

USAWC STRATEGY RESEARCH PROJECT

A COMPARISON OF ARMY AND NAVY LOGISTICAL SUPPORT TO THE COMBATANT COMMANDER

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## ABSTRACT

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The Army logistics community is attempting to become more effective in providing support to Combatant Commanders who must utilize forces in a more expeditionary manner under reduced time constraints laid out by former Army Chief of Staff, General Shinseki. In addition to reducing logistical footprints, increasing power projection capabilities and improving in-transit visibility, Army logisticians are faced with new constraints in dealing with asymmetrical threats worldwide: specifically time and access. Recently, the Army has had to support “on the fly” or “come as you are” without the benefit of pre-planned Time Phase Force Deployment Data force flow, with uncertain access to Intermediate or Forward Staging Bases and without long lead times to build up supplies.

This paper outlines a description of the time constraints for deployment of the Army’s Stryker Brigade as an operational parameter for challenges in providing support. Additionally, a comparison and contrast between Army doctrinal logistical support to the Stryker Brigade and Navy methodologies for support to a similar organization (the Marine Expeditionary Brigade) may reveal lessons learned. How the Army and Navy approach logistical support given the constraints of deployment times and in locations without guaranteed access for logistical bases could provide answers to a Combatant Commander’s staff. The end result will be to suggest techniques the Army may adopt to become more expeditionary in nature and to identify joint interdependencies the Army can capitalize upon with the Navy.



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## PREFACE

As a U.S. Army Lieutenant Colonel, I consider my first “joint assignment” to be as a student at the U.S. Army War College, Carlisle Barracks, Pennsylvania. Although exposed to requests for support from other services on a few occasions while on the Army Staff, this is the first experience I have had in over twenty years to learn, evaluate and apply joint principles of combat operations. Coupled with the fact that our former Army Chiefs of Staff have made enormous strides in convincing Army personnel that we must “become joint” and eventually be “born joint,” this is my first attempt at researching and writing about logistical challenges that are outside the realm of the Army.

Secondly, at the first opportunity to exercise logistical concepts in a joint environment in the form of a student campaign planning exercise, I was struck by the relevance of current and possibly future constraints on a Combatant Commander. One must now plan for operations within a reduced timeline and without the benefit of sufficient ports and facilities to bring in more than a small expeditionary force with limited logistics. The Combatant Commander in our joint exercise had enough forces allocated and, if given over 90 days, could have introduced up to two Corps into the Theater of Operations. During this exercise, constraints allowed much less than that to flow into theater over a 60 day period. The available ports could not immediately support an Intermediate Logistics Base for the first 30 days.

Finally, an Army War College guest speaker remarked that if students felt they were here to learn a few (joint) issues and then be able to return to their respective service staffs, they may not understand the definition of “jointness.” Even if a student were to return to his/her respective service in either a staff or leadership role, current operations dictate a joint and interdependent mindset. This paper will delve into the possibilities for an Army logistician to examine and perhaps incorporate some Naval logistic methodologies into a Theater of Operations in order to capitalize upon interdependencies.



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## A COMPARISON OF ARMY AND NAVY LOGISTICAL SUPPORT TO THE COMBATANT COMMANDER

Predominantly a land based force, the Army is the largest service in the Department of Defense. Logistical support doctrine for the Army has developed over time with the following assumption: that an Intermediate Staging Base (ISB) must be secured at an air or sea port in order for forces to flow into theater and receive sustainment. Army support units have been designed for this purpose and the inability to establish a secure ISB usually puts forces at risk for follow on missions. Conversely, the Navy always operates and resupplies at sea. A study of naval methodologies for resupply can help the Army overcome the paradigm of creating a fixed ISB or series of logistics bases which are both time consuming and a security burden. The Army, by its very nature, also requires support from sister services to project forces and resupply its combat power. Current world situations have made the Army focus on the fastest mode of transportation, air transport, to deploy forces quickly to Combatant Commands. But the pure physics of Army requirements for force projection and follow-on sustainment in terms of tonnage and cubic feet will suggest that Naval assets must provide much of the Army's transportation needs in order for even the smallest force (e.g., a Stryker Brigade) to sustain itself. The sustainment function for the Army is also under revision as the Army G-4 struggles with a charter to develop smaller logistical footprints, increased power projection, and total asset visibility. Army doctrine for logistics contains a myriad of tools for the logistician to provide support in the early phases of an operation (e.g., contracting and host nation support) when support units are not available. After the initial entry phase, Army support units are designed to fall into formations in a predominately functional manner (e.g., supply, maintenance, transportation, medical, etc.). As more operational forces enter the theater, more support units are called upon to create the "logistics tail." This creates a layered effect, where specific units with different functional capabilities are aligned to each maneuver force and must insert themselves into a Theater of Operations to work effectively, creating both a large logistics footprint and a security burden.

In comparison to the Army's doctrine for forced entry and sustainment operations, the Marine Corps relies upon the Navy to enable forced entry and resupply its forces in the most efficient and effective way. The Navy utilizes both sea and air to resupply Marine ground forces, taking advantage of modularity and span of reach as well as non-military support for common items found on the economy. The Navy often moves Marine maneuver forces around the world to areas without allied forces in country, without easy access to sea and air ports, and without

the minimum infrastructure to support early entry. The Marine Corps, which has always been an amphibious, early entry force, has expanded its expeditionary capability by projecting forces inland up to 100 miles. Marine Expeditionary Units (MEUs) are the force of choice for Combatant Commanders because of their flexibility to project power, using a loiter capability, anywhere within a short timeframe. A MEU consists of 1,500 to 3,000 soldiers with 15 days of supply and has a six hour response time for deployment. Similarly, the Army's Stryker Brigade has approximately 3,600 soldiers with three to six days of supply and a five to 21 day response time (from Hawaii to South America to sub-Saharan Africa).<sup>1</sup> While the Stryker Brigade is designed for insertion by the Air Force, the Army could benefit from developing a closer partnership with the Navy for both power projection and resupply, allowing it more flexibility to project and sustain forces in austere theaters.

First, I will discuss the Army's power projection requirement, in terms of the newly formed Stryker Brigade. I will then compare and contrast Army and Navy methods for obtaining logistical support given constrained environments for insertion of maneuver forces and logistical units. I have chosen the Stryker Brigade as the "unit of measure" upon which to compare methods of support, as the new Army Brigade's mission for early entry is comparable to that of a MEU or a MEB (at about 3,000 to 3,600 soldiers), which is often inserted by Naval forces in these same environments. Finally, I will suggest opportunities for the Army and Navy to become more interdependent in providing joint logistical support to Combatant Commanders.

## **THE ARMY'S POWER PROJECTION REQUIREMENT**

The following power projection data comes from a U.S. General Accounting Office report, dated 30 June 2003, and captures the comparison of air and sea deployability timelines needed for an Army Stryker Brigade.

"In 1999 the Army announced its intentions to transform its forces into a more strategically responsive force that could deploy a brigade anywhere in the world in four days, a division in five days, and five divisions within 30 days. Initially, the Army established a requirement for Stryker Brigade Combat Teams, as an early-entry force that can be rapidly deployed, supported anywhere in the world, and capable of conducting combat operations immediately upon arrival into a theater of operations within four days after first aircraft liftoff. However, meeting the four-day worldwide deployment goal of a brigade-size force would require more airlift than may be possible to allocate to these brigades.

At present, it would take from five to 21 days, depending on destination, and require over one-third of the Air Force's C-17 and C-5 transport aircraft fleet to deploy one Stryker brigade by air. Based on deployment planning assumptions the Army uses, about 243 C-17 strategic airlift sorties would be needed to airlift a Stryker brigade. The minimum time it would take to airlift a Stryker brigade would

be about five days to South America and the Balkans, seven days to South Asia and South Pacific regions, and 13 days to West Africa.

Obtaining this amount of airlift for deploying one Stryker brigade would require allocating 31 percent of the Air Force's total 2005 inventory of C-17 aircraft and 38 percent of its C-5 aircraft inventory. In contrast, sailing time for a Fort Lewis-based Stryker brigade from Seattle/Tacoma, Washington, would be about ten days to ports in northern regions of South America and more than two weeks to ports in West Africa. From Alaska, sailing time to any of the eight overseas destinations we included in this analysis would take from 12 days to 24 days. Similarly, sailing times to the Balkans from any one of the four planned Stryker brigade locations would take a minimum of two weeks to over three weeks. With a Stryker brigade forward based in Europe, sea deployment times to the Balkans from seaports in Germany, for example, could be reduced to about seven days. According to Army deployment planning data, it would take about two days for loading ships and another two days to unload them after arrival, compared to hours for loading and unloading aircraft.

***Furthermore, many areas of the world in which Stryker brigades are anticipated to operate have no access to a seaport, and not all seaports would have the capacity to handle large deep-draft vessels.*** Stryker brigades are organized and equipped to begin operations soon after arrival in an operational theater, carrying up to three days' supplies of the fuel and ammunition and sustainment items, allowing the brigades to immediately conduct a combat mission. While the Army set out to design Stryker brigades to be a rapidly air deployable force, ***Army officials now recognize that airlift alone will not be sufficient and that some combination of airlift and sealift will likely be used to deploy the brigades.*** To make Stryker brigades easier to deploy and support, the Army designed the brigades with a support structure that is only about one-third the size of that found in a heavy armored brigade. Thus, Stryker brigades do not have the capability to sustain operations without the assistance of external support organizations and resources." <sup>2</sup>

We have now established that the Army has evaluated and is seeking to reach the four-day goal for power projection of an early entry force. But how can the Army sustain this force after having consumed its Air Force power projection assets on only one Brigade? Some amount of lift would likely be required for sustainment, delaying follow-on forces from entering the fight. A short discussion of how the Navy sustains Marine forces shows some similarities to the Army's challenges as well as some unique differences.

## THE NAVY'S METHOD FOR PROVIDING LOGISTICAL SUPPORT

### NAVAL SUPPORT DOCTRINE

Unlike the Army's logistical support structure, which is built upon functional units that align with combat forces and must move with these maneuver forces to establish Lines of Communication (LOCs), the Navy operates on a more spatial relationship of support to forces. Forces are grouped by sea or area and provide support via sea lines of communications. The metaphor is "hub and spoke," which connotes a span of logistical assets that service the maneuver units in a radial arc.

"At sea, a Naval Logistic organization for forces afloat is often supported across multiple lines of communication from sites both within and without the operating area. These sites may be under control of different numbered fleet commanders. The forces afloat can also move in and out of the combatant commander's area of responsibility (AOR), drawing sustainment from changing combatant commanders as they transit the ocean. Shore-based forces in theater have different support requirements than forces afloat, and in some theaters may fall under different service logistics command and control organizations per Executive Agent agreements. Certain Naval forces ashore may be reassigned between Navy and Marine Corps (or other-Service) control, shifting support responsibilities. Finally, Marine Corps forces afloat may shift substantial support requirements from Navy to Marine Corps logistics organizations when they go ashore. The commander of the afloat forces will exercise control of logistics through a Fleet Logistics Coordinator (FLC), Task Force Logistics Coordinator (TFLC), or Task Group Logistics Coordinator (TGLC)."<sup>3</sup>

In this manner, the Navy provides support over the seas, which comprises over 70 percent of the earth's surface. Instead of aligning logistics to forces in a "tooth to tail" ratio, the Navy aligns support to areas and anticipates forces movement throughout in a fluid environment without boundaries. Additionally,

"hospital ships and prepositioning ships act as [logistical multipliers, providing] defense stock points, strategic transporters, theater transporters, and combat service support providers. With these various assets, a full range of strategic and theater distribution functions is possible with limited or no theater shore-based support. While forward basing, fixed or expeditionary, is critical to support maneuver and provide economy of operations and throughput capacity, naval forces afloat are able to maintain station anywhere."<sup>4</sup>

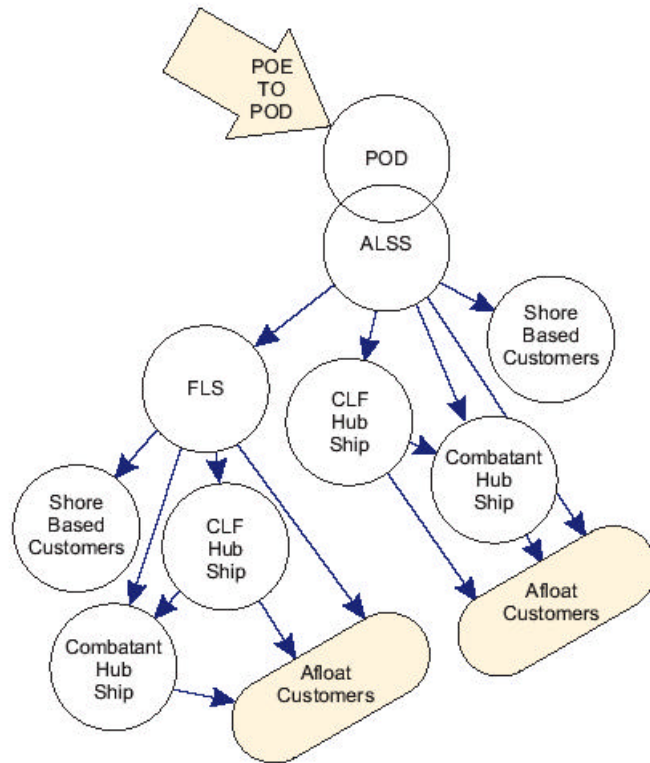


FIGURE 1 – HUB AND SPOKE DISTRIBUTION<sup>5</sup>

#### CONTRACTOR SUPPORT TO THE NAVAL FORCES

The Navy's one similarity to the Army is that it aggressively capitalizes upon contractor support for common requirements. The Navy follows the principle of economy. Simply stated:

"Host nation and multinational agreements for specific support will often result in substantial savings in distribution. Shared resources and shortened transportation legs made possible by these agreements allow a distribution system that is at once more responsive and more economical. Increasing commonality and interoperability of multinational supported and supporting forces continue to enhance this trend. Distribution through the multinational system economically offers the certainty of support necessary to mission accomplishment."<sup>6</sup>

The Navy, like the Army, relies on contractor support for both sea and land operations. Similar to the Army's Logistics Civil Augmentation Program (LOGCAP), the Navy's CONCAP (Construction Capabilities) is provided by Halliburton Kellog, Brown and Root (formerly Brown & Root). The services provided to the Navy are more suited for construction scenarios, but are

helpful when plans call for arrival in global environments where U.S. Forces or coalition bases are not available. The Navy has even developed a FEDEX-like approach to receiving supplies from vendors. A new program called Performance Based Logistics (PBL) provides useful information on possible ways of leveraging commercial business practices to satisfy Department of Defense (DoD) logistics requirements.

"Under the PBL program, NAVICP [Naval Inventory Control Point] awards a contract or work request to a single supplier. This supplier provides material directly to our customers in time to meet the customer's requirements. This is achieved without the intervention of, or need for, government inventory managers or intervening storage and material handling systems while providing increased product reliability and reducing total cost to the fleet customer and the Navy. The PBL suppliers may take on a number of functions normally performed by various DoD services or agencies. These functions may include spare parts requirements determination, physical distribution, warehousing of material, depot level maintenance, and some engineering functions."<sup>7</sup>

#### FUTURE CONCEPTS FOR NAVAL LOGISTICS

One of the most exciting concepts the Navy has for overcoming problems of force entry and support where access is either constrained or denied is called "Sea Basing." Providing support to expeditionary forces on the shore directly from the sea reduces or may even eliminate the logistic footprint on the shore and allow access to land without a large logistical tail. Pre-positioned ships with cargo that is accessible to be offloaded from the sea means undeveloped ports may no longer restrict the force. While the Army is still struggling with logistical requirements for early entry forces, studies on the newest cargo ship, the High Speed Vessel (HSV) may be the answer to execute resupply from a Sea Base.

"The HSV's ability to transport a battalion and its combat equipment delivered together at high speeds in one trip is a great advantage to a combatant commander. The HSV has already proven the capacity to reliably transport a 400-ton load to include 370 Marines and their camp gear, five Cobra helicopters, two Huey helicopters and aviation ground support equipment from Japan to Guam within 40 hours at far less time and cost than the currently employed airlift. In another configuration the HSV would be able to move over 800 Soldiers/Marines, 60 ground vehicles and 30 storage containers from the Kin pier to Yokohama in under 30 hours."<sup>8</sup>

The Army's doctrinal method of establishing ISBs at or close to ports requires heavy infrastructure, personnel and security support. Distribution lines are fixed from ISBs as LOCs to forward forces. Imagine a flexible, mobile ISB in the form of a secure, Sea Base! A future offloading capability is under development as both Army and Navy continue research on an ultra-large airship, capable of lifting up to 1,000 tons of cargo from ship to shore, thus expanding

the logistical advantages of Sea Basing. If the Army worked directly with the Navy on force projection and sustainment methods from a Sea Base, the Army's logistical support doctrine that demands a secure ISB could be re-defined for expeditionary forces.

#### **THE ARMY'S METHOD FOR PROVIDING LOGISTICAL SUPPORT**

Previously, the Army thought of only where and when support was required and made the assumption that the logistical infrastructure, with its global reach, could get logistics anywhere and in time. The Army would then sustain its forces from logistics bases and achieve, by either supply-based or distribution-based principles, an adequate "tooth to tail" ratio of support to operational forces. However, constraints such as operations in areas with primitive and austere infrastructures, multiple services competing for limited transportation assets, and overcoming anti-access and area denial strategies all are part of worldwide scenarios which limit the establishment of support bases.

Although the Army realizes the battlefield is no longer linear and support forces do not need to be "layered" ("duplicated" in each zone of communication), doctrine has not replaced any theory for establishment of the logistical base other than to admit that, as forces move, ISBs must follow forces in order to provide support. But what methods do we use to develop sustainment bases when we have no sea or air port? What can the Combatant Commander's staff do in the early phases of an operation prior to securing logistics bases? With limited force projection assets, both air and naval, the logistics staff already knows that support units may not be available to establish an ISB for early entry forces. Initial support units may not have the benefit of follow-on logistics units for up to 30 to 60 days. Below is a doctrinal replication of an ISB in a non-linear battle space.

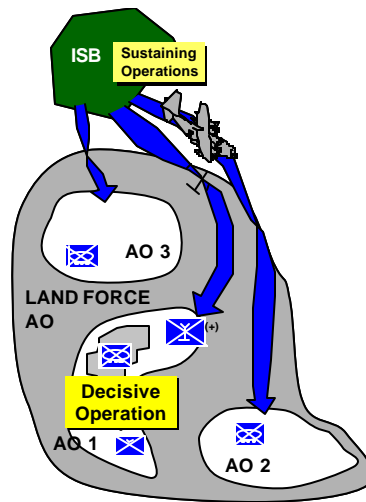


FIGURE 2 – INTERMEDIATE STAGING BASE SUPPORTING LAND OPERATIONS

The U.S. National Security Strategy (NSS) calls for forward basing of U.S. military forces as a symbol of commitment to friends and allies. Specifically, “the United States will require bases and stations within and beyond Western Europe and Northeast Asia, as well as temporary access arrangements for the long-distance deployment of U.S. forces.”<sup>9</sup> The Army has built much of its logistical doctrine with the underlying assumption that logistics bases must be present worldwide. Yet, the Army does not have the resources to establish logistics bases everywhere a future contingency might arise, nor would some areas of the world welcome a U.S. presence during peacetime. The Army must therefore enhance the expeditionary capability of U.S.-based support forces to make them more responsive to potential needs of theater Combatant Commanders. I believe our service chiefs can fulfill this goal with efforts to transform our services to perform with a more expeditionary mindset. In other words, if we cannot be stationed everywhere, we can design our support forces to be more responsive to the Combatant Commander. Instead of designing support forces for each zone of communication, leading to the buildup of Armies, expeditionary forces demand expeditionary support methodologies. Support packages that can be inserted into any theater and moved around the battle space are more valuable than introducing duplicative support forces in a linear fashion vis-à-vis the old “Red Ball express,” where support units transported supplies by handing off supplies from one logistics base to another.

## DOCTRINAL SUPPORT FOR LAND FORCES IN THEATER

Joint Publication (JP) 4-0, "Doctrine for Logistic Support of Joint Operations," articulates U.S. doctrine for providing logistics to forward deployed troops. Whether troops are permanently stationed overseas within a Combatant Commander's area or are temporarily deployed for contingency operations, JP 4-0 governs how they will be sustained. This policy describes various strategies such as: combining all U.S. service capabilities under one command, coordinating for host nation support (HNS), negotiating Allied and Coalition support, and contingency contracting. Some of these "tools" are more advantageous than others when operating in logistically constrained environments.

The Combatant Commander can establish priorities, shift resources within a theater, and capitalize on good business practices by eliminating duplication of resources, facilities, or functions provided by the services within his area of responsibility. Although Title 10, United States Code prescribes that services must support themselves, in most cases, a single service in theater is named to provide common-user support. Resources are conserved by maximizing support via a distribution-based system instead of a supply-based system. Recently, U.S. Transportation Command (TRANSCOM) was designated the Distribution Process Owner "tasked with developing efficient and effective distribution solutions to enhance strategic support to worldwide customers" (e.g., Combatant Commanders).<sup>10</sup> New streamlined distribution, which allows just-in-time practices, will conserve limited resources while capitalizing on the ability to mass resources with global transportation systems. This should allow the U.S. to retain a forward-based military presence with a smaller logistical footprint.

Generally, placing the authority for providing logistics in an area of operation solely in the hands of the Combatant Commander aids in unity of (logistics) effort. Unity of command is another important element of this concept. The Army's Theater Support Command (TSC) could become the organizational model used by other services when merging logistical assets under a single logistical commander working for the Combatant Commander. The Army's TSC broke the paradigm of "stovepipe" functional commands (such as medical, personnel and engineer) answering separately to the Army Service Component Commander (ASCC) for theater logistics. Instead, the TSC Commander answers to the ASCC and to the Combatant Commander for all logistical support. The TSC also takes advantage of Active/Reserve Component integration to align logistical support to forces that coordinate deployment from the Port of Embarkation as well as the Port of Debarkation simultaneously. All services could unify logistics command and control of their functional commands under one logistics commander resulting in only one ADCON (administrative control) line to their service component. Economies of effort are

created by service logistical staffs as they focus to mitigate the problems of “ad-hocery” inherent in the Joint Theater Logistics Management (JTLM) board process. A Senior Theater Logistics Commander could execute the Combatant Commander’s logistical priorities without delay, utilizing all assigned joint and interdependent assets. Current joint logistical agencies such as the Defense Logistics Agency and Defense Energy and Supply Center, as well as TRANSCOM, could interface more readily with service staffs under one joint logistics commander instead of using the JTLM process of board adjudication of logistics between service components.

However, a TSC can be a huge organization -- one whose footprint the Army is trying to reduce. Unfortunately, the Stryker Brigade is reliant upon a TSC for support when its initial supplies from its support element are exhausted.<sup>11</sup> In order for a TSC to provide tactical level sustainment for our new, early entry force, some sort of build-up period, or ISB must be established in theater. Is there another method?

#### HOST NATION SUPPORT IN THEATER

A second tool, or option defined in JP 4-0 is to capitalize on host nation support. One problem with this is the availability of current agreements. The “Combatant Commander cannot enter into multinational relationships that are contrary to U.S. policy without National Command Authority direction.”<sup>12</sup> Each participating nation is responsible for its own logistics and could be an additional source of supply, or could compete for the same supplies needed by U.S. forces in a Combatant Commander’s theater. Even NATO partners do not have clearly defined logistical interoperabilities with the United States. Therefore, the anticipated need for quick coordination between Combatant Commanders and the Department of State for international support agreements may require detailed planning in advance of an operation. When such agreements are pre-coordinated, they can reduce the logistics footprint in a country as well as provide infrastructure for port and terminal access, and rail and pipelines that speed reception of deploying troops. Acquisition and Cross-Servicing Agreements (ACSAs) are bilateral agreements that provide an alternative, potentially more efficient source of logistics support. They were successfully employed in Operations DESERT STORM, RESTORE HOPE and JOINT ENDEAVOR.<sup>13</sup> According to Army Regulation 570-9, “to complement DOD operational mission resourcing for crises, transition to war, and wartime, the U.S. Army actively seeks to increase its overseas combat potential through the formal establishment of HNS agreements with Allied and friendly foreign nations’ governments.”<sup>14</sup> HNS agreements can be purely logistical in nature, i.e., a financial reimbursement agreement for infrastructure, supplies and services, or can involve the stationing of troops, which is a more tangible commitment of

strategic importance. Uses of bilateral agreements are also suitable for far more than an exchange of supplies or services. For example, Rust Deming, principal Deputy Assistant Secretary of State for East Asian and Pacific Affairs, notes that the 47,000 Americans in Japan and 36,000 in South Korea are forward deployed for strategic reasons. They allow regional economies to thrive, they prevent a military power vacuum from developing, and they spur the partner to increase defense spending.<sup>15</sup> A U.S. Department of State regional overview notes that "South Korea's annual defense spending has grown by 36 percent since 1990, compared to a decline of nearly 25 percent for all other Pacific and NATO nations combined."<sup>16</sup> Investment in our allies should garner healthier military relationships which may help us in the future when our own military force projection and sustainment requirements are taxed. Agreements such as the above can provide a different sort of forward presence than is prescribed in our NSS. Aggressive contacts with host nations in a Combatant Commander's area of operation will help pave the way for unanticipated expeditionary missions when both time and access become a problem for our force projection and follow on sustainment capabilities.

#### CONTRACT SUPPORT FOR LAND FORCES

In the absence of forward deploying U.S. logistical assets or utilizing multinational relationships, another sustainment tool is contracting. When U.S. or host nation support is not yet available, responsiveness can be defined as "the power of the contract," or "money talks." Combatant Commanders use this option as a force multiplier for needed logistics assets that have not yet arrived. Sometimes the government official with the black briefcase is the only logistician on the ground in the early phases of an operation. The feasibility and suitability of this option is only restricted by the imagination of the contracting officer. Contracting is so widely popular that Combatant Commanders must sometime call upon the JTLM element to "establish a contract clearing house to ensure that Service components are not bidding against each other for the same commodity."<sup>17</sup> However, contracting can also become the bane of the logistician. It is acceptable in the short run, but often causes supportability and interoperability problems later. Accountability of the "stuff bought" can also be a nightmare as Combatant Commanders are also responsible for maintenance, salvage and retrograde of supplies from many separate contractor efforts. Knowing that contract support may become a predominant tool for support of early entry forces, a Combatant Commander should develop these plans in advance. The Army's LOGCAP program, established in 1985, is now used by all services under different titles. The original LOGCAP contractor, Brown and Root Services, developed an open contract to provide support for up to 20,000 troops in five base camps for up to 180 days using a

worldwide management plan in 13 regions.<sup>18</sup> LOGCAP was originally designed to increase responsiveness with existing resources. It has now become the tool of “last resort” for Combatant Commanders due to cost overruns, contract monitoring burdens, and the mission planning challenges of using a large organization over which Combatant Commanders have little or no control. The General Accounting Office, in its 1997 report to Congressional Requesters, has provided succinct data, lessons learned, and recommended improvements for the use of LOGCAP programs.<sup>19</sup> Many of these changes are now in place and could provide Combatant Commanders with more flexibility in conducting operations in austere environments. Contracts and contractors are a responsive, yet expensive tool. However, they do reduce the presence of forward deployed logistics troops and the reliance on coalition logistical support.

#### FUTURE CONCEPTS FOR ARMY LOGISTICAL STRUCTURE

Even if called upon to deploy in an area where we have no forward presence, the aggressive application of HNS, ACSAs, and bilateral agreements with allies in the region provide us with other ways to get logistics to the right place at the right time. The traditional methodology of establishing forward presence through the stationing of thousands of troops in a secure ISB carries a heavy logistics and security burden. The ancillary effects of economic and diplomatic ties far outweigh the traditional presence of troops when one factors in the impracticalities of moving or maintaining the sometimes huge logistical “tail” required of large or extended operations. If forward presence were “light” on soldiers but “heavy” on service support agreements, we could still reap the benefits of cooperation and commitment to our allies and friends. The Army is now considering transitioning some units from the traditional functions of supply, medical and transportation to civil affairs, military police, engineer and other stabilizing units. The Army G-4 is concerned that the “layered” approach of providing many types of logistical units has created redundancies that burden the operational commander. For example, three different echelons of supply and maintenance units (Organizational, Direct Support, General Support) have been designed per Army Corps. Using a modular approach may be advisable when operations call for expeditionary units without their respective layers of Division, Corps and Army units. One supply unit would provide distribution for all types of operational units within a single area of operation -- a more spatial approach reminiscent of Fleet Logistics Coordinators. In fact, in the late 1970's, the Army had formulated a modular approach under a single logistics coordinator per Brigade called a FASCO (Forward Area Support Coordinator). The FASCO controlled all Army logistics units that came into the Brigade area, whether they were assigned or not. When more operational forces are introduced in future operations, more

logistics units were added under the same commander. This is similar to the Marine Corps analogy of the MSSG, BSSG, FSSGs (MEU, Brigade or Fleet Service Support Groups) which are modular logistics units that grow larger in direct relation to the MEU, MEB or MEF (Marine Expeditionary Force). Continued utilization of all of the above mentioned tools, along with options provided a Combatant Commander through total authority to combine all services' logistical assets under a single joint TSC, helps support the early entry land forces. The advantages of unity of (logistics) command are too logical to ignore -- the efficacy of planning is one major advantage.

Host nation and multinational support agreements should continue to be reviewed and updated in countries where they currently exist and negotiated where they do not. These agreements should include requirements for responsive logistical support for contingency operations. This could act as a diplomatic and economic tool that could reduce the strain on the military (both Active and Reserve) which normally provides logistical support for early entry forces. Continued improvement of LOGCAP and contracting power could augment early entry forces that have only a few days of logistics. Our greatest asset is our defense dollar, which is sometimes now used to "buy" allegiance (e.g., Iraqi Police forces). But until major reforms in organization of logistic forces come into effect, both options (HNS and contracting) for non-military support should be secondary and tertiary to our main strategy: that of long-standing multinational agreements. The National Security Strategy of forward presence in today's constrained logistical environment can only be strengthened with international agreements -- agreements that have the added advantage of providing a more responsive, less cumbersome logistical tail.

Utilization of so many support tools to marshal logistics assets in logistically constrained environments or in areas that do not allow ready access to large forces seems contrary to efforts to reduce logistical footprints. Even Martin van Creveld, in his historical analysis Supplying War, notes that the proportion of support to combat troops is frequently cited as an indicator of an army's efficiency, with a low proportion representing a high efficiency.<sup>20</sup> The same misunderstanding of proportional support is prevalent today. Senior logisticians' goals seem to be to reduce the logistical footprint by 50 percent. But the push for reductions today is based on transportation constraints, not a desire for increased efficiency. Martin van Creveld's premise was the proportion of support to combat troops could indeed be 100:1, if that were the optimum ratio to win the campaign. Realizing that we can't take it all with us, at least not quickly, the option of getting the correct ratio of logistical support through multinational agreements makes sense. There is no requirement that the 100 support troops needed to

support one combat soldier to be troops with US uniforms. The future of providing support may lie in more aggressively pursuing non-standard support as well as adjusting the Army's outmoded functional, layered support. It will take time to reconfigure logistic units that have been designed around the functional elements of Divisions, Corps and Armies, but until then, Combatant Commanders can support expeditionary forces with non-standard support arrangements until military support forces are introduced from a secure ISB.

#### **USE OF ARMY AND NAVY METHODS FOR PROVIDING SUPPORT TO MAXIMIZE INTERDEPENDENCY (JOINTNESS)**

The reduction of logistical support in the Army's new Stryker Brigade will be characteristic of all new early entry organizations. Even the MEU, originally designed as an amphibious assault unit for beachheads and ports and later evolving to a strike force capable of driving hundreds of miles inward, is logistically constrained to 15 days of supply. Similarly, the "staying power" or minimal days of supply will require aggressive methods of resupply from all the services.

Reliance upon non-U.S. support will increase in the form of contracts, HNS, and multi-national agreements. A prudent logistician will see that these tools become a logistics force multiplier when U.S. distribution and power projection capacities are taxed. Both the Army and Navy are doing more to capitalize upon these sources.

The Army could use the examples of Navy (and Marine) organizations and methods of resupply to become more modular and less uniquely functional in nature. The TSC combines functional organizations under one commander for conservation of resources and unity of command. The Navy operates in a more spatial nature, like a hub and spoke, growing and constricting where necessary to provide the correct span of coverage.

The Army and Navy's combined efforts to support from a Sea Base only makes sense as the Army cannot always establish forward presence, with associated costly infrastructure, worldwide. Since conflicts are now arising in areas of the world where we have limited resources, the Navy and Army can combine power projection and resupply efforts similar to the Navy-Marine relationship. By simply establishing a relationship with the Navy for programmed resupply, the Army can reduce its almost total reliance on Air Force assets. The Army has built its early entry force around the Stryker Brigade and made requirements known to the Air Force for strategic lift. The Future Combat System, the Army's future force, will also be designed around an Air Force parameter -- the C130, but it could easily be designed for transport in a future naval ship such as the HSV. The Army should now focus efforts on defining

requirements for support from the Navy for both power projection and Sea Basing. With defined requirements, both services can work on overcoming any technology limits for supporting Stryker and Stryker-like brigades from the sea. Interdependence of the services for force deployment and sustainment is a huge part of getting to the fight.

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## ENDNOTES

<sup>1</sup> Honolulu Advisor, "Four-Day Goal for Strykers Unrealistic, Study Finds," *The Honolulu Advisor*, 9 July, 2003.

<sup>2</sup> General Accounting Office, *Realistic Deployment Timelines Needed for Army Stryker Brigades* (GAO-03-801, Washington, D.C.: U.S. General Accounting Office, June 2003).

<sup>3</sup> Department of the Navy, *Naval Logistics*, Naval Doctrine Publication 4 (Washington, D.C.: U.S. Department of the Navy, 20 February 2001), 44-48.

<sup>4</sup> *Ibid.*, 62.

<sup>5</sup> *Ibid.*, 68.

<sup>6</sup> *Ibid.*, 72.

<sup>7</sup> Department of the Navy, *Maritime PBL Deskguide, Naval Inventory Control Point*, Department of the Navy Acquisition Community Website, June 2003, 1.

<sup>8</sup> Naval Warfare Development Command, "Baseline HSV Characteristics," 13 March 2004; available from <http://www.nwdc.navy.mil/Concepts/concepts.aspx>; Internet; accessed Jan 2004.

<sup>9</sup> George W. Bush, *The National Security Strategy of the United States of America* (Washington, D.C.: The White House, September 2002), 29.

<sup>10</sup> News Release, "U.S. Transportation Command appointed as Defense Distribution Process Owner," 25 September 2003; available from <http://www.defenselink.mil>.>; Internet; accessed 26 Sep 2003.

<sup>11</sup> Department of the Army, *Theater Logistics*, Field Manual 4-93.4 (Washington, D.C.: 15 April 2003), 1-31.

<sup>12</sup> Joint Chiefs of Staff, *Doctrine for Logistic Support of Joint Operations*, Joint Pub 4-0 (Washington D.C.: U.S. Joint Chiefs of Staff, 6 April 2000), 4.

<sup>13</sup> *Ibid.*, 15.

<sup>14</sup> Department of the Army, *Host Nation Support*, Army Regulation 570-9 (Washington, D.C.: U.S. Department of the Army, 9 October 1990), 1.

<sup>15</sup> Jane Morse, "Host Nation Support Vital to U.S.-Japan Alliance, Regional Security," The Washington File; available from <http://usembassy-austrailia.state.gov>>; Internet; accessed 24 September 2003.

<sup>16</sup> Jane Morse, "Host Nation Support Vital to Maintaining Alliances, Fighting Threats," The Washington File; available from <http://usinfo.state.gov>; Internet; accesses 24 September 2003.

<sup>17</sup> Joint Chiefs of Staff, *Doctrine for Logistic Support of Joint Operations*, 19.

<sup>18</sup> General Accounting Office, *Opportunities to Improve Logistics Civil Augmentation Program* (Washington D.C.: U.S. General Accounting Office, February 1997), 2.

<sup>19</sup> *Ibid.*, 7.

<sup>20</sup> Martin Van Creveld, *Supplying War*, (Cambridge University Press., Cambridge, 1977), 235-236.

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