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THE U.S. TRANSPORTATION COMMAND - HOW BIG A DIFFERENCE WILL IT MAKE?

BY

LIEUTENANT COLONEL JAMES W. BURNS

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31 MARCH 1989
U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050
Since the Joint Chiefs of Staff (JCS) Command Post Exercise (CPX) NIFTY NUGGET 78, conducted in the Fall of 1978, the Department of Defense (DOD) has been trying to fix the significant transportation shortcomings that were identified in this worldwide mobilization and deployment exercise. Our inability to mobilize, deploy, and sustain forces came under great criticism. The JCS, DOD, and even the Congress have been involved in coming up with the right fix, and there have been many efforts to identify the best approach. While the headquarters was activated on 1 October 1987, the United States Transportation
Command (USTRANSCOM) formally became our newest unified command on 1 October 1988. This study is based on my personal experiences as a member of JCS Special Task Force (1984) studying the problem, briefing papers, interviews at USTRANSCOM, many other working papers, as well as published documents. My purpose is to provide insight into the many efforts to reorganize the DOD transportation operating agencies (TOAs) and the logic for the recommendations. Next I will review the USTRANSCOM mission, organization and concept of operations. A quick review of the strategic mobility related portions of Defense automated planning and execution systems will provide the reader with insight into the command, control, communications, and computer (C4I) dilemma that exists today. Finally, in answering the title question, I will review the problems with the proposed solutions and determine where we are now and where we still need to go.
THE U.S. TRANSPORTATION COMMAND - HOW BIG A DIFFERENCE WILL IT MAKE?

AN INDIVIDUAL STUDY PROJECT

by

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U.S. Army War College
Carlisle Barracks, Pennsylvania 17013
31 March 1989
ABSTRACT

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THE UNITED STATES TRANSPORTATION COMMAND -
HOW BIG A DIFFERENCE WILL IT MAKE?

CHAPTER I
INTRODUCTION

The U.S. Transportation Command (USTRANSCOM) became our newest unified command on 1 October 1988. Its formation has been long overdue and can be directly traced to the Joint Chiefs of Staff (JCS) worldwide command post exercise (CPX) NIFTY NUGGET 78, conducted in the Fall of 1978. This study will review the established need for USTRANSCOM, trace the history of its creation, review its concept of operation, touch on the automated transportation systems, and conclude with how far we have come and how much further we need to go.

NIFTY NUGGET 78

NIFTY NUGGET 78 was designed primarily to test plans, procedures, and supporting plans for the mobilization and deployment of forces. The war fighting portion of the CPX was subordinated to allow a thorough test of the
mobilization and deployment aspects of war. The results of this exercise have been haunting those involved in the mobilization and deployment process ever since. For this study, I will focus on the transportation portion of the exercise and its results.

The exercise identified significant transportation shortfalls in both management and resources. From the management perspective, NIFTY NUGGET showed that coordination between the transportation operating agencies (TOAs)—Military Airlift Command (MAC), Military Sealift Command (MSC), and Military Traffic Management Command (MTMC)—was inadequate. Coordinating the flow of forces in operation plans (OPLANs) and automatic data processing (ADP) system incompatibilities were the most notable findings. The Joint Transportation Board (JTB), under the auspices of the JCS, provided only limited coordination. No organization had been charged with integrating TOA planning into a single traffic management system. This resulted in significant delays in the movement of units and supplies and an inefficient use of strategic airlift assets.

On the surface deployment side of things, NIFTY NUGGET revealed a difficulty in getting ships to their designated ports and a shortage of hazardous (ammunition) outloading capacities. Commercial transportation for movement to sea and air ports of embarkation (A/SPOE) were generally found to be adequate, but identification of movement requirements
and the release of funds to contract commercial transportation were problems. More specifically, problems were encountered with the reporting of ship and cargo movements; ammunition waiting at ports when shipping was available; JCS was uncertain whether MTMC or MSC provided cargo loading information; no single manager in DOD had overall responsibility for deployment planning; inadequacies in ADP software used by TOAs and other operational commands hindered force movements; deployment responsibilities, control, and coordination were fragmented among many commands.

A key lesson learned during NIFTY NUGGET was that transportation and traffic management functions needed to be realigned to improve the coordination and responsiveness of surface transportation. Two recommendations were made to overcome this: (1) give the TOAs a direct reporting channel to the JCS in a crisis; and (2) establish a single manager for deployment planning.

It was clear to all involved that significant improvements had to be made in our deployment system if we wanted to have a credible force projection capability. Much needed to be done and each service TOA had its unique automated systems and thoughts on how best to fix the problem. As a ‘quick-fix’, the JCS established the Joint Deployment Agency (JDA) on 1 May 1979 and gave it the mission of integrating TOA planning, the second
recommendation from NIFTY NUGGET. While JDA made some progress with the development of the Joint Deployment System (JDS), an automated planning system, it was clearly not the final answer. The first recommendation from NIFTY NUGGET was much more difficult to deal with as the services were concerned with a loss of responsibility, force structure, and money in the event of any reorganization or merger of TOAs.

In 1980, the JCS conducted another CPX to test the deployment system and the JDA. Again, automated systems were key to the exercise results. Significant problems included (1) a lack of effective automated interfaces among the Joint Operations Planning System (JOPS), JDS, and service and TOA unique ADP systems which hampered information flow and processing; (2) JDS was inadequate for managing deployment operations; (3) MTMC and MSC needed to coordinate with the JDA to develop an automated interface; and (4) timely sequential planning was not supported by the automated systems.5

Despite its shortcomings, the Joint Deployment Agency and its data base, the Joint Deployment System, have greatly improved the deliberate planning process. The joint deployment community (JDC), which includes supported and supporting commanders, TOAs, services, JCS, and JDA, was able to build near executable plans. The Time Phased Force Deployment Data (TPFDD) refinement conferences and the
efforts of all JDC members have been at the heart of these improvements. These meetings allowed the JDC to work through problems which affected the flow of a given deployment, making coordinated decisions on the best course of action to improve deployment. However, the Joint Deployment Agency was never given the teeth to fix the remainder of the deployment problem. As an agency of the JCS, it was only given coordination authority with the TOAs and was unable to resolve many difficult traffic management issues between the TOAs. The JDA mission revolved around development of the JDS and OPLAN refinement. We still had no single DOD traffic manager.

As James Canan described JDA in his 1987 article on USTRANSCOM, "...JDA turned out to be a nice try that fell short." He went on to say, "JDA made the matches (in deliberate planning) all right, but couldn’t make them stick. Its insurmountable problem---as a JCS agency with authority to coordinate, but not to command---was its lack of clout with MAC, MSC, and MTMC, which are commanded by general and flag officers of higher rank than that of JDA’s two-star general in command."
THE STUDIES

During the period 1980 to 1986 numerous studies were conducted by DOD, JCS, and other activities to determine what needed to be done to fix the deployment problem.

The Harbridge House Study

Harbridge House, a 'think tank' with headquarters in Boston, conducted "A Study of DOD Organizations for Transportation and Traffic Management." The report, published on 10 September 1980, was done under contract with DOD. The results of this study went to reinforce the results of NIFTY NUGGET. It reported that all TOAs have organic data processing capabilities with no common database and minimal interchange of information. Control of cargo and passenger movement remained fragmented. Costly parallel development efforts continued as each command strived to improve its individual system. In their evaluation of TOAs, the study group found (1) that the TOAs were operating between marginal and satisfactory in a peacetime environment; (2) under emergency conditions the TOAs would only be marginally effective; (3) in wartime the TOAs would operate ineffectively; and (4) in peacetime, the TOAs were inefficient and cost-ineffective with duplicated effort and too little automation.7
These were more harsh words for DOD and the services to swallow. The primary recommendation was that DOD establish a single traffic manager that would report directly to the JCS.\textsuperscript{8} This was not to be the last recommendation to this effect, but it was not acted on.

The Dalton Study

A JCS task force under the Director of the Joint Staff completed a study in 1981 known as the Dalton Study. This study recommended JDA provide JCS with all requisite deployment data and monitor deployments to assist JCS decisionmaking. It also recommended integrating MTMC and MSC into a single command reporting to the Secretary of Defense through the JCS. The Dalton study results were published and approved by the Deputy Secretary of Defense (Carlucci) on 16 September 1981. A revised terms of reference for JDA also resulted from the study. JDA was defined as the focal point for deployment associated decisionmaking.\textsuperscript{9}

The Dalton Study again recommended a reorganization of TOAs, specifically a merger of MSC and MTMC. While the first of the recommendations was implemented, nothing was accomplished on the merger. The FY 83 DOD Authorization Act (Section 1110) denied funds for a MTMC and MSC merger or any consolidation of TOA functions.\textsuperscript{10} In January 1983, the
Chief of Naval Operations sent a memorandum to the Chairman, JCS, stating in part "...I can find no military utility in the proposed establishment of MTC (Military Transportation Command) and view it as a further erosion of U.S. Navy responsibilities for strategic sealift." Likewise the Secretary of the Navy sent a memorandum to the Secretary of Defense reinforcing the same position and saying "...The consolidation will destroy effective management of sealift which can only be done by the Navy Secretariat." These three events were to significantly slow the process.

The Ambrose-Pyatt Proposal

In June 1983, James R. Ambrose, Under Secretary of the Army, and Everett Pyatt, Principal Deputy Assistant Secretary of the Navy, forwarded a proposal to the Secretary of Defense. Their proposal was not unlike the Harbridge House or Dalton Study results. They recommended:

To strengthen further this joint capability, we recommend creating a unified command under the Joint Chiefs of Staff to function with the JDA, the JCS, the theater commanders and Transportation Operating Agencies (TOAs). This new Joint Transportation Command (JTC) would be responsible initially for wartime/peacetime surface transportation support and, later, air transportation support as well. The new command would assume the execution and sustainment responsibilities now assigned to JDA, but would require tighter coordination with JDA to ensure
planning and execution compatibility. We leave the specific details of the command organization relations to the JCS.13

This proposal received the necessary support from the services as a step in the right direction. But the Navy was to retain nearly the full function of MSC and the result was not a true creation of a single DOD traffic manager. Also, legislation in the FY 83 Authorization Act still prohibited any consolidation of functions.

The Keech Study

Shortly after the Ambrose-Pyatt Proposal, Everett T. Keech of the Wharton Applied Research Center, under contract to the Office of Naval Research, published a study that examined a proposal to form a single unified transportation command.

This study has concluded that serious problems exist in the surface transportation component of the strategic mobility system and that the present system is not satisfactory. In studies done since 1977, nearly every conceivable organization alternative has been considered, including: functional commands under service control, specified commands, unified commands, component commands of unified commands, and consolidation into a defense agency. Currently, there is almost universal support for a single command to manage peacetime surface transportation operations, as well as to manage the operational systems which will support wartime deployment.14
Keech went on to recommend the formation of a Joint Transportation Command (JTC) that would report directly to JCS as a unified command. MAC would remain a specified command and MSC would remain a Navy major command but would lose some of its traffic management and planning responsibilities. MTMC was to become the hub of this new organization and move its current traffic management responsibilities and ocean terminal operations into the new JTC. The study offered three recommendations as part of this new strategy:

1. Assign peacetime and wartime traffic management to a single unified command reporting to the Joint Chiefs of Staff.

2. The Navy should keep responsibility for sealift and maritime operations.

3. An integrated decision support and information system must be developed for traffic management.15

The Keech study made some sound recommendations that were thought to keep the services happy, that is, no service lost any significant functions or force structure. But nothing could be done without Congressional approval. So, despite another recommendation to consolidate, our hands were tied. Sufficient impetus could not be mustered to get the services fully behind the proposal and convince Congress to remove the restrictive legislation.
Other JCS Study Group Efforts

In a 14 September 1983 memorandum for the secretaries of the military departments and the Chairman of the Joint Chiefs of Staff, Lawrence J. Korb, Assistant Secretary of Defense for Manpower, Reserve Affairs, and Logistics, provided guidance on where to go with the action. He stated that he had sent letters to the Chairmen of the House and Senate Armed Services Committees advising them that the Deputy Secretary of Defense had decided to establish the Military Transportation Command (MTC) as a unified command and to integrate surface traffic management within the MTC. He went on to request that immediate action be taken to repeal the prohibition against consolidating functions of transportation commands in Section 1110 of the FY 83 DOD Authorization Act. Mr. Korb went on to give the JCS guidance to proceed immediately to:

Direct the preparation of the MTC implementation plan to reflect the provisions of the Deputy Secretary’s decision. The plan should reach me within 60 days.

Organize the MTC
--With the Army’s Military Traffic Management Command (MTMC) as the nucleus of the command.
--With the current Commander, MTMC as the interim Commander, MTC.

Provide the Secretary of Defense the nomination for permanent Commander, MTC.
The JCS formed a Special Task Force (STF) under the Director of the Joint Staff, with direct supervision from the Director for Logistics, J4. A series of proposals were developed and briefings presented to the JCS, but Navy approval continued to elude the STF. The Chief of Naval Operations submitted a memorandum to the JCS and formally stated that he did not concur with the establishment of the MTC. He went on to recommend that an ADP system be developed to support deliberate and crisis action planning. The system development was to be accomplished under the auspices of a flag/general officer joint steering group to ensure total system development, interfaces, and balance. The Army continued to support the formation of the MTC which would consolidate surface strategic mobility planning functions.17

In November 1984, the Chairman of the Joint Chiefs of Staff advised the Deputy Secretary of Defense that the Joint Chiefs of Staff recommended that he support the ADP systems development approach to resolving surface transportation planning and execution coordination problems.18 The Deputy Secretary of Defense approved the JCS recommendation.19 The flag/general officer joint steering group was formed and everything returned to normal. There was little progress made toward bringing the MTMC and MSC automated systems into line.
One of the recommendations published in the June 1986 report from the President's Blue Ribbon Commission on Defense Management was to form a unified transportation command. Specifically the report stated that, "The Secretary of Defense should establish a single unified command to integrate global air, land, and sea transportation, and should have flexibility to structure this organization as he sees fit. Legislation prohibiting such a command should be repealed." 19

With the President's approval of this recommendation and the repeal of the prohibiting legislation, the Secretary of Defense directed the JCS to develop an implementation plan for a unified transportation command. This implementation plan was published on 12 March 1987, and formed the basis for the establishment of the U.S. Transportation Command. 20
ENDNOTES


2. Ibid., pp. 16-17.

3. LTC Robert M. Weiss, Briefing to the JCS, "Surface Transportation Problems and Solutions," Aug 84, slides 3-4 (hereafter referred to as "Weiss").


5. Weiss, slides 5-6.


8. Ibid., p. 3.


15. Ibid., pp. 16-19.

16. Lawrence J. Korb, memorandum for the Secretaries of the Military Departments and the Chairman, Joint Chiefs of Staff, subject: Military Transportation Command, 14 Sep 83, p. 1.


18. General John W. Vessey, Jr., memorandum for the Secretary of Defense, subject: Surface Transportation Problems and Solutions, 23 Nov 84, p. 2.


In the first chapter, I developed the history of and need for establishing the U.S. Transportation Command (USTRANSCOM). In this chapter I will describe what USTRANSCOM has been tasked to do, how the Commander in Chief (CINC) plans to accomplish his mission, and what impact it is having on the remainder of the Joint Deployment Community (JDC).

**PLAN TO ESTABLISH THE USTRANSCOM**

National Security Decision Directive (NSDD)-219, April 1986 directed the establishment of a unified transportation command to provide global air, land, and sea transportation. The Chairman of the Joint Chiefs of Staff (CJCS) established a new special task force to study the issue and make
recommendations. Under the auspices of the Director for Logistics, J4, the task force was comprised of representatives from the services, the TOAs, U.S. Readiness Command (USREDCOM), the JDA, and the directorates of the OJCS. The task force worked full time for seven months and produced an implementation plan to establish the USTRANSCOM.1

The Joint Chiefs of Staff approved the plan and forwarded it to the Secretary of Defense on 12 March 1987. The implementation plan also served as USTRANSCOM's terms of reference.2

Organizational Timeline

USTRANSCOM was activated at Scott Air Force Base (AFB), Illinois, on 15 April 1987. The MAC Commander in Chief, General Duane H. Cassidy, USAF, was designated as the first CINC, while retaining his command of MAC. This dual-hat arrangement is to be reviewed by the Secretary of Defense at a later date. An 18 month phase-in period was established prior to achieving full operational capability and having forces assigned. Key dates in this phase-in period include:

--15 Apr 87: Activation. MAC, MSC, and MTMC assigned, for planning purposes, as components. JDA was disestablished and its functions and responsibilities assigned to USTRANSCOM. (JDA
retained its name until functions and responsibilities were fully transferred to Scott AFB.)


--Apr 88: USCINCTRANS submitted his proposed Joint Manpower Plan and included requests for additional personnel authorizations.

--Jul 88: CINC made recommendations to the JCS on USTRANSCOM functions, responsibilities, organization, and manpower.

--1 Oct 88: USTRANSCOM, including JDA, were to be fully operational at Scott AFB. Forces (MAC, MSC, and MTMC) were assigned. CINC was to certify the command fully operational. MAC was no longer to be a specified command.

--1 Oct 90: USCINCTRANS is to report to the Secretary of Defense on progress made in strategic mobility planning and execution, and his analysis of the dual-hat arrangement as the MAC Commander and USCINCTRANS.³

To the best of my knowledge, all milestones to date have been met, with only minor deviations on the timeline. However, as I will describe later, whether or not they were fully met maybe open to conjecture.
Organization of USTRANSCOM

USTRANSCOM was organized as a unified combatant command. This means that it is a wartime oriented command organized on functional lines. The three TOAs (MAC, MSC, and MTMC) were assigned as component commands.

With the assigned mission of "To provide global air, land, and sea transportation to meet national security objectives," USTRANSCOM has a number of specified responsibilities inherent with the mission. While I will explore the details of some of the responsibilities later, a look at the most significant responsibilities now would be useful.

USTRANSCOM is responsible for the transportation aspects of worldwide strategic mobility planning (deliberate and execution), deployment related ADP systems integration, and centralized wartime traffic management, including:

(a) Developing and operating the deployment elements of the crisis action planning and execution system.

(b) Receiving, evaluating, tasking, and coordinating global mobility requirements in support of the commanders in chief (CINCs) of the other unified and specified commands.

(c) Directing deployment execution and redirecting transportation to meet National Command Authority (NCA) and CINC taskings.

(d) Optimizing the use of transportation capability.4
To fulfill these responsibilities, the assigned forces and the component headquarters are under the operational command (OPCOM) of USCINCTRANS. This arrangement was to give USCINCTRANS full authority to accomplish the assigned strategic mobility planning, ADP integration, and execution functions. The components exercise operational control (OPCON) over their assigned forces.\(^5\)

To facilitate future discussion, a definition of OPCOM and OPCON seems to be in order. The 1988 version of *The Joint Staff Officer’s Guide* defines OPCOM as "The authority to perform those functions of command involving the composition of forces, assignment of tasks, designation of objectives, and authoritative direction necessary to accomplish the mission..." This same document defines OPCON as "The authority delegated to a commander to perform those functions of command over subordinate forces involving the composition of subordinate forces, the assignment of tasks, the designation of objectives, and the authoritative direction necessary to accomplish the mission..."\(^6\)

Figure 1 in Appendix 1 provides an organizational diagram that graphically portrays the subordinate and superior relationships of USTRANSCOM. It is important to note that the chain of command runs from the National Command Authority (President and Secretary of Defense) directly to USCINCTRANS who exercises operational command over his three component commands. Equally important is
that the TOAs retain their relationship as major commands of their respective Services for operational test and evaluation and single manager status for common-user transportation operations.

Major Functions of USTRANSCOM

I will not attempt to list all functions of USTRANSCOM in this study, but will highlight several that directly relate to the scope of this study. In the area of strategic mobility planning, USTRANSCOM has responsibility to:

1. Refine, administer, and operate the Joint Deployment System (JDS).
2. Provide strategic mobility planning expertise and advice to the JDC.
3. Specify the level of detail for information and interface requirements for JDS.
4. In conjunction with supported CINCs, refine Time Phased Force Deployment Data (TPFDD) portion of plans.

Data automation will provide a major challenge to USTRANSCOM. It has been tasked to integrate all strategic mobility and deployment information ADP systems into a transportation oriented ADP master plan. With the many different peacetime and wartime automated transportation
related systems already in place, this will prove to be a most difficult mission to accomplish.

USTRANSCOM has only a monitor, collect, and analyze traffic management responsibility in peacetime. The components continue to manage their common user resources and cargo and passengers being moved on them. In essence, this means that procedures for transportation operations existing prior to the establishment of USTRANSCOM remain intact—no change.8

Assigned Forces

At this point, a review of the USTRANSCOM assigned forces and the split of their responsibilities to their respective Service and to USTRANSCOM is in order. This separation is shown graphically in Figure 1-2 at Appendix 1. As a note, the missions and assets planned to be assigned with the respective TOA in the JCS Implementation Plan and what finally was assigned do not quite match.

The Military Airlift Command assets under OPCOM to USTRANSCOM include the strategic airlift (C-140 and C-5), tactical airlift (C-130) in the Continental U.S. (CONUS), the Civil Reserve Air Fleet (CRAF), and the rescue and weather missions. The MAC aeromedical evacuation, special airlift, audiovisual service, and special operations assets and missions remain a Service mission.
The Military Sealift Command came to USTRANSCOM with its common user shipping, including dry cargo ships, tankers, and the prepositioned ships after discharge of their cargo. MSC responsibilities for the Maritime Prepositioned Ships (MPS), Naval Fleet Auxiliary (ammunition, oilers, and tugs), and other special missions remain Navy missions.

The Military Traffic Management Command brought its CONUS land transportation responsibilities and assets, operation of common user seaports, and intermodal movements into USTRANSCOM. Their personal property traffic management responsibility for DOD and transportability engineering functions stayed with the Army. Additionally, each of these TOAs operate under an industrial fund. Simply stated, this means the respective TOA charges each shipper for the transportation services rendered. In this manner, the TOA and the respective Service receives funds from their own and other Services which pays for the transportation services and allows the TOA to continue to perform its mission. These industrial funds are carefully protected by each service as each TOA has a mission beyond just the common user transportation mission. However, note that USTRANSCOM has no industrial fund unique to itself. The TOA industrial funds are Service connected.
USCINTRANS’ CONCEPT OF OPERATIONS

To accomplish the USTRANSCOM assigned mission, General Cassidy developed his command concept. This was developed as the USCINTRANS Concept of Operations (CONOPS) and subsequently published on 22 February 1988. There are four very key paragraphs in this document that I will quote, to ensure the USCINTRANS concept is accurately presented. The command concept is:

USTRANSCOM, through the process of Global Mobility Management, will establish an integrated transportation system to be used in peace and war that provides for the most effective use of airlift, sealift and land transportation resources from origin to destination.

The key terms used in this concept are defined as follows:

a. "Global Mobility Management". An integrated process that includes coordinated efforts in the PPBS process, development of unified or coordinated management procedures and systems for deliberate and execution planning, and application of the DOD and civil transportation systems through exercises, operations, and wartime traffic management. The object of Global Military Management is to achieve responsible transportation capability for all phases of the mobility process.

b. "Peace to War". The same systems and procedures will be used daily throughout the transportation community from the National Command Authorities (NCA) to the shipper, receiver and individual units. From the transportation perspective, war should
represent only an increase in intensity of the same basic procedures and systems.

c. "Origin to Destination". The task of any transportation system should be the movement of passengers and cargo from origin to final destination. USTRANSCOM intends to promote the goal of origin-to-destination transportation service. This goal will not infringe on the theater CINC’s transportation authority or responsibility. Rather, USTRANSCOM will interface, coordinate and, if requested by theater CINCs, extend procedures, policies, and systems that facilitate origin-to-destination transportation capabilities.10

I have presented the concept of operation here to assure an even flow of the study. Chapter IV will explore it further and take a look at how USTRANSCOM is going to accomplish this major undertaking.

IMPACT ON THE JOINT DEPLOYMENT COMMUNITY

USTRANSCOM has operational command of the three TOAs. This permits a focused direction in the deliberate planning process to assure well flowed plans. The CINC has the authority to make the decisions and make them stick with the TOAs. JDA has been folded into USTRANSCOM, along with its mission and the Joint Deployment System. This should permit a quicker refinement of the JDS and an overall improvement in the development of future automated transportation systems. This is contrasted with one of the greatest
criticisms of the JDA in the past, its inability to make their fixes to the strategic mobility problems stick with the TOAs.\textsuperscript{11}

While the establishment of USTRANSCOM has mollified this 'clout' problem, remember that the TOA administrative chain of command and funding continues to run through the Service Secretaries. This means that existing procedures for mode operations remain intact. Each TOA continues as a major command of its parent Service which continues to organize, train, and equip its forces. As pointed out earlier, each of the TOAs retained service unique missions and their industrial funds, which did not transfer to the OPCOM of USTRANSCOM.\textsuperscript{12} Some would argue that this keeps USTRANSCOM focused on its wartime mission and does not bog it down in peacetime operations. It is also interesting to note that John Lehman, former Secretary of the Navy, remained opposed to the formation of a unified transportation command. In 1986, after winning the same battles in the early 1980's, he returned to voice his opposition to Congress, saying "To take Military Sealift Command and put it out in Illinois under an Air Force commander has to be taking the process of reorganization for its own sake to an absurd extreme." Both the Army and Air Force had some concerns about responsiveness and service unique requirements and single service planning, but were much less vocal.\textsuperscript{13}
The relationship of USCINCRANS to the other unified and specified CINCs is somewhat unique. During strategic mobility planning and JDS operations and maintenance, he is the supported CINC. He is a supporting CINC during deployment execution. With this sort of complex relationship, it is essential that USTRANSCOM establish and maintain a solid relationship with the other unified and specified commanders. To facilitate this, General Cassidy has been proactive in establishing memorandums of understanding (MOU) and memorandums of agreement (MOA) with the other CINCs, a method of operation he successfully used as CINCMAC.
1. Organization of the Joint Chiefs of Staff, Implementation Plan for the Establishment of the United States Transportation Command, 12 Mar 87, p. 1 (hereafter referred to as "OJCS, Implementation Plan").


4. Ibid., pp. 2-3.

5. Ibid., p. 3.


7. USTRANSCOM Command Briefing (J5), Dec 88, slide 8.


9. USTRANSCOM Command Briefing (J5), slide 9.

10. USTRANSCOM, United States Transportation Command (USTRANSCOM) Concept of Operations (CONOPS), 22 Feb 88, pp. 1-3 (hereafter referred to as "USTRANSCOM, CONOPS").


12. William J. Crowe, Office of the Joint Chiefs of Staff, memorandum for the Secretary of Defense, subject: Recommendations for a Unified Transportation Command, 1 Dec 86, p. 2 to enclosure (hereafter referred to as "Crowe, Recommendations for UTC").


15. USTRANSCOM, CONOPS, p. 4-9.
As should be clear at this stage, is the criticality of automated systems in the strategic deployment process. In this chapter I will present a basic primer on the Joint Deployment System (JDS) and its successor the Joint Operation Planning and Execution System (JOPES). I will also introduce USTRANSCOM plans for the command, control, communication, and computer systems (C4S). This chapter will provide an introduction to these systems as they are very complex. Any thorough description would be very lengthy and not significantly add to this study.

**THE JOINT DEPLOYMENT SYSTEM**

The JDS was developed by the Joint Deployment Agency (JDA) in the early 1980’s to operate with other automated systems to provide a link between peacetime planning and
crisis planning and deployment execution. This was the JDA tool to share information with the other members of the joint deployment community (JDC) to aid in decision making. The JCS could use this deployment information to evaluate alternatives prior to submission to the National Command Authority.1

The JDS is based on a deployment data base derived from refined Time Phased Force Deployment Data (TPFDD) associated with each major operation plan developed in the Joint Operation Planning System (JOPS). This deployment data base is networked to many sites via the top secret World-Wide Military Command and Control System (WWMCCS). To ensure current data bases at the several sites, an update to one data base generates updates to all. This allows the JDS to be used in the plans development process, the plans maintenance process, and through all phases of the JOPS process from situation development to execution.2

When fully operational in the mid 1980's there were still a number of problems with the JDS, depending on where you were sitting in the JDC. The supported CINC wanted more detailed information on what equipment and supplies deploying units were bringing and their arrival schedule. The supporting CINC could not get the information into the system and did not know why all that information had to be provided in the JDS. The TOAs had similar questions as this information would be available in their peacetime systems.
but not formatted or readable by the JDS. The JCS wanted the ability to reflow an entire deployment in the 'what if' process and have visibility over a great amount of detail. The JDA could not keep up with the demands on JDS and could not get resolution on several critical issues that still persist with USTRANSCOM.

In a 1986 GAO report on deployment, the GAO again cited several of these issues. The major issue continued to be that the JDA could not get JDC agreement on what information should be included in the JDS or how the JDS would interface with or obtain information from other systems. The level of information detail was a large part of this issue. The lack of JDA authority to direct community members to take actions in support of JDS development was also cited. Finally, while JDS was continuing to develop, JOPES was also being developed, but not by JDA. As JOPES would follow on from JDS, the GAO believed the same organization should develop both. While DOD did not fully agree with the GAO conclusions, they essentially did concur with the first and attempted to explain their logic regarding the other two.\textsuperscript{3} However, it should be noted that the lack of JDA authority was one of the driving factors for the formation of USTRANSCOM and that the JOPES Project Group is collocated with USTRANSCOM.
JOINT OPERATION PLANNING AND EXECUTION SYSTEM

JOPES is the next generation of JOPS and JDS, rolled into one. The non-technical definition of JOPES is that "...it is the policy and procedures that will be used to develop and execute warplans...JOPES will serve the decisionmaker by providing and displaying information rapidly, accurately and at the level he needs to make a considered decision. JOPES will serve the action officer by providing him with real time data and state of the art analysis tools." It is being developed to provide a single, interactive system that unifies the DOD with a single procedural and data processing discipline. It will be used in planning, execution, and command and control of mobilization, deployment, employment and sustainment of forces.

The goal for developers is to allow plan refinement to be accomplished in 45 days, a process that now exceeds one year. Additionally, it will be able to be used in peacetime, on exercises, and in wartime. It is scheduled for release in increments, with increment one envisioned to be fully operational in the FY 94 timeframe. Increment one is planned to integrate JOPS and JDS while providing automated interface between other existing or developing systems.
The greatest enemy to JOPES is the tightening DOD budget. As dollars become tighter, there is real concern over JOPES being developed on schedule. It will be competing with other highly visible systems, even some it will be dependent on to function, such as the WWMCCS Information System (WIS).

**USTRANSCOM COMMAND, CONTROL, COMMUNICATION, AND COMPUTER SYSTEMS (C4S)**

The GAO published a report in September, 1988, highlighting the challenges to USTRANSCOM in the ADP area. Of particular interest to this study are the four issues the GAO points out regarding the implementation of a USTRANSCOM C4S Master Plan. Please note that these four problems relate closely to the issues in the 1986 GAO report on deployment, cited earlier in this chapter.

1. MSC and MTMC expressed concern that changes to their existing, peacetime automated systems "...may entail significant changes to their current methods of operation, data needed to meet their departmental reporting requirements, or standard operating procedures now in use."

2. Components are having difficulty getting funds through service channels for their automated systems development. Additionally, the problem of a service
automated system requirement versus a USTRANSCOM automated system requirement and the ability of one system to 'talk' with another will continue to exist.

3. The long term nature of automated system development requires significant cooperation between USTRANSCOM and the transportation community to plan for the most effective and efficient processes.

4. JOPES is essential to major improvements to the strategic deployment process. GAO cites "...late delivery, uncertain funding, and limited capabilities in the first release--require resolution to help ensure that the system meets the Command's needs." 6

USTRANSCOM is working to develop the Global Transportation Network (GTN) which I will explain in more detail in the next chapter. In essence, it is planned to be the system that will allow information to be pulled from one system into another, manipulated and further fed into a third. This will prevent duplication of effort with data entry and build on existing service and civilian industry systems.

Each of the USTRANSCOM components has or is developing peacetime and wartime automated transportation systems. Some have existed and been upgraded over many years. Others are still on the drawing boards and must be carefully evaluated based on the USTRANSCOM C4S Master Plan. This
will be a major effort but critical to the overall effectiveness of USTRANSCOM in the transportation process.


4. JOPES Project Group, JOPES Overview Brief, October 1988, p. 3 (script).

5. Ibid., pp. 1-10 (script).

I have reviewed the history of the establishment of the USTRANSCOM, taken a look at what JCS wants it to do, how the CINC plans to do it, and some of the automation challenges it faces. I will now present the views of the Department of Defense Inspector General (DOD IG), USCINCMTRANS, along with my own analysis and recommendations, in answering the title question.

THE DOD IG REPORT

In February 1988, the DOD IG published his report, a review of the Joint Staff and the unified and specified commands, to include their component commands, conducted at the request of the Secretary of Defense. The primary objective of the review was to find ways to reduce manpower levels and overhead costs.
While it is understood that the focus of this review was to cut personnel spaces and save money for DOD, some of the findings and recommendations are worthy of strong consideration. The report cited the retention of the TOAs as layering and that a good bit of the transportation management and control of transportation forces remains with these component headquarters (a problem identified in NIFTY NUGGET 78 and subsequent studies). Additionally, the report highlights that duplication and incompatible automated systems will continue to exist as the three components continue to manage their parts of the transportation system separately through Service component headquarters.¹

The report recommended that the component command headquarters be disestablished with those missions appropriate transferred to USTRANSCOM, with the necessary manpower authorizations. Those missions inappropriate to USTRANSCOM should be transferred to another command in the appropriate service or other DOD agency. Additionally, the report recommends that USCINCTRANS exercise fiscal program and budget responsibilities appropriate to his command.²

The USCINCTRANS responded to the report recommendations. While all three component command headquarters commented to the CINC with a different twist, General Cassidy chose to respond with the logic provided him by MAC. Principally, the CINC found four major difficulties with the DOD IG recommendations:
1. He does not favor centralized traffic management as it would lead to a confusion of roles and responsibilities.

2. The relationship of services to component commands of unified commands is established by law (manning, training, and equipping) and the proposed organization violates this law.

3. He was concerned that the addition of the component command peacetime responsibilities to USTRANSCOM may divert his attention from his primary war fighting mission.

4. Finally, he concluded that the removal of the services and their departments from the resource allocation process would complicate programming and budgeting.3

The final Secretary of Defense actions with the DOD IG report are not yet known. However, aside from some manpower losses, I do not believe there will be any significant, near term changes to the USTRANSCOM organization or mission.

USCINCTRANS' VIEW

As you will recall, the JCS Implementation Plan called for USTRANSCOM to be fully operational by 1 October 1988 and for the CINC to so certify. In a 23 September 1988 message, General Cassidy announced that he would assume operational
command (OPCOM) of all common user lift forces assigned to MAC, MSC, and MTMC on 1 October 1988. Commanders of those component commands would continue to exercise operational control (OPCON) of their forces. He went on to say that peacetime operations and functions would continue to be performed by the TOAs and monitored by USTRANSCOM Headquarters. General Cassidy also assured the Joint Deployment Community (JDC) that USTRANSCOM would meet the supported CINC requirements for contingency and wartime operations. I could not find where he said USTRANSCOM was fully operational.

During November 1988, General Cassidy traveled to Washington, D.C., to brief the Joint Chiefs of Staff on the status of USTRANSCOM. While I was not present at the briefing, the following comments are extracted from the slides and script used for the briefing. However, I must point out that there undoubtedly was significant dialogue during the briefing and I have no knowledge of what transpired. General Cassidy covered nine major areas in his briefing for the JCS. I will not review all nine, rather capture those most relevant to this study.

He began the briefing with his view of the USTRANSCOM mission, according to the JCS Implementation Plan. He pointed out that while he has been tasked to provide global air, land, and sea transportation to meet national security objectives, he views that mission as having responsibility
for both visibility of the movement as well as the movement itself, origin to destination.\textsuperscript{5} He went on to review the other elements of his concept of operations as I have previously discussed in Chapter II.

The CINC identified for the JCS a shortfall of 116 personnel authorizations in his Headquarters. This includes an original shortfall of 22 authorizations and 94 authorizations for new requirements he has identified. The Implementation Plan directed that personnel requirements be refined after functions and responsibilities were assessed and modified.\textsuperscript{6} However, in light of the DOD IG report and other manpower reduction programs, this will be a tough bill to pay under the current organizational arrangements.

General Cassidy spent a great part of the briefing on the ADP work that has been going on at USTRANSCOM, highlighting that he believes "...communications and computer systems are the keys to success for the Transportation Command." Known as command, control, communication, and computer systems (C4S), he pointed out that the USTRANSCOM mission goes beyond the DOD into the systems of the federal (non-DOD) and commercial sectors. In a study of C4S, USTRANSCOM has identified 106 out of 660 DOD, non-DOD, and commercial systems surveyed as important to the command. The way that USTRANSCOM plans to deal with this multitude of systems that cannot talk to each other is to create what he is calling the Global Transportation
Network (GTN). An excellent plan, the GTN will allow the free exchange of transportation information among all users at the level of detail they require. Additionally, it will give USTRANSCOM the means to access and control the amount of information which flows through the JDC. "It will support the transportation community by making maximum use of existing systems through procedural and technical interfaces and through the sharing of common resources." The GTN, when it gets going, will be a major step in the right direction. A similar solution was proposed in 1986, but without a sponsor with enough clout, it died on the vine.

As the DOD transportation advocate, General Cassidy pointed out how dependent DOD is on the civil sector. He stated that the civil sector must move 70% of DOD tonnage in wartime, via all modes of transportation. He went on to say that USTRANSCOM has assumed the leadership role in this area. Working with Congress, forming a solid relationship with the National Defense Transportation Association (NDTA), and leadership in the civilian transportation industry, he is pushing hard for an awareness of the scope of the problem.

In wrapping up the briefing, General Cassidy stated that USTRANSCOM's peacetime role will evolve as the command matures. He went on to say that he currently believes that the dual-hat status for the CINC as also the MAC Commander
is working well. Concluding the briefing he stated that USTRANSCOM is working issues no one else has worked and he assured the JCS that USTRANSCOM will make a difference to them, the National Command Authority, and the warfighting CINCs. 9

From this we can conclude that General Cassidy sees that USTRANSCOM is moving in the right direction. While he has not said that USTRANSCOM has achieved full operational capability, he certainly shows that the command is moving strategic mobility in the right direction but there is much left to do. I agree!

CONCLUSIONS

The USTRANSCOM is a significant step toward correcting our strategic mobility problems, but we have more to do organizationally and doctrinally to improve on this basic model. These conclusions are based on my personal experience, the preceding research, and the opinions of others familiar with DOD transportation.

Traffic management must be consolidated, in peace and war. MAC, MSC, and MTMC all perform certain traffic management functions in peacetime. In wartime new or additional traffic management procedures are implemented to manage the deployment. Without this consolidation we will continue to have the problems of different service systems,
without the ability to 'talk' to each other as well as different traffic management systems for use in peace and war. The USTRANSCOM Concept of Operations talks to the necessity of using the same systems in peace and war, along with origin to destination traffic management. The Global Transportation Network may allow the sharing of information among the many DOD systems, but will not resolve the overall traffic management issue, that is, a single traffic manager.

The component commands should be streamlined for their wartime, strategic mobility mission. That is to say they should only have those missions that directly relate to their wartime role. As an example, the DOD personal property mission should be pulled from MTMC and given to another agency. Each component currently has missions that do not directly relate to the strategic deployment mission. All should be reallocated. By this I mean that the TOAs should perform the same mission in peace as in war. Each would continue as a mode manager with associated functions, while traffic management would be consolidated at USTRANSCOM Headquarters level.

Finally, I believe that USTRANSCOM must have a direct funding source. While the Goldwater-Nichols Act gives the CINCs of unified commands greater influence in the Planning, Programming, and Budgeting System (PPBS), funding remains a service responsibility. He who holds the purse strings still has the final say. The logical way to give USTRANSCOM
greater fiscal independence is by the creation of another industrial fund. I do not suggest that the components (services) give up their industrial fund, rather a fourth industrial fund for traffic management should be created. This would give TRANSCOM direct funding and help resolve the issue of service underfunding of items considered a high priority by USCINTRANS but not by the Service Chiefs.

RECOMMENDATIONS

In a recent editorial published in the Defense Transportation Journal, Dr. Joseph Mattingly speaks out for intermodalism. This allows a single transportation company to provide a shipper with any transportation service on one mode or with more than one mode. Dr. Mattingly believes the establishment of USTRANSCOM is a step in the right direction for DOD, will spur intermodal development in the civilian sector, and will improve our deployment posture.10

I believe that the establishment of USTRANSCOM is a great step toward fixing our strategic mobility problems. As Dr. Mattingly pointed out, intermodalism is the way to go. However, as I discussed earlier, there are three major hurdles left to refine USTRANSCOM and its mission:
1. Consolidate peacetime and wartime traffic management at USTRANSCOM Headquarters. Tied to this is the need for greatly improved C4S.

2. Streamline the component commands to include only their peacetime missions that directly translate to wartime strategic mobility missions.

3. Develop a traffic management industrial fund for USTRANSCOM to provide a direct funding source to support the traffic management function and the expansion of C4S for wartime control.

We are finally on the road to improved economies and efficiencies in the Department of Defense transportation business. These efforts must be continued if we are to continue to improve our ability to operate economically and efficiently in peacetime and be prepared to deploy an sustain the force when war comes.

2. Ibid., Appendix I, pp. 5-6.

3. USCINTRANS message to the JCS, subject: Comments on DOD IG Report, Feb 88, 271700Z Apr 88, (FOUO).

4. USCINTRANS message to multiple addressees, subject: CINCTRANS Assumes Operational Command, 231500Z Sep 88.

5. USCINTRANS briefing to the JCS, subject: Progress to Establish the United States Transportation Command, November 1988, p. 2.3.

6. Ibid., pp. 4.1 - 4.3.


8. Ibid., pp. 11.1 - 12.2.

9. Ibid., pp. 18.6 - 19.1.

BIBLIOGRAPHY


5. Cassidy, Duane, General, "USTRANSCOM," Airlifter, Sep 87, p. 3.


11. Herres, Robert T., Acting Chairman of the Joint Chiefs of Staff, memorandum for the Secretary of Defense, subject: Implementation Plan to Establish the US Transportation Command, 12 Mar 87.


15. JOPES Project Group, JOPES Overview Brief, Oct 88, p. 1-10 (script).


26. President’s Blue Ribbon Commission on Defense Management, A Quest For Excellence: Final Report to the President by the President’s Blue Ribbon Commission on Defense Management, Jun 86, p. 38.


29. United States General Accounting Office Report to the Commander in Chief, U.S. Transportation Command, ADP Planning Challenges at the U.S. Transportation Command, Sep 88, pp. 4-5.


31. USCINCTRANS briefing to the JCS, subject: Progress to Establish the United States Transportation Command, Nov 88.

32. USCINCTRANS message to multiple addressees, subject: CINCTRANS Assumes Operational Command, 231500Z Sep 88.

33. USCINCTRANS message to the JCS, subject: Comments on DOD IG Report, Feb 88, 271700Z Apr 88, (FOUO).

34. USTRANSCOM Command Briefing (J5), slide 9.


36. Vessey, John W. Jr., General, memorandum for the Secretary of Defense, subject: Surface Transportation Problems and Solutions, 23 Nov 84, p. 2.


APPENDIX 1

ORGANIZATIONAL AND FUNCTIONAL DIAGRAMS
USTRANSCOM COMPONENT/SERVICE MISSIONS

SECDEF

USCINTRANSM

DN --- MSC --- DA --- MTMC --- DAF --- MAC

(COMPONENT MISSIONS)
- COMMON USER SHIPPING
  - DRY CARGO
  - TANKERS
  - PREPOSITIONED
- COMMON USER PORTS
- INTERMODAL MOVEMENTS
- CONUS LAND TRANSPORTATION
- STRATEGIC AIRLIFT
- CRAFT
- TACTICAL AIRLIFT (CONUS)
- RESCUE AND WEATHER

(SERVICE MISSIONS)
- NAVAL FLEET AUXILIARY
  (AMMO, OILERS, TUGS)
- SPECIAL MISSIONS
  (OCEANOGRAPHIC, CABLE LAYING, ETC.)
- MARITIME PREPOSITIONED SHIPS
- TRAFFIC MANAGEMENT
  (PERSONAL PROPERTY)
- TRANSPORTATION ENGINEERING AGENCY
- AEROMEDICAL EVACUATION
- SPECIAL AIRLIFT AND AUDIOVISUAL
- SPECIAL OPERATIONS

Figure 1-2