicate that we still have work to do. Transportation systems are a major constraint and information systems are still not mature enough for command and control for a just-in-time system. The TPFDD process broke down due to the dynamic nature of the operation, which then resulted in loss of confidence in the system and ad-hoc work-arounds. Total asset visibility was not achieved. Although it was better than previous operations, it did not reach down to the tactical user. The OIF experience reinforces the fact that the US has the most effective logistics system in the world, but it lacks flexibility and relies on mass to compensate for risk and weaknesses.³⁹ When we tried to reduce mass, we had shortages. Combatant commanders and joint task force commanders do not have an integrated logistics information system nor is there a source of accurate real-time information on which to base such a system. Logistics information systems are Service specific, invaluable to the Service but fragmented at the JTF Combatant Command level.⁴⁰ Current logistics doctrine does not support a high velocity, just-in-time system.

TRENDS IN LOGISTICS

The trends in logistics theory will add to the problems already discussed. Today's logistician operates in an information age world. This means logisticians can have access to more information than ever before. On-line systems give logisticians the ability to determine

where items are and when they will arrive.⁴¹ Total asset visibility is close to fruition. We live in a world where FedEx has the technology to track an item from the time it is dropped off to the time it is delivered.⁴² Civilian corporations have reduced inventory by leveraging information.⁴³ Large stand-by inventory and excess capacity are a thing of the past in the commercial world; relics of the industrial age.

Logistics will be a worldwide enterprise in the Global War on Terror. Joint Vision 2020 says there will be a greater focus on CONUS based power projection.⁴⁴ The United States will use rapidly deployable expeditionary joint forces projecting balanced sustained waves of capability that will fight while deploying and on arrival.⁴⁵

Emerging military logistics concepts are described in the Focused Logistics Campaign Plan (FLCP) published by the Joint Staff J-4.⁴⁶ The J-4 envisages real time web-based information systems 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.⁴⁷ The FLCP's goal is faster deployment of mission ready forces and their support, reduced support footprint, and reduced logistics costs.⁴⁸ The key revolutionary change is a shift from mass to velocity.

The Focused Logistics campaign plan starts by explicitly stating that the shift from a supply based logistics system (mass) to a leaner more agile distribution based system is ongoing.⁴⁹ Each Service is reducing inventory and relying on high velocity transportation and reach back through information systems to meet their legal responsibilities to support their component's forces.

Air Force Trends

The Air Force position is that the Air Force Component Commander (COMAFFOR) should support Air Force systems and the Air Force needs to retain control of logistics above the theater level because of global commitments and operations in multiple theaters.⁵⁰ LT Gen Zettler, Director of Installations and Logistics explains that just after 11 September 2001 the Air Force had forces supporting Operation NOBLE ANVIL, Operations NORTHERN and SOUTHERN WATCH and building up for Operation ENDURING FREEDOM all at the same time.⁵¹ Its approach to logistics transformation is based on a nodal system emphasizing a global distribution based high-velocity system using information and speed in the pipeline to provide support to the Air Force warfighter.⁵² This nodal concept worked well when USAFE was supporting both Operations NOBIL ANVIL and IRAQI FREEDOM.⁵³ It's focus is on distribution. For the Air Force, combat support has evolved from a theater-centric model to a global

perspective, that is why its combat support system will be based on a global nodal system for sustainment. However, it will still rely on theater based systems for fuel, distribution, and storage of munitions, and prepositioning assets for beddown at forward operating locations.⁵⁴ The Air Force envisions coordinating at the theater level when selecting and developing support concepts for Forward Operating Locations (FOLs) and would continue to work with joint theater logisticians to select FOLs and support them. But, the actual sustainment system would come from the global system.

Navy/Marine Corps Trends

The Navy and Marine Corps are moving to integrate their logistics systems and are developing a logistics system founded on their sea basing concept in Sea Power 21.⁵⁵ The Marines current logistics system requires them to build up a capability on shore then move forward with ground based Lines of Communication (LOC)s. In the future logistics support will be provided from ships at sea thus freeing the Marines from land based LOCs. They will use the Naval distribution system to flow logistics through the sea base and then provide it when and where it is need either by airlift from the sea base or fast delivery ships like LCACs that can move inland quickly.⁵⁶ MAGTFs will operate from the sea base meaning that they will close and reconstitute forces at sea. The primary enabler will be coupling ship to objective distribution with a network based automated information system to provide in-stride sustainment for maneuvering and fighting forces. In other words, just-in-time distribution from the sea. All Combat Service Support (CSS), warehousing and distribution will occur on the sea base and resupply from CONUS will flow through the sea base to the user. The seabase would be a group of ships networked together and connected to the user ashore with each ship providing a part of the logistics support.⁵⁷ Naval thinkers view this as an enabler for a JTF commander because it frees naval and marine forces from the need for host-nation support. However, the concept is limited in its "jointness". Seabased logistics is designed to make an expeditionary force more self sufficient. Marine landing forces will continue to be sustained by Naval logistics even when established ashore.⁵⁸ However, the Marine force will still be part of a larger theater logistics effort under naval logistics. This concept does not rule out support through strategic lift from the United States but rather emphasizes naval support or a combination of strategic lift and Naval logistics for large operations.⁵⁹

Army Trends

The Army has been moving to a transportation based system since 1996. The Chief of Staff of the Army stated we want to move to a transportation based system as rapidly as we

can. . .”⁶⁰ The Army has reduced stocks to make this happen. It is also refining its Theater Support Command to streamline operations and to have the capability to expand into a Joint Logistics command and control organization. The Army uses the Theater Support Command (TSC) to coordinate and direct Army CSS functions within the combatant commanders area of operations. The TSC typically is responsible to the Army Service Component Commander of the Combatant Command. The TSC supports the Army and other services and coalition partners by providing lead service support for common user logistics when designated and in executing its lead Service responsibilities for fuel, water, and land transportation management.⁶¹ As early as 1999 Army logisticians have advocated a Joint Theater Support Command that would provide command and control for joint logistics operations.⁶² Combined Arms Support Command (CASCOM) is currently developing a TSC concept that would do just that. Its vision is to use the basic Army TSC structure with Air Force and Naval Logistics imbedded across support areas. The TSC would expand and take on the additional tasks of: simultaneous Deployment, Employment, and Sustainment (D-E-S) support; manage local procurement, local contracting, and Host Nation Support; manage contractors on the battlefield; and provide joint support.⁶³ This concept was tested in an Army-JFCOM exercise (Unified Quest 03) and validated the need for coordination of logistics over long distances on future battlefields. The current vision is based on the TSC with an air logistics element and a Naval logistics element commanded by a functional logistics command who is co-equal with the other component commanders.⁶⁴

All the Services put a premium on the two things that are most constraining in current military logistics systems transportation and information systems. Distribution based logistics systems require a robust transportation network optimized by a sophisticated information management systems. This enables replacing mass with velocity. It is utterly dependent on the ability to dynamically observe, manage, and control material in motion.⁶⁵

A NEW PRINCIPLE FOR LOGISTICS

Logistics command and control needs to be compatible with historical lessons and the logistics visions already discussed. The question is how best to command and control logistics. Some propose giving one Service logistics responsibility, others advocate a new theater command.⁶⁶ Neither option addresses the true nature of logistics in the future.

PRINCIPLES OF WAR

In the future logistics operations will have characteristics similar to airpower. The principles of war apply to high velocity logistics in a similar way that they apply to airpower.

Unity of command, objective, maneuver, economy of force, and simplicity all impact logistics and airpower in a similar way.

Problems of the past combined with trends in logistics will have theater wide impact. The principle of *unity of effort* means “all efforts should be directed and coordinated toward a common objective.”⁶⁷ This principle emphasizes the idea of directing all efforts to a common objective.⁶⁸ Independent service logistics systems working on their own do not provide unity of effort in the theater. In the past our logistics system did not need unity of effort and was not very efficient because it didn't have to be. We were willing to build up huge stockpiles just-in-case they were needed. We moved significantly more material than we actually used because it was the only way to reduce risk.⁶⁹ But this is not the future for logistics. Airpower history proves an efficient just-in-time system, requires *unity of command* for success. The only way to effectively control limited airpower and still have the flexibility to direct it where it was needed on the dynamic battlefield was to put it under a single commander. In logistics we cooperated by coordinating different Service needs and deconflicting transportation requirements in planning through the JOPES system. However, in all operations since Operation Desert Storm the unity of effort was lost because the plan changed on implementation. Future logistics support will be the product of multiple capabilities from multiple services just as airpower is the product of many different types of aircraft from each Service. Unity of command is essential to effectively fuse diverse capabilities.⁷⁰ On the dynamic and fast moving battlefield, logistics will have to be directed to the locations needed as the situation changes.

Historical experience and future trends also show that the principles of *objective and economy of force* will apply to logistics the same way that they apply to airpower. From the airmen's perspective the principle of objective shapes priorities and helps concentrate on theater priorities. Airpower is susceptible to siphoning to fragmented objectives because it is a limited resource. The principle of Economy of Force says that minimum power should be devoted to secondary objectives.⁷¹ Logistics will be a constrained asset and have similar characteristics. If we continue to pursue current initiatives, we will have to focus our resources on theater objectives and control them at a higher level.

Airpower's ability to *maneuver* is not only a product of speed and range, but also flows from its flexibility and versatility when planning and executing operations.⁷² Logistics will also have to have flexibility and versatility. If we are to avoid shortages like those in OIF, we must have the agility to support fast moving forces. Distribution on the move will require flexibility and versatility similar to airpower.

The JFACC's ability to use the special capabilities of each Service to orchestrate air campaigns shows that specialization is necessary but centralized control and decentralized execution are required.

TENETS OF LOGISTICS

A key tenet of airpower is centralized control and decentralized execution. Airmen have learned over time that the best way to employ airpower was through centralized control. Centralized control allows commanders to focus on priorities that lead to victory. Through centralized control commanders give coherence, guidance and organization to the effort. Logistics like airpower will be a constrained resource made up of many specialized parts contributing to the campaign. However, logistics like airpower will require decentralized execution. "Delegation of execution authority to lower level commanders is essential to achieve effective span of control and foster initiative, responsiveness, and flexibility."⁷³ Each Service is best able to support its own logistics needs and equipment. There is much commonality in support, bulk fuel and food are examples, but there are also enough unique logistics aspects that each service must still support its own requirements.

The FLCP envisions each Service fulfilling its unique support needs while focusing on a common objective and supporting each other when necessary. Each Service's logistics system will exploit its capabilities for a common purpose and objective, but needs to maintain its flexibility and execution through local commanders.

Air power is flexible and versatile it can be employed against a variety of targets and can change focus quickly.⁷⁴ Logistics planners seek to include these tenets in future operations. The focused logistics campaign plan says "we will provide a fully enabled mobility system to optimize rapid projection, delivery, handoff. . . at the place and time required to support rapid maneuver."⁷⁵

Logistics must achieve concentration of purpose, priority, and balance. If dispersion of effects results from high demand there are three risks: (1) failing to achieve operational objectives (while achieving tactical objectives); (2) delaying or diminishing effects; (3) increasing attrition.⁷⁶ Historically we have had dispersion of logistics but avoided problems by moving mountains of material. Logistics historically is the limiting factor in the speed of operations and it can increase attrition through lack of support of war fighters.

These principles and tenets of airpower employment led the Air Force to develop the JFACC. It is based on hard lessons on the employment of airpower going back to WWII. The JFACC concept was validated in Desert Storm and has been used successfully ever since.⁷⁷

Given the similarities between the tenets of airpower and future logistics theory it is time to consider a JFACC like approach for logistics. Since Desert Shield/Desert Storm the Air Force has invested in Air Operations Centers and training to enable the JFACC to command and control airpower. The result is a sophisticated command and control system that gives commanders fully visibility of the air campaign as well as the ability to control and redirect it.

HOW THE JFACC WORKS

In joint doctrine the JFACC exploits the capabilities of joint aerospace operations through a cohesive joint plan and a responsive integrated control system.⁷⁸ He plans coordinates, allocates tasks executes and assesses aerospace operations.⁷⁹ He has a theater-wide perspective. Joint doctrine also states the JFACC should be the component commander with the preponderance of air assets and the capability to plan task and control joint air operations.⁸⁰ The second part of this definition is key. The ability to command and control is just as important as which Service has the most aircraft. By definition he will control the air assets of other Services however the air arms of the Services are unique and the JFACC must consider these differing capabilities and philosophies when developing his plan. However, he does not diminish their unique capabilities or change their tactics. His role is to provide unity of command and unity of effort for the theater commander.

HOW A JFLOGCC WOULD WORK

A Joint Forces Logistics Component Commander (JFLogCC) would use the same principles and criteria as the JFACC. It would be provided by the Service with the preponderance of requirements and the ability to plan, task, and control them. The preponderance of support may favor a selection of JFLogCC based on the mission and the unique support required for that Service or it may be based on the logistics assets employed. For example a sea based operation would require an understanding of naval logistics and the command and control system for logistics would be the sea based logistics system even if it is supporting other forces.

The key to selection of the JFLogCC is the ability to plan, task, and control logistics. If the logistics effort is supporting a major theater operation, the JFLogCC should come from the Service that can control the flow of assets to and from the theater, maintain visibility, and control support. The selection of the JFLogCC should be based on the Service with the preponderance of need and ability to control support. He must be able to task across Services to get the right support in the right place at the right time for the war fighters. The Army's proposed Theater Support Command (TSC) structure is similar to an Air Operations Center. It would have

command and control systems and robust ability to control most of the logistics in the theater.⁸¹ Since the Army is making the investment in this system, in most cases they would be a JFLogCC with liaison officers from other Services plugging into their system.

A JFLogCC would enable the concepts espoused in the focused logistics campaign plan and would allow centralized control and decentralized execution of logistics support. Just as the JFACC does not take over other Services air arms or dictate their development and tactics, the JFLogCC would not take over logistics for each of the Services, he would provide unity of effort and unity of command.

The JFLogCC would also provide objective and economy of force for the theater commander. He will be able to shape logistics priorities to align with theater priorities. Currently, there is no logistics function with the authority to do this other than in an ad-hoc manner using the five options in the focused campaign plan. There is no one watching for redundancy in support, efficient use of lift, or monitoring to ensure there is no siphoning of logistics capability to purposes that are not in line with the combatant commander's priorities. The JFLogCC can ensure economy of force by controlling the flow of support in the theater and eliminating redundancy that will free up limited transportation assets and make them both efficient and effective.

The focused logistics campaign plan seeks a logistics system that can match the rapid maneuver envisioned by the future force. This concept is called distributed logistics, but it requires flexibility and versatility. The JFLogCC will enable distributed logistics by being able to change focus quickly, direct support from the closest unit, and direct assets where they are needed. This capability does not exist now.

The JFLogCC will provide concentration of purpose, priority, and balance. Logistics is vulnerable to dispersion of effects resulting from high demand, the risk of failing to achieve operational objectives (while achieving tactical objectives) by delaying or diminishing support can be mitigated with central control of logistics and by a commander viewing requirements across the theater.

Finally and most importantly the JFLogCC will be able to meet the needs of the war fighter. The most important function of logistics is to get the right thing to the right place at the right time to support the war fighter. The JFLogCC gives the opportunity to do this more effectively and efficiently than ever before. It will be the ability to command and control logistics that will make this concept work. The Army's TSC concept and its potential investment in the TSC command and control systems will bring this capability to reality.

CONCLUSION

The drive of transformation in the focused logistics campaign plan makes it clear that we will no longer move iron mountains as we have in the past and that we will replace mass with velocity to mitigate logistics risk. The history of logistics command and control and the trends in the environment indicate the logistics system must update its method of command and control to meet the needs envisioned in the focused logistics campaign plan. However the plan falls short of meeting the need in the five options given the theater commander. These are ad-hoc approaches to the problem. A doctrinal, equipment, and training solution needs to be established so it can be developed and practiced. The logistics environment of the future demands expertise and doctrine that can not be thrown together ad-hoc. The characteristics of logistics in the future will resemble the characteristics of airpower we can use the JFACC as a model for commanding and controlling logistics. The Service that provides the JFLogCC for joint operations will be the one that like the Air Force, invests in command and control and training and equipment to achieve it. The Army is stepping up to this challenge. The concept of a JFACC to control airpower developed over many years. We can save time and expense by using this concept for logistics. We need a JFLogCC to control logistics. He/she will provide the unity of effort simplicity and objective and economy of force needed for tomorrow's logistics systems.

WORD COUNT= 5,799

ENDNOTES

¹ Joint Chiefs of Staff, *Focused Logistics Campaign Plan* (Washington, D.C.:U.S. Joint Chiefs of Staff), 31.

² Ibid., 17,31.

³ Ibid., 28.

⁴ John Dumond et al., *Velocity Management: The Business Paradigm That Has Transformed U.S. Army Logistics* (Arlington, VA: RAND 2001), 2.

⁵ There were no information systems to track individual items or repair parts so stocks had to be close to users and large inventories were needed. Because, the system was slow and unresponsive, there was a lack of confidence in the system and logisticians provided equipment and supplies for every contingency. Therefore, we moved mountains of equipment to where ever it was needed. Ibid., 1-5.

⁶ David Schrady, "Combatant Logistics Command and Control for the Joint Force Commander," *Naval War College Review* 52 (Summer 1999): 49 [database on-line]; available from ProQuest; accessed 20 October 2003.

⁷ Dumond, *Velocity Management*, 1.

⁸ U. S. Central Command (CENTCOM) did not have an approved OPLAN or TPFDD for the operation it was about to undertake. Schrady, "Combatant Logistics Command and Control for the Joint Force Commander," available from ProQuest.

⁹ William G. Pagonis with Jeffery L. Cruikshank. *Moving Mountains: Lessons in Leadership and Logistics from the Gulf War* (Boston, MA: Harvard Business School Press, 1992), 89-90.

¹⁰ Ibid.

¹¹ This approach resulted in confusion and duplication of effort in logistics and caused an unsynchronized build up of the theater support structure. Yves J. Fontaine, *Strategic Logistics for Intervention Forces*, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 10 April 1997), 2.

¹² Pagonis, *Moving Mountains*, 97-98.

¹³ The Air Force set up its own priority transportation system, desert express, that was not controlled by then LTG Pagonis. Fontaine, *Strategic Logistics for Intervention Forces*, 3.

¹⁴ Ibid., 3.

¹⁵ An analysis of situation reports, by David Schrady, shows that there was little visibility of what was coming into the theater and therefore the theater logistics commander could not control what was coming to him. Well over half the incoming containers had to be opened to determine ownership, contents and destination. Schrady, "Combatant Logistics Command and Control for the Joint Force Commander," [database on-line].

¹⁶ Ibid.

¹⁷ Planners underestimated the logistics personnel needed to support operations at bare bases. There was no preexisting TPFDD for the operation because there was no contingency that covered the situation. The TPFDD that was developed constantly changed and subordinate units made changes without notifying planners. Fontaine, *Strategic Logistics for Intervention Forces*, 7.

¹⁸ Ibid.

¹⁹ Jeanette K. Edmunds, "Organizing Logistics for Peace and War: The Necessity of a Trained Joint Logistics Support Command Headquarters," *Essays On Strategy XIII*, ed. Mary A. Sommerville (Washington, D.C.: National Defense University Press, 1996), 235.

²⁰ The situation in Somalia was complicated by the fact that it started as a combined humanitarian operation under the United Nations (UN). As the situation got worse the UN assigned the U.S. the lead to provide security forces. CENTCOM established a JTF with the First Marine Expeditionary Force as the nucleus and the 10th Mountain Division was alerted for deployment²⁰. As the situation rapidly worsened the 10th Mountain Division deployed and quickly overwhelmed the I MEF 1st Force Service Support Group. The Army was then tasked to provide Joint Logistics through the 13th COSCOM. Kenneth C. Allard, *Somalia Operations: Lessons Learned* (Washington, D. C. : National Defense University Press, 1995), 14.

²¹ Planning was difficult because the situation was ambiguous until the peace agreement was signed. The planning that had been done called for a balanced build up of forces, but the peace agreement called for immediate entry of a sizable combat force. Fontaine, *Strategic Logistics for Intervention Forces*, 12.

²² Ibid., 14.

²³ William S. Cohen and Henry H. Shelton, *Joint Statement on the Kosovo After Action Review*, Presented to the Senate Armed Services Committee (Washington D.C.: Department of Defense), 14 October 1999, 14.

²⁴ In Operation Desert Storm 9.6% of the cargo moved by air compared to 96.4% in Operation Allied Force. The JFACC was first delegated responsibility for coordinating movement, the CINC quickly designated a Director of Mobility Forces (DIRMOBFOR) to coordinate movement of air assets and separated him from the JFACC²⁴. However the DIRMOBFOR only controlled air mobility assets and was not in control of the other parts of the transportation system. All Commanders wanted airlift and according to Colonel Coy, Deputy DIRMOBFOR, everyone wanted airlift for its speed, but there was not enough to go around²⁴. Nonie Cabana, "Total Mobility Flow: A Post-Kosovo Role for the DIRMOBFOR", *Air Force Journal of Logistics*, 26 (Spring 2002): 32 [database on-line]; available from ProQuest; accessed 10 November 2003.

²⁵ Michael W. Lamb Sr., *Operation Allied Force: Golden Nuggets for Future Campaigns*, Maxwell Paper No. 27, (Maxwell AFB, AL: Air University Press) August 2002, 16.

²⁶ The joint forces commander can use a service support organization as a nucleus as in (Desert Shield/Desert Storm), augment his J-4, delegate Joint Theater Logistics Management

(JTLM) to a JTF commander, establish a virtual or stand alone agency, select the predominant service to manage joint requirements, or expand the J-4 logistics readiness center. Joint Chiefs of Staff, *Doctrine for Logistics Support of Joint Operations*, Joint Pub 4-0 (Washington D.C.: U.S. Joint Chiefs of Staff, 6 April 2000), I-3.

²⁷ Joint Chiefs of Staff, *Joint Tactics, Techniques, and Procedures for Common User Logistics During Joint Operations*, Joint Pub 4-07 (Washington, D.C.: U.S. Joint Chiefs of Staff, 11 June 2001), I-3.

²⁸ The combatant commander's authority over logistics is exercised through review of the service components support plans and by deconflicting proposed lines of communication and transportation requirements. Joint Chiefs of Staff, *Doctrine for Logistics Support of Joint Operations*, Joint Pub 4-0 (Washington, D.C.: U.S. Joint Chiefs of Staff, 6 April 2000), III-1, III-3.

²⁹ Common user support is covered in Joint Pub 4-07. It is based on one Service providing support to other services by using its unique support system. Joint Chiefs of Staff, *Joint Tactics, Techniques, and Procedures for Common User Logistics During Joint Operations*, Joint Pub 4-07 (Washington, D.C.: U.S. Joint Chiefs of Staff, 11 June 2001), I-1-I-7.

³⁰ Robert W. Cone, "Briefing on Joint Lessons Learned from Operation Iraqi Freedom," 2 October 2003; available from <<http://www.defenselink.mil/transcripts/2003/tr20031002-0727.html>>; Internet; accessed 10 November 2003.

³¹ Ibid.

³² Ibid.

³³ Jason A. Miselli, "The View From My Windshield: Just-In-Time Logistics just Isn't Working", *Armor*, 112 (Sep/Oct 2003): 11 [database on-line]; available from ProQuest; accessed 11 November 2003.

³⁴ Ibid.

³⁵ John J. Broadmeadow, "Logistics Support to 1st Marine Division During Operation Iraqi Freedom", *Marine Corps Gazette*, 87 (August 2003): 44 [database on-line]; available from ProQuest; accessed 11 November 2003.

³⁶ Ibid.

³⁷ Ibid.

³⁸ Christopher E. Rabassi, "What Happened to Class IX in Iraq," *Marine Corps Gazette*, 87 (September 2003): 54-56.

³⁹ Ibid., 39.

⁴⁰ Joint Chiefs of Staff, *Focused Logistics Campaign Plan*, (Washington, D.C.: U.S. Joint Chiefs of Staff), 11.

⁴¹ Paul G. Kaminski, "The Revolution in Defense Logistics," 31 October 1995; available from <<http://www.defenselink.mil/speeches/1995/di10107.html>>; Internet; accessed 15 October 2003.

⁴² Civilian companies like Boeing and caterpillar take advantage of fast transportation and information technology to support their customers world wide and they are able to guarantee parts delivery in 24 hours. Ibid.

⁴³ Ibid.

⁴⁴ Joint Chiefs of Staff, *Doctrine for Logistics Support of Joint Operations*, Joint Pub 4-0 (Washington, D.C.: U.S. Joint Chiefs of Staff, 6 April 2000), D-1-D-3.

⁴⁵ Joint Chiefs of Staff, *Focused Logistics Campaign Plan* (Washington, D.C.: U.S. Joint Chiefs of Staff), 8.

⁴⁶ Ibid.

⁴⁷ Ibid., 11-15.

⁴⁸ Ibid., 7-10.

⁴⁹ Ibid., 31.

⁵⁰ Kevin J. Sullivan, "Concept to Reality," *Air Force Journal of Logistics*, 27 (Summer 2003): 10.

⁵¹ Michael E. Zettler, "The New Vision," *Air Force Journal of Logistics*, 27 (Summer 2003): 2.

⁵² Sullivan, "Concept to Reality," 6.

⁵³ The nodal system has five components: forward operating locations, forward support locations, CONUS support locations, a responsive distribution system, and a command and control system. Each theater COMAFOR would have an Operations Support Center (OSC) that supports operations in that theater. The theater node would be supported by the Air Force Combat Support Center., Ibid., 8-10.

⁵⁴ Robert S. Tripp et al. "Combat Support C2 Architecture." *Air Force Journal of Logistics*, 27 (Summer 2003): 14-21.

⁵⁵ Vern Clark, "Sea Power 21: Projecting Decisive Joint Capabilities," (October 2002), available from <http://www.chinfo.navy.mil/navpalib/cno/proceedings.html>; Internet; accessed 16 Jan 2004.

⁵⁶ Naval Studies Board, National Research Council, "Naval Expeditionary Logistics: Enabling Operational Maneuver From the Sea." 1999; available from <<http://books.nap.edu/books/0309064295/html>>; Internet; accessed 16 January 2004.

⁵⁷ Nicholas, Linkowitz, "Future MAGTF Logistics and Support From the Sea (2010+)." *Marine Corps Gazette*, 87 (August 2003): 24-26.

⁵⁸ Ibid.

⁵⁹ Ibid., 25-27.

⁶⁰ Christopher R. Hardy, "Joint Logistics Command: The Time Has Come to Take the Next Step," *Logistics Spectrum*, 35 (Jan-Mar 2001), 39 [database on-line]; available from ProQuest; accessed 15 November 2003.

⁶¹ Department of the Army, *Theater Support Command*, Army Field Manual 4-93.4 (Washington, D.C.: U.S. Department of the Army, April 2003), 1-1-1-6.

⁶² Gary R. Engel, "Joint and Combined Theater Logistics-The Future Reality." May/June 99; available from <<http://www.army.mil/ALOG/issues/MayJun99/MS351.htm>>; Internet; accessed 15 October 2003.

⁶³ Andrea Jansen, "Command and Control of Support and Sustainment to the UE," briefing to the TRADOC Commander, U.S. Army Training and Doctrine Command, 15 June 2003.

⁶⁴ Ibid.

⁶⁵ Hardy, "Joint Logistics Command: The Time Has Come to Take the Next Step," [database on-line].

⁶⁶ Zettler, "The New Vision," 4.

⁶⁷ Department of the Air Force, *Air Force Doctrine Document 1*, Air Force Basic Doctrine (Washington, D.C.: U. S. Department of the Air Force, September 1997), 12.

⁶⁸ Ibid.

⁶⁹ Schrady, "Combatant Logistics Command and Control for the Joint Force Commander," [database on-line].

⁷⁰ Department of the Air Force, *Air Force Doctrine Document 1*, Air Force Basic Doctrine (Washington, D.C.: U. S. Department of the Air Force, September 1997), 13.

⁷¹ Ibid., 13,18.

⁷² Ibid., 17.

⁷³ Ibid., 1-23.

⁷⁴ Ibid., 23-24.

⁷⁵ Joint Chiefs of Staff, *Focused Logistics Campaign Plan*, (Washington, D.C.:U.S. Joint Chiefs of Staff), 16.

⁷⁶ Department of the Air Force, *Air Force Doctrine Document 1*, Air Force Basic Doctrine (Washington, D.C.: U. S. Department of the Air Force, September 1997), 26.

⁷⁷ Gary Snyder, "Joint Air Operations", *Core Curriculum Directive, Course 4, Implementing National Military Strategy*, (U.S. Army War College, Carlisle Barracks PA, 2003), 62.

⁷⁸ Department of the Air Force, *Air Force Doctrine Document 21, Organization and Employment of Aerospace Power* (Washington, D.C.: U. S. Department of the Air Force, February 2000), 54.

⁷⁹ Joint Chiefs of Staff, *Command and Control for Joint Air Operations*, Joint Pub 3-30 (Washington, D.C.: U.S. Joint Chiefs of Staff, 5 June 2003), II-2-II-3.

⁸⁰ Ibid. II-1.

⁸¹ Andrea Jansen, "Command and Control of Support and Sustainment to the UE."

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