SHOULD USTRANSCOM OWN IT ALL?

GRADUATE RESEARCH PROJECT

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Abstract

"Logistics sets a campaign's operations limits."

- JCS Pub 1

The U.S. logistics system is not as capable as it is designed to be and therefore unnecessarily confines the operational limits of future campaigns. The organizational structure of our transportation system is sluggish, unreliable, and expensive because it is fragmented and inefficient. It consists of multiple transportation entities and agencies made up of separate services and commands each with responsibilities for individual modal and service commitments and functions operating in a vertical or "stovepiped" fashion. This stovepiped organizational structure causes unnecessary redundancies and extra layers of bureaucracy which increase costs, slow the process down, and make the system less reliable.

This Graduate Research Project (GRP) begins by examining the creation and history of USTRANSCOM to lay the foundation for what was expected of it as a unified command and help explain why it has failed to meet those expectations. It also discusses the indicators of USTRANSCOM's inefficiency and ineffectiveness while highlighting and investigating the causes. This GRP discusses the alternative of putting the ITO/TMO and theater airlift under the organizational control of USTRANSCOM; and consolidating the headquarters functions of AMC, MSC, and MTMC. Finally this GRP recommends consolidating the above organizational elements under the organizational structure of USTRANSCOM.

SHOULD USTRANSCOM OWN IT ALL?

I. Introduction

Purpose

USTRANSCOM was established in order to improve the Defense Transportation System (DTS) by creating a joint unified command responsible for the management of the DTS. Today USTRANSCOM acts as manager for AMC, MSC, and MTMC. Currently, the transportation agents at the specific unit levels work for their local units and theater airlift is owned, operated, and managed by the individual theaters.

This GRP examines the creation and history of USTRANSCOM to lay the foundation for what was expected of it as a unified command and help explain why it has failed to meet those expectations. It also discusses the indicators of USTRANSCOM's inefficiency and ineffectiveness while highlighting and investigating the causes of inefficiency and ineffectiveness. Finally, this GRP recommends consolidation of DTS assets and placing the control of these assets under the organizational structure of USTRANSCOM.

Background

Even before the creation of USTRANSCOM, the United States Department of Defense was a relatively successful participant in several wars, police actions, and contingencies. Thus, the establishment of USTRANSCOM was not designed to fix an

enormous problem with the U.S. logistics system. USTRANSCOM was, however, formed to improve upon the existing Department of Defense (DoD) logistics transportation system. The vision for improvement began very early, in 1949, and culminated in the Goldwater-Nichols era of increased jointness, with the creation of a new joint unified command, USTRANSCOM.

In this new era of jointness, USTRANSCOM's charter was set to manage the transportation requirements of the Air Force, Army, Navy, and Marines during times of war. In 1992, after Operation Desert Shield/Desert Storm, USTRANSCOM was given more control over the logistics system by adding peacetime responsibility to the existing wartime responsibility (Matthews and Holt, 1996: 3-4). This increase of responsibility was designed to allow the DTS to train like it intended to fight. While this increase in scope of responsibilities has improved the effectiveness of USTRANSCOM, it is evident to some that the DTS remains inefficient and unreliable.

This inefficiency and lack of reliability is a result of the individual component commands' retaining too much control over assets and money. USTRANSCOM remains fragmented because it only manages the middle portion of the defense transportation system, Air Mobility Command (AMC), Military Sealift Command (MSC), and Military Traffic Management Command (MTMC). Even as manager of the middle portion of the DTS, USTRANSCOM is the manager of three separate major commands owned by separate military services and the subsequent application of "the golden rule" (the one who has the gold makes the rules, or the one who controls the purse strings controls everything) results in too much duplication of effort by the component commands. This

duplicity costs the taxpayers money, the logistics customers precious time, and decreases reliability of delivery. USTRANSCOM's partial control of the DTS does not allow it to sufficiently control the system for which it is held accountable.

In the days of the cold war and push logistics, this frustrating situation would not cause insurmountable difficulties. In fact, the huge success of Operation Desert Shield/Desert Storm led many critics to down play any need for changing the USTRANSCOM arrangement. The successes of Operations Desert Shield and Desert Storm are either classic examples of how the U.S. can overcome a poor logistics system with brute force and volume or they validate the current organizational structure and processes of USTRANSCOM. While the prosecution of Operation Desert Shield/Desert Storm was extremely successful, and could not have been so without a workable logistics system, it is apparent to some that the efforts of the U.S. logistics system were inefficient.

The following examples are offered as an illustration of these inefficiencies. Twenty to thirty-thousand containers shipped to the southwestern theater had to be opened to determine the contents and their eventual destination (Tuttle, 1993: 14). Equipment and supplies were reordered time and again by units that were well within reaching distance of the requested materials but weren't aware that the material was so close (Tuttle, 1993: 14). Not only was there significant confusion as to what was shipped and to where, but costs were also incredibly disproportionate to what they should have been. The cost of shipping an item within the DoD system is frequently two to three times more expensive than necessary because of unnecessary multiple billings (Tuttle, 1993: 14). In this era of reduced funding and personnel cutbacks, the DoD cannot afford

to do logistics business as usual. The DoD no longer possesses the assets required to overcome a poor logistical system. There are major initiatives afoot to lean up logistics through management of speed and reliability. The majority of this thrust (termed Velocity Management, for the Army and Lean Logistics, for the Air Force) is directed at In-Transit Visibility (ITV), and Total Asset Visibility (TAV). ITV is the ability to see where any item is once it has entered the transportation system and TAV is ITV plus the ability to see exactly what is in the complete logistics system, from the factory to the foxhole.

With increased ITV and TAV, it is argued that the DoD logistics system will become much more efficient and reliable and result in a smaller required pipeline inventory. A smaller pipeline inventory results in lower inventory carrying costs and subsequently lower total cost. Often the efficiency and effectiveness of an organization's parts come at the expense of the efficiency and effectiveness of the organization as a whole. When an organization behaves in this manner the organization is suboptimizing. As long as the concepts of ITV and TAV are applied to reduce total cost, being careful not to suboptimize, and applied in a way which will improve reliability these terms will be more than mere buzz words. While there are many ongoing improvements in technology which will help USTRANSCOM improve efficiency and reliability, it is the point of this GRP to avoid the discussion of technology and focus on the organizational structure that will employ any technological changes. The DTS is currently undergoing a reengineering effort to improve transportation services while investigating the use of new technologies to improve ITV and TAV. While these technological changes should

facilitate the reengineering process, the reengineering process should drive a new organizational structure that facilitates the remaining and resulting processes and this GRP is a look at what the eventual organizational structure might look like.

USTRANSCOM's reengineering effort is a three part operation designed to improve the DoD's transportation process. Following the completion of this reengineering initiative a team will asses the structure necessary to support the reengineered processes. A 1996 Government Accounting Office (GAO) report criticizes the DoD and USTRANSCOM for not reorganizing the organizational structure as an integral part of reengineering effort (GAO, 1996: 39).

Statement Of The Problem

Because USTRANSCOM has already started the process of reengineering itself, the eventual reengineering of USTRANSCOM is a forgone conclusion. The fact that the organizational structure will not be adjusted until the formal reengineering process is complete is also a given. Once the reengineering is complete, however, what should the organizational structure of USTRANSCOM look like? There are some fundamental questions concerning the eventual organizational structure that seem prudent at the outset and which might help free those responsible for the reengineering process to "think outside the box" in order to perform an actual organizational reengineering as opposed to a simple organizational restructuring.

First, should the organizational structure of USTRANSCOM remain as it is today, the manager of the different component commands or should the headquarters of the different component commands be consolidated; making them an integral part of USTRANSCOM?

Second, in order to compliment USTRANSCOM's management of the entire DTS, should USTRANSCOM bring into its professional purview the transportation agents at the specific unit levels and the airlift assets at the theater level or should the organizational relationships between these entities remain the same?

II. Literature Review

Change Begets Change, an Age Old Problem

> We trained hard, but it seemed that every time we were beginning to form into teams, we would be reorganized, I was to learn later in life that we tend to meet any new situation by reorganizing; and what a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency, and demoralization. Petronius Arbiter, 110 B.C.

The end of the Cold War has produced a changing world situation that has created political and economic pressures forcing the U.S. military to downsize and reduce its overseas presence. This down sizing has significantly increased the importance of logistics and the United States' ability to deploy forces ready to fight anywhere in the world in a short period of time. It does no good for the United States to have the most sophisticated weapons and most thoroughly trained soldiers if weapons and soldiers cannot be brought to bear upon the enemy during a time of crisis.

America's military presence overseas must be sustained by USTRANSCOM. Now there is a much smaller American presence overseas with a continuing need for heavy division force package capabilities overseas. For the United States to do anything consequential overseas these capabilities must now be deployed in a crisis to deter or defeat our overseas adversaries. Further, the United States' drawdown of forces, especially overseas, makes the fewer in-place forces even more vulnerable in a combat environment, their protection becomes more difficult. From a force protection aspect it is usually easier to protect a small contingent from isolated acts of terrorism, but if a major

war breaks out our overseas troops do not have the troop strength or weapons and assets available to protect themselves the way they did during the cold war; they must rely on the DTS to supply them the necessary equipment and personnel.

A Short History of USTRANSCOM

> Those who cannot remember the past are condemned to repeat it.
> -- George Santayana

In order to better understand what USTRANSCOM is designed to do and to prevent repeating the mistakes of the past, this GRP investigates the history of USTRANSCOM's creation. Formal recommendations to combine transportation organizations are numerous and span a notable period of time. The recognized beginning of organization and management of the DTS dates as far back as 1949 with the report made by the Hoover Commission, recommending organization of transportation systems for efficiency and effectiveness, but the official formation of USTRANSCOM did not begin until about forty years later (McBride, 1989: 5). The Packard Commission Report of 1986 and the 1978 Joint Chiefs-of-Staff (JCS) command post exercise "Nifty Nugget" are considered the culminating pieces of evidence gathered to justify a separate unified command responsible for fulfilling the mobility demands of the DoD (McBride, 1989: 5). In all, between World War II and the eventual establishment of USTRANSCOM, there were over 25 reports by the House/Senate, task forces, and independent studies suggesting a centralized transportation organization including actual attempts made by the

DoD to centralize the transportation functions. During this time period, in fact, there was only one period of opposition towards centralization when from March 1982 to September 1982 hearings and reports suggested the trend toward centralization should be prohibited (Matthews and Holt, 1995: 235-241). For a detailed chronology of consolidation efforts see Appendix.

Nifty Nugget is recognized by most everyone knowledgeable about the DTS as the genesis of a unified transportation command (McBride, 1989: 5). Nifty Nugget was a command post exercise in the fall of 1978 simulating a fast breaking conventional attack by the Warsaw Pact forces on North Atlantic Treaty Organization (NATO) forces in Europe to evaluate the United States' ability to mobilize and deploy the necessary forces and equipment to the European theater (Matthews and Holt, 1995: 1). Nifty Nugget was designed to evaluate cooperation between the DoD and other federal agencies during mobilization and deployment of U.S. forces (Matthews and Holt, 1995: 1).

Nifty Nugget was a miserable failure. The simulation resulted in most of the 400,000 soldiers within the European theater killed in just the first few weeks. These simulated deaths were attributable as a direct result of the DoD logistical system's acute inability to prioritize the supported commands' requirements (Matthews and Holt, 1995: 1). This inability to prioritize led to the strategic airlift capacity being over-tasked by 300 percent. Airlift planners received 27 different validation requests for deploying the same unit to 27 different locations. Nifty Nugget highlighted the fact that the DoD logistics planning and execution systems lacked the necessary flexibility required to manage

changes to deployment requirements, especially the kind of real time and short-notice changes that occur during combat operations (McBride, 1989: 5).

In response to the exercise's recently identified lack of centralized command and coordination within the DoD transportation community, the JCS established a direct reporting chain from the Transportation Operating Agencies to the Joint Chiefs of Staff and created the Joint Deployment Agency (JDA) assigning it the job of integrating plans and procedures for executing major deployments (Matthews and Holt, 1995: 1). The JDA attempted to remedy this demonstrated lack of centralization by developing an automated data processing system, naming it the Joint Deployment System (JDS). As had been the case throughout the DoD's history with logistics and mobility prioritization, this system failed to establish a common data base, definition of information requirements, or a universal computer interface for the members of the joint deployment community. A GAO study addressing the failure of the JDA reported a mixture of 14 different computer systems among the joint deployment community. Of these 14 systems only six of them had any ability to interface with each other (McBride, 1989: 5). The report attributes the cause of the JDA's problems with their lack of authority to direct the Specified Commanders in Chief to implement corrective actions or adhere to milestones (Matthews and Holt, 1995: 2).

Continued assessment of the effectiveness of the joint deployment community by Congress and a presidential commission identified six critical needs which eventually led the President's Blue Ribbon Commission on Defense Management, the Packard Commission, to recommend that the Secretary of Defense establish a single unified

command to integrate global air, land , and sea transportation (Matthews and Holt, 1995: 2). The following six critical needs, identified by Congress and the President's commission are listed in Table 1:

Table 1. Six Critical Needs.
(McBride, 1989: 6)

1	Coordination and integration of strategic lift planning and execution.
2	Unity of command for transportation forces.
3	Delegation of authority for corrective actions.
4	Integrated direction of automated data processing (ADP) systems.
5	Optimization of transportation assets.
6	Consolidation of wartime transportation requirements transportation policy, and traffic management.

The Packard Commission recommendations to President Ronald Reagan led to the President's signing of the National Security Decision Directive (NSDD) No. 219 which authorized the unification of command that was necessary for the establishment of USTRANSCOM (Matthews and Holt, 1995: 2).

Many saw this creation of a four star, unified command (planned to be the single point of contact for the Defense Transportation System) as the long sought after remedy for the DoD's fragmented system. This vision of a universal remedy for the disjointed efforts of the transportation system seems, however, to be a myopic one blind to the realities of matrix organizational structure and the resulting stovepipes. It is evident that the idea was not completely thought out. USTRANSCOM's implementation plan did very little in the way of centralizing authority and control. The implementation plan

allowed the Air Force, Army, and the Navy to retain their single manager charters for their respective modes of transportation and named USTRANSCOM as simply a wartime-related command (Matthews and Holt, 1995: 3).

Interestingly, USTRANSCOM was not originally intended to be restricted to command only during wartime. The Congress' and President's intent was to form a wartime and peacetime, fully-operational unified transportation command. Their intent, however was thwarted by the then Rear Admiral Paul D. Butcher, on the Chief of Naval Operations staff and later the Deputy Commander in Chief of the newly formed USTRANSCOM (Matthews and Holt, 1995: 3). In an interview with the Command Historian, following the Gulf War, Admiral Butcher admitted to adding the wartime phrasing to the original Implementation Plan during the final coordination at the Joint Chiefs of Staff level, but believed he was acting in the best interests of the Navy as laid out for him by the Chief of Naval Operations and the Secretary of the Navy. He also admitted that with hindsight, it was "one of the dumbest things" he had ever done in his entire career (Matthews and Holt, 1995: 4). He had taken a great idea for the DoD, to centralize control of all transportation assets during peace time and wartime, and suboptimized it by doing what he thought was best for the United States Navy. In execution of this action he not only suboptimized the efforts to improve the DTS, but also completely violated the age old adage that warns we must practice like we fight.

Having sealed the fate of the new command as something short of the proposed intentions as a unification of command; the guidelines for USTRANSCOM started out very restrictive. USTRANSCOM's role was to be contingency planning, systems

automation and enhancement, and support of exercises. The day to day operations of the armed forces continued to be individual service responsibilities. Negotiations with carriers, contract activities, movement of commodities, rates and routings, sealift scheduling, port operations, passenger movement by commercial carriers and many other important transportation activities were to remain as they had always been, independent of USTRANSCOM's centralizing influence (Lamb, 1992: 2-3). USTRANSCOM soon found itself at odds with the "golden rule," those with the gold, rule.

Indicators of Inefficiency and Unreliability

> Commodities were managed and distributed through the brute force approach employing mass quantities and Herculean transportation efforts. Focused management of critical commodities was nearly impossible and inventory control was a nightmare.
>
> -- Colonel Douglas W. Craft, on supplying Operation Desert Storm

Despite the overwhelming military success of Operation Desert Shield/Desert Storm, the DoD transportation system did not produce the kinds of results that USTRANSCOM was designed to foster. Colonel Douglas W. Craft's description of the supply effort for Operation Desert Shield/Desert Storm is frighteningly similar to accounts of the same supply and resupply processes during the Korean and Vietnam wars. In all three wars there were significant and alarmingly familiar problems with port congestion, shipment prioritization, routing, accountability, visibility and control of the large volumes of commodities (Clagett, 1993: 8).

> In Vietnam the inability to know where things were and when they had been shipped was called the "gray box," and has plagued the services for well over 20 years. The continuation of this situation for such a long period of time, including operations in the desert and in Somalia, are a continued source of expensive embarrassment that the DoD should be ashamed of. (Tuttle, 1993: 14)

General Colin Powell proclaimed Operation Desert Shield/Desert Storm to be USTRANSCOM's "graduation exercise," while President George Bush stated that USTRANSCOM had "graduated magna cum laude," (Matthews and Holt, 1995: 12). These adulations seem to be based on the overwhelming success of Operation Desert Storm and the historical comparisons which lend themselves to such grandiose statements when compared to previous logistical feats. For comparison: more passengers and equipment were moved in the first three weeks of Desert Shield than were moved in the first three months of the Korean War and three weeks later the total ton miles surpassed that of the Berlin Air lift (Matthews and Holt, 1995: 12). At first glance our deployment to the desert seems to have succeeded against the worst case scenario; the command moved the equivalent of Atlanta, Georgia (all of its people and their clothing, food, cars and belongings) half way around the world in less than seven months; and it is obvious the United States and its allies were the undisputed winners of this undeclared war (Matthews and Holt, 1995: 12).

Before we accept grandiose adulation for the success of USTRANSCOM during Operations Desert Shield and Desert Storm, let's take a look at some of the contributing factors which make this success look so overwhelming. First, the Suez Canal was open for completely unrestricted use; second, the sea lines of communication were absolutely

unchallenged; third, transports did not have to contend with combat attrition; fourth, in-theater air and seaports of debarkation were among the most modern and capable in the world; fifth, Saudi Arabia proved to be a most generous host nation; and finally, Saddam Hussein even decided to be cooperative by allowing 161 unhampered days of deployment activities before the U.S. military offensive began (Matthews and Holt, 1995: 18-19).

Still with all these factors working with the U.S. efforts, instead of working against them, there are significant indicators that the deployment to the Gulf was inefficient and the commanders within the theater saw their supply system as unreliable. The Saudi Arabian ports were not only congested by the huge amounts of material that were needed but also congested with material that was needlessly reordered. Units reordered materials time and again because they were unable to locate their supplies, even though those same supplies were many times well within physical reach (Tuttle, 1993: 14). That is not to say materials were always delivered to the correct location. On the contrary, because strategic logisticians saw a need to move as much as possible, as efficiently as possible, most everything was moved further forward than was necessary and the in-theater logistician saw ninety percent of the containers hauled 2,000 miles into the desert hauled back to where they belonged, to the troops near the ports of debarkation (Layer, 1994: 26-27). Most of the containers that arrived in the desert theater required opening to determine not only their contents, but also, their intended recipients (Clagett, 1993: 9).

Too much material deployed to our troops in the theater is a problem not nearly as obvious as the problems associated with too little deployed to our troops. According to

Brian Layer there are three principal flaws with deploying too much material. First, with limited transport assets, excess material competes for the already limited transportation assets and lengthens the time for force deployment. Second, excess materials require more material handling equipment (MHE) and material handling units; and finally, excess materials require more infrastructure and the resulting in-place force protection which places a strain on combat forces required to provide that protection (Layer, 1994: 27).

Here was a situation where America was fighting one major regional conflict (MRC) while simultaneously purporting a policy of two major regional conflicts. According to Joseph Nye, in his book After the Storm: Lessons from the Gulf War, we would be "sorely pressed" to fight even another half MRC (Nye, 1992: 286). A 1991 GAO report entitled, Desert Shield/Storm Logistics, seems to support Nye's claim that the U.S. logistics system was not supporting the single MRC in a way that would facilitate fighting another one and one-half MRCs. The GAO report claims that readiness rates were about ninety percent and that these rates were achieved only because of the ingenuity and flexibility of supply and maintenance personnel (GAO, 1991: 4). There was a lot of cannibalization of non-mission capable equipment, reuse and reliance on the local economy.

> One of the reasons why the United States could fly so many sorties and keep so many tanks up and running during the Gulf War was because maintenance and supply units from everywhere else were stripped of their personnel and supplies. (Nye, 1992: 286)

The availability of unused equipment and a friendly economy capable of meeting our supply needs is not something a national policy of two MRCs should necessary rely

upon. While the innovative and effective efforts of supply and maintenance service members for obtaining spares is laudable it also indicates the logistical support system's inefficiencies.

What kind of reliability should one expect from the DoD distribution system, what is acceptable? As can be interpreted from the following table, the current standard for shipment within the United States is five days for the highest-priority cargo and 65 days for the lowest priority to the Western Pacific. These standards seem rather low when compared to commercial industry's promises of overnight delivery. However, a 1993 RAND analysis reveals that only a mere 17 percent of the highest-priority shipments have ever met the given DoD standard and the average high-priority shipment to Operation Desert Storm took more than three times the standard (Halliday and Moore, 1993: 3-4). Using these standards and USTRANSCOM's ability to meet them, it seems the customers using the DTS can not consider USTRANSCOM very reliable.

Table 2. Current DoD Transportation System Delivery Time Standards.
(Halliday and Moore, 1994: 4)

	Priority Designator		
Destination	Highest	Middle	Lowest
	01-03	04-08	09-15
United States	5	9	22
Mediterranean	9	13	55
Western Pacific	10	14	65

As indicated earlier, problems during the Gulf War are not isolated problems. Indicators of inefficiencies and unreliability are prevalent throughout our military's

history, not only during its conflicts with other countries, but also during peacetime. The cost of transportation services are currently two to three times higher for DoD shipments than they are for commercial carriers (GAO, 1996: 3). A 1996 GAO report cites several examples of USTRANSCOM's higher than commercial transportation costs. The report gives fifteen examples with USTRANSCOM's costs ranging from 24 percent greater than commercial to 201 percent greater than commercial. The following is the worst case example given by the 1996 GAO report for a shipment from Oakland, California to Pusan, Korea. The low-rate carrier charges a total of $1,267.32; USTRANSCOM charges $3,815.07. The breakdown of USTRANSCOM charges amounts to $2,486.85 for Military Sealift Command (MSC), $573.87 for Military Management Command (MTMC) at origin, and $754.35 for MTMC at destination (GAO, 1996: 43). While it is true that the need to maintain a mobilization capability drives much of these excess charges and it is also true that commercial carriers do not need to plan for such contingencies, USTRANSCOM's fragmented and inefficient organizational structure and management processes are significant contributors to the excess billing (GAO, 1996: 4).

The DTS customer receives an individual bill from each component command for each mode of transportation and this separate billing system is an indicator of inefficiency in and of itself (GAO, 1996: 3). Separate billing systems add people and cost, are confusing to the customer and duplicate effort which in turn provides more opportunities to drop information or mistakenly change information.

It is obvious, with the current emphasis in the legislature to reduce the National Debt and decrease deficit spending, that the DoD must substantially change how it does

business; the DoD must do its business more efficiently and more effectively. The DoD is in serious competition with domestic programs for scarce budgetary dollars. In 1993 the commander of USTRANSCOM, General Ronald Fogleman, acknowledged this need, identifying the switch in importance from addressing the Soviet Union's serious threat to meeting National priorities. In further recognition of this fact he went on to say that because this change will limit the resources available for national defense it is extremely important for USTRANSCOM to improve its effectiveness and efficiency (Fogleman, 1993: 16).

III. The Causes of Inefficiency and Unreliability

There are three major categories of causes for inefficiency and ineffectiveness shown in Table 3.

Table 3. Summary of the Causes of Inefficiency and Unreliability.

1	A stovepiped structure that leads to fragmentation.
2	Duplication of effort.
3	Lack of central control for all mobility assets.

These categories are not listed anywhere other than this research project and they do not lend themselves to easy compartmentalization. The fact that the DTS is fragmented or stovepiped leads to duplication of effort and a lack of centralized control. Because duplication of effort exists among different commands and services, the structure remains stovepiped and lacks centralized control. With no centralized control for all mobility assets it is difficult to eliminate the seams of fragmentation or duplication. Because these causes are so interrelated, there will be some overlap of discussion within each category of cause.

A Stovepiped Structure Leads to Fragmentation

After over fifty years in development and constant attempts at improvement, the DTS still uses an outdated and inefficient modaly oriented organizational structure where offices and duties are organized around the major modes of transportation; planes, trains,

and boats. While commercial industry is coming on board with the idea of intermodal delivery, much of today's DoD cargo moves through USTRANSCOM's fragmented processes resulting from the stovepiped organizational structure inherent in separate processes managed by separate services and commands (GAO, 1996: 3). Commercial logistic operations managers have learned to leverage modern transportation and computer technologies in order to reduce expenses and the DoD can learn from this example (Layer, 1994: 14).

A review of each component's responsibilities shows the modal concentration of each command. MTMC is considered the DoD traffic management manager. MTMC manages land transportation, ocean terminals, intermodal containers, and freight movements, as well as, personal property and passengers. MSC is the manager for sealift; managing the Afloat Prepositioning Force and operating ships, contracting commercial shipping when necessary. AMC manages airlift; the airlift it operates, as well as, contracting commercial augmentation airlift when necessary (GAO, 1996: 10).

The separate services naturally tend to treat transportation activities as three distinct movement activities. The first leg is from the place of origin to ports of embarkation (POEs). The second leg, or strategic move leg, is from the POEs in the CONUS to ports of debarkation (PODs) located in the theater of operations. The final, and third leg, is from the PODs to the foxhole. The propensity for each of the services to treat logistical movements with regard to these three levels propels each service toward the development of its own logistical stovepipe and leaves USTRANSCOM in a fragmented condition (Layer, 1994: 13-14).

Fragmentation is evident in USTRANSCOM's inability to provide the customer with one organization responsible for all aspects of the traffic management or with one organization that can meet the customer's needs regardless of the transportation mode necessary. Although USTRANSCOM was developed to consolidate the DTS functions into one organization, the fact that the management processes were developed independently of each other along the lines of modal responsibilities resulted in fragmentation. This fragmentation is evident, especially in the areas of rate negotiations, shipment routing, documentation, and customer billing (GAO, 1996: 20).

Because USTRANSCOM uses five separate systems, reflecting each service's approach to procurement, for rate negotiations it can take as many as five separate USTRANSCOM units to negotiate the rates for a single shipment. Circumvention becomes the customer's method for avoiding delays in procuring needed services and while this may be advantageous to the customer, it is an example of suboptimization for the DoD in general (GAO, 1996: 20). Not using a single standard system for documentation, especially one that is a standard among the commercial sector, not only drives the customer's costs up, but also, drives up the prices from commercial business that do their business with the DoD (GAO, 1996: 21).

The following excerpt is taken directly from the 1996 GAO report on Defense Transportation, GAO/NSIAD-96-60, and illustrates the bottom line that a DTS customer cannot go to a single unit within USTRANSCOM to negotiate transportation services employing multiple modes of transportation.

> •For domestic continental United States (CONUS) freight shipments, and the CONUS portion of international shipments not moving

as part of a through-intermodal move, MTMC's Office of the Deputy Chief of Staff for Operations, which has a staff of about 20 traffic management specialists, negotiates for land transportation, inland waterway transportation, and less-than-plane load air transportation with U.S. motor carriers, railroads, freight forwarders, barge carriers, and air cargo companies.

•For international freight shipments, MSC's Central Technical Activity, Contracts and Business Directorate and its staff of 36, who are primarily contracting specialists, negotiate for ocean transportation with ocean carriers.

•For foreign transportation, MTMC's overseas commands, such as MTMC-Europe, Directorate of Inland Theater Transportation, negotiate for land, inland waterway, and air rates, as required, in their areas of responsibilities.

•For stevedore and terminal services, MTMC's Office of the Principal Assistant Responsible for Contracting, with a staff of seven contracting specialists, negotiates contracts with port interests. Other units negotiate for such services overseas.

•For personal property shipments, another part of MTMC's Office of the Deputy Chief of Staff for Operations, which has a staff of about 10 traffic management specialist, negotiates household goods and unaccompanied baggage freight rates for CONUS land and international water and air transportation with through-bill-of -lading commercial moving van companies and freight forwarders. MTMC's overseas commands also negotiate rates with overseas movers and forwarders for intratheater personal property movement. (GAO, 1996: 21)

The DoD's individual and separate component commands each contribute to the high cost and confusion passed on to the customers. Customers receive a bill from each component command for each mode of transportation that handles their cargo and this multiple billing results in inefficiency that costs the customer. Each bill requires personnel to do the accounting and many of the accounting personnel are duplicating efforts while obviously requiring salaries and infrastructure (GAO, 1996: 3).

Duplication of Effort

The following example of a non-containerized freight shipment from CONUS to overseas is offered as an illustration of how the above stovepiped system results in multiple billings. The customer is billed for shipping the cargo to the POE, is billed by MTMC for port handling, by MSC for ocean service, the customer is billed a second time by MTMC to clear customs at the overseas end, and a line-haul transportation fee is billed for the transportation to the final point of destination; a total of five billings in all (GAO, 1996: 24).

These multiple billings are similar in their suboptimizing effects to transfer prices within a large manufacturing organization. Production adds a transfer price before passing the product onto distribution and distribution adds a transfer price before passing it on to marketing. The final result is, very possibly, suboptimization as each department attempts to lower their own costs without regard to the final total cost (Tyworth, Cavinato, and Langley: 1991: 370-372).

Because USTRANSCOM is comprised of all the services and each builds its own stovepipe of logistic management, it is fragmented. Because of this fragmentation the system is replete with duplication and is resultantly suboptimized; the results are confusion, inefficiency, and unreliability.

The organizational structure of USTRANSCOM contributes to the customer's ultimately higher costs. Three component commands result in several instances of duplicity of effort among the different staffs. Because MTMC and MSC have very similar organizational structures it is easier to compare their numbers. Table 4 is a

comparison of MTMC and MSC offices and is taken from the 1996 GAO report (GAO, 1996: 25-26).

Table 4. Comparison of MTMC and MSC Offices.

MTMC	MSC
1 headquarters office	1 headquarters office
1 field operating activity office	1 central technical activity office
3 subordinate command HQ offices	4 subordinate command HQ offices
2 subordinate command, subcommand HQ offices	3 subordinate command subarea offices
4 major port command offices	8 MSC port offices
14 medium port command offices	1 subordinate command representative office
6 port detachments	3 MSC detachment offices
1 river terminal	4 MSC Fast Sealift Squadron offices
1 outport	
4 ocean cargo clearance authority offices	
5 ocean cargo clearance authority offices	
1 overseas inland theater transportation directorate	
2 privately owned vehicle processing centers	
2 regional storage management offices	
2 army garrisons	

Of the 25 MSC offices located around the world, 24 of them are collocated with or very near MTMC offices which perform the same basic duties. Within the headquarters and subordinate commands, the field operating agencies and the field offices duplicate such responsibilities as: public affairs, internal review, legal affairs, resource management/comptroller, information management/computer services, plans, and equal employment opportunity matters (GAO, 1996: 26). While it makes sense to have offices which perform similar duties to be located near one another it seems even more

reasonable and responsible to combine tasks and eliminate duplication whenever and wherever possible.

There are experts that argue theater airlift leads to duplication of effort and creates seams that add to inefficiency and unreliability. "Ultimately there is one airlift mission--the delivery of what is needed, where it is needed, when it is needed. All organizational, doctrinal, and resource issues must be answered in relation to that mission" (Miller, 1988: 429). The following excerpt from the 1995 AMC/PACAF Command to Command Agreement is an example of how the concept of theater airlift suboptimizes the DTS and states that AMC will:

> Provide HQ PACAF and PACAF subordinate units access to AMC command and control systems until HQ PACAF can fund and install a permanent theater command and control system which will be interoperable with AMC command and control systems. HQ AMC will assist HQ PACAF in developing and installing a theater command and control system. (AMC/PACAF Command and Control Agreement, 1995: B-8)

This agreement is an example of the duplication that a theater command and control system adds to the already fully functioning AMC command and control system operating within the Pacific Theater. By requiring AMC to supply PACAF with access to AMC's already fully functioning command and control, the agreement indicates that the command and control ability already exists and PACAF's installation of an interoperable system is a duplication of existing capabilities. The part of the statement requiring AMC to provide assistance for developing and installing the theater command and control system is an indication that PACAF lacks experience controlling mobility assets and this lack of experience is unnecessary, as AMC always has, and continues to, provide command and control within all theaters for its strategic airlift assets.

Fragmentation within USTRANSCOM's existing organization is not the sole explanation for inefficiency and lack of reliability within the DTS. The fact that USTRANSCOM does not own the entire logistical structure from the depot to the foxhole contributes significantly to the failure of the DTS to provide reliable delivery to the combatant commanders. Without control of the entire logistical system USTRANSCOM can not ensure timely, reliable delivery.

Lack of Centralized Control for All Mobility Assets

Because of the matrix of accountability that each component within USTRANSCOM is faced with, it is difficult sometimes to convince each component to comply with USTRANSCOM's overall plan, in a timely manner. Each component is accountable to its parent service and receives its funding from that parent service.

It is the opinion of some that theater airlift command and control separate from the command and control of strategic airlift assets causes an unneeded seam and that this seam is the price of creating unity of command within the specific theaters (Devereaux, 1994: 37). This unity of command assumes the theater commanders have the expertise, time, and manpower to effectively use their theater airlift assets. This assumption may not be accurate as the Joint Force Air Component Commander (JFACC), responsible for the theater air campaign, may lack the assets required to plan and control the airlift effort designed to support surface forces. (Devereaux, 1994: 56).

USTRANSCOM's lack of delivery reliability is a function of its lack of control of the system for which it is the manager. This lack of control is evident not only in the end user's theater, but also throughout the entire system, from the depot to the foxhole. Starting with the beginning, USTRANSCOM is not part of the system when a package enters its own supply system, at the depot. It becomes responsible for a package that it has neither documented nor entered into that system. The depot's documentation personnel enter information into the system about a package for which USTRANSCOM initially takes responsibility (Tuttle, 1993: 15). At this point USTRANSCOM has responsibility but has no way of attributing accountability to the entry activities. If the documentation is incorrect and the package is subsequently lost, who is responsible, the depot, the Army (MTMC) or USTRANSCOM? According to Captain Decastillo, the 1301st Major Port Command Executive Officer, fifty percent of the Actual Unit Equipment Lists (AUELs) that arrive at Bayonne Military seaport have to be reconciled before continued shipment (Decastillo, 1997: interview). This is a classic example of suboptimization; as the transportation agents at the originating end cut corners saving money and time on their end, but add cost and time to the whole process.

Once the package is loaded by depot personnel, the package goes on to a POE where it is handed over to someone within the USTRANSCOM system. Even though the package is now within the USTRANSCOM system and is at least manifested by someone within the system, the identity of the individual handling the package is not precisely known (Tuttle, 1993: 15). Even if USTRANSCOM wants to implement a change to the technology tracking the package through the POE, so that some individual is always

accountable for the package, USTRANSCOM can not unilaterally implement the change, because USTRANSCOM does not supply the funds for the organization responsible for the POE. By law, Title 10, the POE receives its organization, training and management from its parent service, subsequently the parent service provides the funds and as such decides when, where, and on what things the money will be spent (GAO, 1996: 38-39). As the single manager for the DTS, USTRANSCOM has the fund approval authority for transportation systems (Matthews, 1997: interview). However, if the component command does not elect to fund a transportation system USTRANSCOM has nothing to exercise approval authority over.

The fact that the parent organization allocates funds makes USTRANSCOM's task of integrating all information systems more difficult. Instead of USTRANSCOM directing which information systems will be used, USTRANSCOM is relegated to coercing and incentivizing change; a time consuming and inefficient process. Given the rate at which change occurs within the data processing arena USTRANSCOM is going to find it difficult to ensure component commands keep up with the changing data technology.

Independent of USTRANSCOM's inability to implement change within the separate component commands which it manages, is USTRANSCOM's loss of control for the package once again near the end of the process. USTRANSCOM loses control of the package once it reaches the POD on the other end. At this point the package is handed off to some Non-TRANSCOM agency with no accountability for asset visibility and little if any incentive for asset visibility (Tuttle, 1993: 15). In reality,

USTRANSCOM owns and controls only a portion of the logistical process from the depot to the foxhole and yet USTRANSCOM receives the blame for the inefficiency and unreliability of the DTS.

IV. Discussion of Alternatives

The organizational structure of USTRANSCOM can take on any of a whole gamut of options to provide the guidance and support necessary to compliment the changes made by the now ongoing effort to reengineer its processes. These options range from as simple an option as making no changes at all, to the complex option dissolving AMC, MSC, MTMC, theater airlift, and DLA; reorganizing USTRANSCOM into the logistics branch of the DoD, equal in status to the current branches of the military.

This chapter investigates an option of consolidation. Consolidating the Installation Transportation Officer/Transportation Management Officer (ITO/TMO) function; all headquarters functions of AMC, MSC, MTMC; and the theater airlift commander's functions into USTRANSCOM. This GRP does not investigate the individual activities and processes that should be consolidated, but instead investigates the concept of consolidating the organizational structures of these headquarters and the ITO/TMO function. This investigation also does not examine the cost of consolidation as that examination is outside the scope of this GRP and is worthy of its own independent investigation and research project.

USTRANSCOM has been tasked to be the single manager of the DTS. Traffic management as defined by Reengineering the Defense Transportation System, The "Ought to Be", is the policies and procedures for receiving customer requirements, selecting modes, procuring or tasking assets, monitoring, controlling and coordinating movements, and billing and payment processes (CINCTRANS', 1994: 3).

Inherent in the principles of reengineering, as described in a book written by Hammer and Champy, Reengineering the Corporation, is the fundamental elimination of functions and layers of bureaucracy that do not add value. Reengineering integrates, compresses and eliminates tasks in order to reduce the number of hand-offs, errors, and misunderstandings that are inherent in the specialized components of the original organization. This chapter investigates the claim that the current organizational structure of USTRANSCOM is replete with bureaucratic checks and controls which do not add value to the system. Do they in fact, add more time and effort than they are worth? With these ideas in mind this GRP explores how USTRANSCOM is shaping up and investigates eliminating excess bureaucratic layers.

On the Side of Consolidation

It can be argued that treating strategic lift, tactical lift, airlift, sealift, and ground based mobility operations as separate entities leads to duplication of effort, a lack of unity of control among mobility assets, and creates functional seams which produce inefficiencies and complications that lead to unreliability. Ultimately there is only one mobility mission and that is to deliver what is needed to who needs it in a timely, efficient manner, and in a reliable manner.

Centralized Control for All Mobility Assets. The struggles by theater commanders and separate branches of the United States' military to maintain unity of

control with respect to forces that have traditionally been assigned to them trades seamless transportation for unity of command. While unity of command is important, the location where the unity of command exists is also important. Unity of command in Vietnam existed for the theater Commander-in-Chief (CINC), but was it effective unity of command; did it add value to the situation? It is argued that it did not add value. Each day the airlift control officers wasted their time and the time of the tactical center by passing their schedules to the tactical center for its rubber stamp of approval and eventual dispatch (Bowersox, 1983: 245). Did this rubber stamp of approval add value to the process or did it just provide another layer of bureaucracy that hampered efficiency and contributed to task saturation within the tactical center? Is the establishment of two airlift structures, strategic and tactical, a value adding situation? Is the continuation of three major mobility arms, AMC, MSC, and MTMC value adding or could the duties of these three be combined at USTRANSCOM to provide unity of control within mobility, and thus providing a synergistic effect between all mobility assets.

The idea to consolidate the DoD transportation function is not a new idea. The idea, however has met with resistance on the subject of transferring control of transportation assets. Rear Admiral Butcher's midnight hour sabotage of USTRANSCOM's original Implementation Plan is a classic example of parochialism as it exists within the different services' mobility commands and demonstrates how the well intended efforts to maintain control of service specific assets has undermined, fragmented, and stovepiped the efforts of USTRANSCOM and subsequently the DoD.

Why should the service specific execution elements remain within the headquarters of the specific branches of the service? For example, why should the TACC remain within AMC headquarters? Are the requirements of command and control so different between modes of transportation that each mode requires a separate headquarters and command and control (C^2) system? In a discussion with Mr. Singer, a contractor implementing the Joint Mobility Control Group (JMCG) for USTRANSCOM, there seems to be no significant difference between command and control elements between services, and the original idea for the JMCG was to bring all command and control functions into USTRANSCOM, under the Mobility Control Center (MCC) but this idea was rejected for other reasons to be discussed later (Singer, 1997: interview).

Intermodality: an Impetus for Unity of Control. The transportation community is moving toward intermodality and the weapon systems of mobility are blurring the distinction between strategic and tactical moves. The C-17 is fully capable as an intertheater lifter as well as an intratheater lifter. Lighter Aboard Ships (LASH) move barges to PODs that might be able to actually send them up river, closer to their eventual destination. Roll on/Roll off (RO/RO) ships offer the opportunity to deliver equipment, fully loaded on ground vehicles ready for movement to the ground vehicle's final destination. As USTRANSCOM works to eliminate seams in the transportation system, it is very likely that direct delivery assets will find themselves competing with strategic and tactical mobility assets at the final destination because of stovepiped command and control systems. At best each asset's command and control system will be in contact with

the command and control systems of the others. At worst confusion will undermine the efforts to eliminate seams within the transportation system.

Eliminating Duplicity of Effort. A plan to consolidate the component command's headquarters functions would serve the transportation system by removing a layer of subordinate headquarters between USCINCTRANS and the transportation systems and assets. Chapters one through three of this research project show evidence of duplication and incompatibility that lead to an inefficient, unreliable system. As long as the separate component commands continue to manage their parts of the transportation system separately, through their service component headquarters and C^2, the transportation system will continue to foster seams between modes, legs of the transportation system, and the different branches of the service.

If the headquarters are not consolidated USTRANSCOM will have to incentivize the component commands to work as one team, void of parochialisms which foster duplication and suboptimization. The following information regarding transportation information systems and the migration to a minimum number of systems illustrates this effort. One of the six original precepts for establishing USTRANSCOM was the integrated direction of automated data processing systems (Matthews and Holt, 1995: 2). A GAO study, addressing the failure of the JDA, reported a mixture of 14 different computer systems among the joint deployment community. Of these 14 systems only six of them had any ability to interface with each other (McBride, 1989: 5). As of 10 May 1994, eight years after the establishment of USTRANSCOM, there were 149 information

systems among the different components of the DTS. The number is now down to 34, as of 22 November 1996 and the final target, as of the former date, is 23. This eventual migration down to 23 systems took the direction of Secretary Perry (Transportation CIM Center Brief, 1996: slide 12). While it looks like the migration is currently going well, it seems excessive that it took the supervision of the Secretary of Defense, especially considering the integrated direction of automated data processing systems is one of USTRANSCOM's primary reasons for existence.

Combining the organizational structures of AMC, MSC, MTMC and theater mobility assets and placing the DTAs directly in the USTRANSCOM chain of command will place all major mobility assets, from the factory to the foxhole, under one command organization and result in USTRANSCOM's ability to better control and hold accountable its assets and asset managers.

Recommendation. The method for fixing suboptimization and transfer prices within a manufacturing organization is to combine duties within the organization, eliminate stovepipes and resultant suboptimization. USTRANSCOM should mitigate fragmentation, duplicity of effort, and lack of centralized control in the following manner:

Table 5. Summary of Consolidation Recommendations.

1	Make the ITO/TMO position at each unit a joint billet working for, rewarded by, punished by, and accountable to USTRANSCOM; more specifically the MCC.
2	Consolidate the headquarters functions of AMC, MSC, and MTMC; assigning the remaining duties to the MCC.
3	Bring all theater mobility assets under the direction and control of USTRANSCOM, more specifically the MCC.

On the Side of No Consolidation

Those that argue consolidation is not only unnecessary, but detrimental point to the mission of a unified command and argue that sufficient power lies within a unified command to allow the supported CINC unity of control. The job of USTRANSCOM is to manage component command assets providing support to the warfighting CINC through this management of assets.

One of the largest obstacles to consolidation resides within the interpretation of Title 10. If interpretation of Title 10 prevents consolidation of the headquarters it would take an act of Congress to allow consolidation, and politics would then enter the argument possibly making efficiency, effectiveness, and reliability back burner issues with respect to the day to day issues within the Congress, Cabinet, and Lobbyist also known as the "Iron Triangle".

Centralized Control at USTRANSCOM Would Lead to Less Control. The Joint Mobility Control Group (JMCG) is the current name for the C^2 architecture used by USTRANSCOM to translate the needs of the supported CINC into the actions of the

component commands. When the concept of operations for the JMCG were developed for USTRANSCOM the original idea was to consolidate all mobility C^2 into one location at USTRANSCOM and make it a direct reporting unit to USCINCTRANS (CINCTRANS', 1994: 9) and (Singer, 1997: interview). This idea follows the principles of reengineering as espoused by Hammer and Champy; creating customer service teams instead of treating the management of mobility in terms of modes, but this idea was later rejected because of the fear of losing command authority by ignoring the concept of authority inherent in the unified command model. According to Mr. Singer, a unified command requires some number of service components to execute missions. If the JMCG were to consolidate all C^2 functions into a single direct reporting unit USTRANSCOM would run the risk of being reorganized into an agency with no command authority.

> With out the status of unified command, I am afraid that CINCTRANS will not have the status to break down the stovepipe processes and procedures developed in the post World War II era where the Services exercised single manager responsibilities within their respective modes without inter modal considerations. In the old model, the Services exercised authority over their respective modes through Major Commands, (MTMC, MAC, MSC). That is the tough paradigm to break. This is where the single manager of the DTS (CINCTRANS) needs the status of a unified commander. To break entrenched processes developed over years of Service authority. (Singer, 1997: interview)

Sufficient Control Within the Unified Command Structure. The command and control structure of USTRANSCOM, the JMCG, is based upon the principle of centralized C^2 of the DTS and decentralized execution at the ITO/TMO and Mobility Control Center (MCC) levels. This concept of operations is designed to solve the

previous problems of the DTS customers having to deal with different offices and entities for different kinds of mobility move requests. The MCC receives the customers requests from the ITO/TMO, performs initial modal analysis, including feasibility, cost and authorities; maximizing customer satisfaction while avoiding suboptimization. When the MCC is satisfied that the requirement is optimized and executable, they will task the appropriate component command C^2 element for mission execution. The idea behind this reengineered process is added value without compromising the integrity of the component commands; giving USCINCTRANS the command structure to successfully act as the single manager of the DTS. Mr. Singer believes this process will electronically and procedurally tie USTRANSCOM and its component commands closely enough to act as a single entity while retaining the authority inherent in the component commands (Singer, 1997, interview).

USCINCTRANS has significant power over the component commanders. USCINCTRANS has both legal powers and powers inherent in the position of authority, as the CINC of USTRANSCOM. In 1977 President Ronald Reagan signed National Security Decision Directive No. 219, which established USTRANSCOM, and in 1992 SECDEF gave USTRANSCOM a peacetime mission and single manager charters for the three modes of transportation. The CINC is dual hatted as the CINC of one of the component commands (currently AMC) and approves the appointments of, as well as, contributes to the ratings for the other two component commanders (currently MSC and MTMC). USTRANSCOM controls revolving funds for transportation services and is the approval authority for transportation systems (Matthews, 1997: interview).

Finally Dr. Matthews' thoughts on the alternative of consolidating Headquarters AMC, MSC, and MTMC are:

> Giving USCINCTRANS "training and equipping" authorities would require a change in the law, one that would radically alter the DoD because that is a service responsibility. Besides, the CINCs--our nation's great warlords--should not be encumbered with such earthly, day to day, responsibilities. (Matthews, 1997: interview)

Elimination of Duplicity of Effort and Fragmentation. These problems can be addressed and handled by the ongoing efforts of process reengineering. The MCC and JMCG are classic examples of how fragmentation is being eliminated within the existing organizational structure at USTRANSCOM. Fragmentation and duplication within and between information systems is being eliminated by the Joint Transportation Corporate Information System Center as it trims the number of transportation migration systems down from 149 to 23 and all of this consolidation is being done within the existing organizational structure of USTRANSCOM.

Title 10. Title 10 is a linchpin for the discussion against consolidation. The 1996 version appears to allow the Secretary of Defense to make such a consolidation, but the 1997 update appears to remove such allowances (Title 10, 1997, Part 125). Even if Title 10 does prohibit such a consolidation, it is a law and as such can be changed. However, just because the DoD thinks something is important to the defense of the nation does not guarantee Congress will agree. National defense implications will not be Congress' sole

consideration. Congress will look at jobs lost and created, desires of their constituents, and arguments presented by both military and non-military lobbyists.

Summary

The following table summarizes the arguments for and against consolidation. While neither list is very large, the issues themselves are complicated and the discussion above must be taken into account when balancing this table.

Table 6. Summary of Arguments For and Against Consolidation.

Support for Consolidation	Support Against Consolidation
Puts centralized command and control at USTRANSCOM.	Removes some of the theater commander's command and control.
Eliminates duplication.	Sufficient control exists with incentives.
A large step towards intermodality.	Title 10.
Eliminates several large seams.	

V. Recommendations

The largest possible barrier to implementing the consolidation of AMC's, MSC's, and MTMC's headquarters is the legal interpretation of Title 10. It appears that the latest revision of Title 10 does indeed prohibit the Secretary of Defense from consolidating AMC, MSC, and MTMC into one headquarters located at USTRANSCOM (Title 10, Part 125, supp: 1997: 87). However, a legal study of the consolidation issue is outside the scope of this GRP and because consolidation is the recommendation of this GRP, a separate study of the legality is warranted if the powers capable of making these decisions agrees with the recommendations of this GRP.

If Title 10 Prohibits Consolidation

If the legal interpretation of Title 10 prohibits the Secretary of Defense from transferring the functions, powers, and duties of AMC HQ, MSC HQ, and MTMC HQ to USTRANSCOM then full consolidation is obviously prevented by law and the results of this GRP do not legally support such a consolidation. This GRP did not address partial consolidation of organizational structure as it is so broad as to be outside the scope of a single GRP. I would caution however that consolidation of only certain organizational structures runs the risk of taking those functions outside the realm of the owning CINC and as a result runs the risk of trading one transportation seam for another.

Recommendation. Implement the first and third recommendations within the alternatives section, "On the Side of Consolidation."

Table 7. Summary of Recommendations if Title 10 Prohibits Consolidation.

1	Make the ITO/TMO position at each unit a joint billet working for, rewarded by, punished by, and accountable to USTRANSCOM; more specifically the MCC.
2	Bring all theater mobility assets under the direction and control of USTRANSCOM, more specifically the MCC.

If Title 10 Does Not Prohibit Consolidation

If the legal interpretation of Title 10 does not prohibit the Secretary of Defense from transferring the functions, powers, and duties of AMC HQ, MSC HQ, and MTMC HQ to USTRANSCOM then this GRP supports full consolidation. The following is a general discussion of what the consolidation should resemble.

Starting from the beginning of the process, place the ITO/TMO under the organizational control of the MCC. The ITO/TMO will work to provide quality transportation for the customer at all the installations to which he or she is assigned, but will be a true part of the DTS, responsible to the DTS. Both the ITO/TMO and the MCC are great ideas aimed at improving service to the customer and do so by eliminating confusion for the customer, but unless the ITO/TMO works for USTRANSCOM the ITO/TMO will never truly be responsible and accountable to the DTS. It seems the reluctance to place the ITO/TMO officer under the control of the MCC is based on a

resistance to make the ITO/TMO position a joint position. In this era of decreased military size and increased jointness it seems odd that there would be any resistance to making a position joint if the position better serves the DoD and the transportation customer as a joint position. As long as the processes that the ITO/TMO uses are hindered by where in the organizational structure the ITO/TMO falls, the efforts to reengineer those processes will also be impeded.

For the rest of the mobility transportation process, consolidate the headquarters functions of AMC, MSC, MTMC, and the theater commanders into Headquarters USTRANSCOM. This will eliminate duplication and provide unity of control for all mobility assets. Further, because the MCC is a big part of USTRANSCOM's reengineering effort and is a major attempt at consolidating processes, it is a key to the eventual organizational structure. Instead of trying to make the JMCG a virtual command and control center for all of the DTS, the JMCG should become an actual command and control process for all mobility assets. Under this plan the MCC would be organizationally the planning and execution arm of the JMCG. The component command and control elements would be integrated into the JMCG and the MCC.

This recommendation goes against what some would consider the unified command model and the supported CINC's unity of control, but it breaks the unified command paradigm and allows the unified command to directly control the processes it is accountable for and allows it to be the expert it is supposed to be. In this manner the command controlling the plan and execution of the plan is accountable and the supported CINC does not tell the supporting command what to do; the supported CINC tells the

supporting command what needs to be done and the supporting CINC makes it happen the best way possible.

If you want Brand X delivery service to move your package overnight, you don't tell Brand X how to do it, enter the data about the package into their system, nor do you pick it up at the airport to deliver it to the final destination. Instead, you give the package to a representative of Brand X and tell that representative where and when you want the package delivered. There are no compelling reasons why the DTS should do these things so differently from the commercial transportation business world.

Table 8. Summary of Recommendations if Title 10 Does Not Prohibit Consolidation.

1	Make the ITO/TMO position at each unit a joint billet working for, rewarded by, punished by, and accountable to USTRANSCOM; more specifically the MCC.
2	Consolidate the headquarters functions of AMC, MSC, and MTMC; assigning the remaining duties to the MCC.
3	Bring all theater mobility assets under the direction and control of USTRANSCOM, more specifically the MCC.

Recommendations For Further Examination

Cost Analysis. If consolidation is indeed a strategy that finds support from those that can make it happen, then examination of the costs of consolidation should be accomplished prior to committing to the change. This GRP did not investigate the actual costs of moving personnel and equipment from current headquarters locations to a new consolidated location or the cost of creating hardware and software architectures to

support a consolidated headquarters. These costs must be weighed against savings produced by trimming duplicated staffs and equipment, and must also be compared to increased effectiveness and reliability of the DTS.

Partial Consolidation. If full consolidation is not supported by leadership that can implement it, then there are two other possible questions to be investigated. First, whether partial consolidation is feasible and if so, what organizational elements should be and could be consolidated without creating more seams between USTRANSCOM and the component commands. Obviously certain functions within AMC, MSC, and , MTMC headquarters and subordinate headquarters can and need to be consolidated in order to stop duplication and increase effectiveness. Offices such as: contracting offices, plans, operations, public affairs, internal review, legal affairs, resource management/comptroller, information management/computer services, equal employment opportunity matters, and logistics should be consolidated.

No Consolidation. If consolidation is not a prudent choice, what additional incentives might be useful in helping to mitigate existing seams between the component commands and USTRANSCOM. A possible incentive might be giving USTRANSCOM funds for transportation that are then divided among the major commands that need them, with USTRANSCOM making the decision which command gets how much and for what. Another type of incentive would be charging different rates to different users depending upon their compliance with USTRANSCOM initiatives.

Summary

This GRP examines the history behind forming USTRANSCOM. It takes a look at indicators of inefficiency and ineffectiveness. It highlightes the causes of these inefficiencies and ineffectiveness. And, examines the consolidation alternatives. Through these efforts, this GRP shows a logical connection between the undesirable effects of today's Defense Transportation System's lack of centralized control, duplication of effort, and the fragmentation and stovepiping of the DTS. The final recommendation is to consolidate mobility functions throughout the DoD and place the control of these functions in USTRANSCOM. This consolidation will help eliminate stovepipes and fragmentation by integrating and compressing job responsibilities. By eliminating fragmentation and centralizing control of all mobility assets under one unified command, USTRANSCOM will eliminate costly duplication of effort and become more effective. The present organizational system involves too many hand-offs, resulting in too many errors, misunderstandings, and duplication. Instead of many managers possessing narrow bands of expertise the new organizational structure of the DTS should shrink, making less managers responsible for more of the transportation process.

Appendix A. Glossary

USTRANSCOM	United States Transportation Command
AMC	Air Mobility Command
AUEL	Actual Unit Equipment List
C^2	Command and Control
CINC	Commander in Chief
DoD	Department of Defense
DTS	Defense Transportation Service
GAO	Government Accounting Office
ITO/TMO	Installation Transportation Officer/Traffic Management Officer
ITV	In-Transit Visibility
JCS	Joint Chiefs-of-Staff
JDA	Joint Deployment Agency
JDS	Joint Deployment Service
JMCG	Joint Mobility Control Group
MAC	Military Airlift Command
MCC	Mobility Control Center
MHE	Material Handling Equipment
MRC	Major Regional Conflict
MSC	Military Sealift Command
MTMC	Military Traffic Management Command
NATO	North Atlantic Treaty Organization
NSDD	National Security Defense Decision
PACAF	Pacific Air Forces
POD	Port of Debarkation
POE	Port of Embarkation
TAV	Total Asset Visibility

Appendix B. Consolidation of Transportation in the Department of Defense

World War II: Showed that transportation and other military functions were poorly organized, resulting in overlap and duplication in manpower and assets. Consequently, in 1944 Congress considered establishing a unified armed service. Testimony highlighted the benefits of centralizing military transportation resources and defense traffic management. Service opposition, however, killed the initiative.

National Security Act of 1947: Clarified Congress' intent not to merge the three services into a single organization and directed the Secretary of Defense (SECDEF) to eliminate unnecessary duplication and overlapping in several fields, including transportation. That position led to interdependence of transportation functions and eventually to today's single manager concept.

1949 Hoover Commission: Sharply critical of the lack of coordination in the government supply and transportation functions, it recommended that they be consolidated. It specifically recommended that military transportation be centralized under a National Military Establishment. The result was the creation of the General Services Administration (GSA) with power to establish policy and methods of procurement in the areas of transportation and traffic management. However, SECDEF could exempt the Department of Defense (DoD) from GSA authority in the interest of

national security and in 1954 he moved the Department out from under the Administration's control.

1955 Hoover Commission: Criticized the general lack of modern traffic management in the federal government and recommended that SECDEF create a Director of Transportation under the Assistant Secretary of Defense (DEPSECDEF) for Supply and Logistics that would establish policy for traffic management. The Army agreed to centralization in principle but felt it should be the central traffic manager while the Navy and Air Force favored retaining traffic management functions in the services. In the end, the Joint Chiefs of Staff (JCS) failed to agree so they shelved the issue.

1956-1970: The Office of the Secretary of Defense (OSD) and the Army made several attempts to centralize traffic management but were thwarted by the services' inability to agree: the Navy and the Air Force believed traffic management was integral to the logistics system and thus must remain the responsibility of the individual services.

1956: The Secretary of Defense designated the Army Single Manager for continental US (CONUS) military traffic and created the Military Traffic Management Agency (MTMA).

1958: The House Committee on Government Operations registered a scathing indictment of DOD policies for procuring civil airlift and suggested centralization of military traffic management.

1961: The Military Traffic Management Agency placed under Defense Supply Agency and named Defense Traffic Management Service (DTMS).

1964: The Defense Traffic Management Service returned to the Army with a new name, Military Traffic Management and Terminal Service (MTMTS), recognizing its increased responsibilities.

Blue Ribbon Defense Panel (1970): Recommended creation of a Logistics Command to take over MTMTS and MSC traffic and terminal management functions. Military Airlift Command would be included in the new unified command.

DEPSECDEF Decision Memorandum (1971): Directed the merger of MTMTS and MSC into a Joint DOD Surface Transportation Command. DOD, however, failed to document any savings and assumed the Navy would not mind losing MSC. Congress killed the plan.

JCS ("Steadman") Study (1977): Examined several options for consolidating DOD surface transportation but concluded no deficiencies existed and recommended the

status quo--MAC remain a specified command and MSC and Army's transportation operating agency, renamed Military Traffic Management Command (MTMC) in 1974, stay independent under their respective services. This study stands alone in not recommending consolidation.

JCS Exercise Nifty Nugget (Nov 1978): Demonstrated inefficiencies of the existing traffic management structure. Fragmented responsibilities for surface movement created severe coordination problems that inhibited responsiveness.

Report on the Feasibility of Consolidating the Military Traffic Management Command (MTMC) and the Military Sealift Command (MSC) (Apr 1979): The House Appropriations Committee (HAC) Surveys and Investigations staff recommended that a defense Traffic Management Agency (DTMA) assume MTMC and MSC traffic management responsibilities.

May 1979: The JCS established the Joint Deployment Agency (JDA) at MacDill AFB, Florida.

December 1979: The House/Senate Conference report on the FY 80 Defense Appropriation Bill directed DOD to develop an implementation plan for consolidation of MSC and MTMC and/or the creation of a DTMA in FY 80. In testimony before the

HAC, DOD advised that further analysis of alternatives was required before a decision could be made. It set up a steering committee and contracted with Harbridge House.

Harbridge House Study (Sep 1980): Recommended establishment of a DTMA or a Unified Traffic Management Command (UTMC) comprised of MTMC and MSC as components. The Army would continue to operate ports and the Navy sealift,

November 1980: The JCS exercise Proud Spirit reinforced the findings of Nifty Nugget and OSD and congressional studies: no single agency was able to view the total transportation system and ensure efficient employment of all modes.

December 1980: The House/Senate Conference Committee on the FY 81 DOD Appropriations Act concluded that further study of this issue was not required and that DOD should submit a plan for a Unified Traffic Management Command or Agency by 1 May 1981.

January-April 1981: The reaction of the services and JCS to the Harbridge House recommendation was that, with its component command structure, the UTMC would increase layering and adequate weight was not given to wartime needs. The JCS decided to initiate their own review of the issue.

30 June 1981: After a review of the service responses and in order to be responsive to congressional direction, the Deputy Secretary of Defense approved a compromise proposal. He directed the transfer of sealift cargo and passenger booking and contract administration functions to MTMC by I October 1981, and asked the Joint Chiefs of Staff for a plan that would establish the organizational and procedural framework for performing joint wartime and contingency mobility planning and deployments, and peacetime and wartime traffic management,

24 July 1981: The JCS submitted concept and milestones for enhancement of deployment planning and execution. The JCS agreed unanimously that the management of the surface movement system could best be accomplished by integration of the MTMC and MSC into a single command reporting through the JCS to the Secretary of Defense,

16 September 1981: The Deputy Secretary of Defense approved the JCS concept and associated milestones for implementation planning and established a senior-level steering group chaired by the JCS to oversee the work of the JCS Special Task Force. The Deputy Secretary set 1 October 1982 as the goal for completing the integration of MTMC and MSC. The Chairman of the Appropriations and Armed Services Committees, as well as other interested members, were advised of the course of action.

5 October 1981: The Military Export Cargo Offering and Booking Offices (MECOBOs) were established worldwide under MTMC supervision.

20 October 1981: The DOD announced the formation of the MECOBOs and approval of the concept for integration of MTMC and MSC.

16 November 1981: The Report of the House Appropriations Committee on the DOD Appropriations Bill, 1982, heartily endorsed the Deputy Secretary's decision of 16 September 1981, to merge MTMC and MSC.

January 1982: The JCS Special Task Force completed the implementation plan for integration of MTMC and MSC.

3 February 1982: The JCS by unanimous vote recommended the integration of MSC and MTMC into a unified Military Transportation Command (MTC). They provided an implementation plan and Terms of Reference for the MTC which would result in establishment of the MTC by 1 October 1982.

5 March 1982: The Secretary of the Navy recommended that the Secretary of Defense drop consideration of the MTC because it would do more harm than good in regard to sealift management.

10 March 1982: At hearings before the House Armed Services Committee, the Secretary of the Navy testified against the MTC proposal,

1 April 1982: The Secretary of the Navy in a memorandum to the Deputy Secretary of Defense elaborated on his opposition to the MTC and, again, suggested that he drop consideration of the proposal.

13 April 1982: The Senate Armed Services Committee reported the DOD Authorization Bill for FY 83 with a general provision prohibiting the consolidation of any of the functions of the transportation commands.

17 June 1982: The Deputy Secretary of Defense testified in support of the MTC at hearings before the Senate Armed Services Committee, His testimony was supported at these hearings by the Director of the Joint Staff and Commander, MTMC. The Commander, MSC, while supporting integration, testified that he believed that the commander should always be a Naval officer.

3 August 1982: The Deputy Secretary of Defense advised Senator John Tower of the results of a review of deployment capabilities by the Defense Science Board. Their findings confirmed the need for management improvements in the transportation area.

10 August 1982: Just prior to consideration of the MTC issue by the House/Senate conferees on the Authorization Bill, the Secretary of Defense sent letters to both Senator Tower and Congressman Melvin Price asking for their support and

indicating that the Secretary of the Navy was prepared to carry out those steps necessary to implement the merger.

16 August 1982: The Conference Report on the DOD Authorization Bill was published. Its language prohibiting consolidation of the functions of the transportation commands was retained. Its language also suggested that DOD should seek legislation to enhance operations of the transportation commands.

August 1983: The Deputy Secretary of Defense approved a compromise plan for the MTC developed by the Army and Navy. This plan essentially would have converted MTMC into a unified MTC. Transportation contingency and execution planning would be consolidated in the MTC. MSC would have continued as a separate Navy command.

September 1983: The Deputy Secretary of Defense asked the JCS to prepare an implementation plan in 60 days. Letters were sent to the Chairmen of the House and Senate Armed Services Committees describing the compromise proposal for the MTC and requesting repeal of the prohibition against consolidating functions.

November 1984: The JCS recommended that DOD proceed with a systems development approach to resolving surface transportation planning and execution problems and hold in abeyance organizational changes.

January 1985: The Deputy Secretary of Defense approved JCS recommendations to proceed with systems development proposal. A joint flag/general officer steering group was established to oversee the effort and report on the progress. The DOD proposals in the FY 84 and FY 85 authorization requests to repeat language prohibiting consolidation of transportation functions were rejected by Congress.

28 February 1986: President Reagan's Blue Ribbon Commission on Defense Management (Packard Commission) recommended, in its Interim Report, that Secretary of Defense Caspar W. Weinberger "establish a single unified command to integrate global air, land, and sea transportation."

28 March 1986: The Chairman, Joint Chiefs of Staff (CJCS), Admiral William J. Crowe, Jr., formed a general/flag officer steering committee and a full-time working group to plan for the establishment of a unified transportation command (UTC).

1 April 1986: President Reagan signed National Security Decision Directive No. 219 directing the Secretary of Defense to establish a unified transportation command.

29 September 1986: Goldwater-Nichols DOD Reorganization Act ordered the Secretary of Defense to consider creation of a unified transportation command with MAC, MTMC, and MSC and repealed the law prohibiting it.

31 December 1986: Deputy Secretary of Defense William H. Taft IV approved the JCS recommendation to unify MAC, MTMC, and MSC under a UTC with headquarters at Scott AFB, Illinois. In addition. the Joint Deployment Agency, MacDill AFB, Florida, would be disestablished and absorbed by the new command. Furthermore, Commander in Chief, MAC, (CINCMAC) would also serve as the UTC CINC. Finally, Deputy Secretary of Defense directed the CJCS to write an Implementation Plan and to establish the UTC in early 1987.

10 April 1987: The Secretary of Defense approved the USTRANSCOM Implementation Plan.

18 April 1987: President Reagan directed Secretary of Defense to establish the United States Transportation Command to provide global, air, land, and sea transportation to meet national security needs. The new command's mission was wartime oriented with few peacetime responsibilities other than deliberate planning and exercises.

1 July 1987: The Senate confirmed Air Force General Duane H. Cassidy as first Commander in Chief, United States Transportation Command (USCINCTRANS), thus activating the command at Scott AFB, Illinois.

1 October 1987: The formal activation ceremony of USTRANSCOM at Scott AFB, Illinois.

14 February 1992: Secretary of Defense Richard B. "Dick" Cheney signed a memorandum expanding the mission responsibilities of USTRANSCOM. "The mission of the Commander in Chief of the United States Transportation Command shall be to provide air, land, and sea transportation for the Department of Defense, both in time of peace and time of war."

1 June 1992: The Military Airlift Command inactivated and the Air Mobility Command (AMC) constituted and activated at Scott AFB, Illinois, in the biggest reorganization of the Air Force since it was formed in 1947.

8 January 1993: Donald J. Atwood, Acting Secretary of Defense, signed DOD Directive No. 5158.4 superseding SECDEF Cheney's memo of 14 February 1992. The new directive gave USCINCTRANS combatant command of the Transportation Component Commands (TCCs) in time of peace and time of war and made him DOD "single manager for transportation. other than service-unique or theater-assigned transportation assets."

SOURCE: Chronology (U), "Consolidation of Transportation in the Department of Defense," by Dr. James K. Matthews and Ms. Cora J. Holt, 1994.

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Vita

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