



**STRATEGY  
RESEARCH  
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**MOVEMENT CONTROL:  
LYNCH PIN TO STRATEGIC MOBILITY**

**BY**

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USAWC STRATEGY RESEARCH PROJECT

**Movement Control: Lynch Pin to Strategic Mobility**

by

Lieutenant Colonel Arthur L. Breithaupt

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## ABSTRACT

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The move to a power projection force places increased responsibility on transportation movements control to manage the timely flow of units and supplies across the strategic, operational and tactical spectrum of war.

A review of the current movement structure, doctrine, and historical experience identifies potential shortfalls in the current movements system that could restrict the operational tempo of forces.

The paper concludes with recommendations for improving movement control at the combatant and component command levels. It recommends establishment of a standing Joint Movement Center at the combatant command level to serve as the CINC's focal point for movements. Second, it recommends rolling up the movements, mode, and terminal operations functions under one transportation brigade.



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FIGURE 1





"Through movement control, time and space is most efficiently overcome. Without it confusion and inefficiency through loss of valuable time will inevitably result. The necessity for such control has greatly increased with the modern increase in size of the Armies and the consequent tremendously increased demands and movements, particularly in the back areas where all means of movement are generally utilized, often simultaneously." (RADM Eccles - Logistics in the National Defense, 1959)

Today's military is facing the daunting task of meeting an escalating operations tempo while simultaneously downsizing and modernizing the force. Our National Military Strategy (NMS) calls for a shift from a forward deployed force to a Continental United States (CONUS) based power projection force. We will become a strategic force ready to deploy for the full spectrum of operations, from Operations Other Than War (OOTW) to conducting two near simultaneous Major Regional Contingencies (MRC). This paper addresses the lack of Movement Control (MC) capability at the combatant and component command level to meet the current and future needs of the power projection force.<sup>1</sup>

Problems in MC have been apparent in every U.S. operation from WW II to our deployment to Bosnia. In addressing the issues surrounding MC I will look at the current MC structure at the combatant and component command level and our historical track record in executing the MC mission. With the current MC structure and historical background as reference points, I will offer some recommendations on how we can improve MC in the future.

However, before we get into the combatant command level let me highlight two important areas that I will not discuss in detail. Instead I will ask readers to assume that the ongoing developments in the respective areas will go as planned. The two areas are United States Transportation Command (USTRANSCOM) and development of Intransit Visibility (ITV) automation technology.

USTRANSCOM provides the movement control, port operations and mode operations at the strategic level from the port of embarkation to the port of debarkation. I do not want to cloud the issue of MC at the combatant command level by revisiting the progress made by USTRANSCOM in the past seven years in the area of strategic mobility. Today's mobility headlines are replete with stories of the Air Force C17, the Navy Large Medium Speed Ro-Ro (LMSR) ships and the development of the Global Transportation Network (GTN) to provide the lift and in-transit visibility (ITV) needed for power projection and sustainment. For the purposes of this paper I ask the reader to assume that our \$44 billion investment on new equipment and GTN development will arrive on schedule between the year 2001 and 2005.<sup>2</sup>

Second, I acknowledge that the lack of communications and automation was and is a major problem for MC. I ask the reader to assume that Force XXI initiatives coupled with GTN

will correct the communications and automation situation. The information and communications initiatives of FORCE XXI, coupled with GTN will overcome previous MC shortfalls in those areas.



## MOVEMENT CONTROL STRUCTURE

In discussing MC it is important to have an understanding of what MC is and its relationship to the operational success of any plan. To provide a common base to work from I will provide the definition of MC, identify the MC structure at the combatant and component command level, and demonstrate MC's linkage to the combatant commander's plan.

Joint doctrine defines MC as "the planning, routing, scheduling, and control of personnel and cargo movements over lines of communications; also an organization responsible for these functions."<sup>3</sup> By definition, MC sits at the apex of the transportation system, providing the command and control linkage between commanders' requirements and the distribution system. In fact, Joint Publication 4-01.3, Joint Techniques and Procedures for Movement Control, states that "Movement Control is the most critical component of the system (Defense Transportation system)."<sup>4</sup>

MC is unique in that it crosses the boundary between the logistics and operational spectrum. From a logistics perspective, MC is critical in managing the timely flow of supplies into and retrograde of items backout of the theater. MC synchronizes the flow of logistics by matching the flow of goods with the transportation assets

available to move the cargo. Operationally, MC is a critical element in the deployment and operational moves within the theater. The significance of these two areas is that operational moves are run by the J-3, while logistical moves come under the control of the J-4. MC normally falls under the J-4. The seam created by the operational versus logistical move must be accounted for in planning process for MC.

#### **COMBATANT COMMAND**

It is the critical seam between the strategic hand-off at the port of debarkation (POD) and the reception, staging, onward movement and integration (RSOI) process where our system traditionally breaks down. It is at the combatant command level where this critical transition between strategic to operational and operational to tactical level occurs. How prepared is the combatant command to deal with MC today?

Joint doctrine provides the CINC with several options for organizing MC at the combatant command level. The CINC can opt to establish either a Joint Transportation Board (JTB), Joint Movements Center (JMC), or both, to handle MC responsibilities at the combatant command level. He can also delegate MC to the Joint Task Force Commander (JTFC),

individual component commanders or designate the predominate component commander as responsible for MC.<sup>5</sup>

The JTB is made up of the J3, J4, J5, MC agencies and service representatives. When established it serves as the CINC's mechanism for establishing priorities, policies, resolution of potential conflicts and apportioning of transportation resources. It is the CINC's senior level policy and priority setter for subordinate units and interface with the Joint Chiefs of Staff (JCS) JTB. But the JTB doesn't perform all the missions associated with our definition of MC.<sup>6</sup>

The JMC, when established, "coordinates the employment of all means of transportation (including that provided by allies or host nation) to support the concept of operations. This coordination is accomplished through establishment of transportation policies within the assigned area of responsibility, consistent with relative urgency of need, port and terminal capabilities, transportation asset availability, and priorities set by a joint force commander."<sup>7</sup>

Joint Doctrine recommends assigning responsibility for theater MC to the JMC.<sup>8</sup> The JMC provides planning, apportioning, allocation, coordination, deconfliction and force tracking for the theater. Organized under the J-4, it has an Administrative section, Plans and Programs



Division, and an Operations Division. Within the Operations Division are the Airlift, Sealift, and Inland Surface Movements Branches. It provides the interface with USTRANSCOM, subordinate units, allies, host nation and commercial contractors essential to ensuring the transportation system provides smooth and continuous service.

If the JMC is the recommended structure why do CINC's generally wait until a crisis to establish the JMC? The chief reason is that the CINC must strip his own staff to man the JMC. The JMC exists in shell form, if at all, prior to the start of conflict. Further, there is no manning document that defines the numbers and types of people needed for the JMC. By design it performs the theater operational aspects of movement control, and when no JTB exists, the policy, priority, and apportioning role for the CINC. At present the US Central Command (CENTCOM) is developing a JMC. Its plans call for a 23 person structure that is stood up at the start of a crises.<sup>9</sup>

In summary, the combatant commander has several options for establishing MC in time of crisis. He can keep MC at his level using the JTB and/or JMC. Or, he can delegate MC to the Joint Task Force Commander (JTFC), individual component commanders or designate the predominate component commander as responsible for movement control. Under current joint doctrine, MC at the combatant command

level consists of an adhoc organization that comes together at the height of crisis. It then must develop and work the intricate business of a deployment and simultaneous sustainment operations on a joint and multinational front. Creating an adhoc MC organization at the start of a crises is the equivalent of creating a new division staff to plan and execute a battle that is already underway. A Combatant Commander would never intentionally plan a battle with a untrained division staff. But in the case of MC, that is precisely the way joint doctrine has designed the process at the combatant command level.

#### **COMPONENT COMMANDS**

Each of the component commands is responsible for its own MC. Within the component commands only the Marines and the Army have a specified structure for movements control. The Air Force and Navy incorporate MC into their logistics staff. The Marines have a Logistics Movement Control Center (LMCC) at the Marine Ground-Air Task Force (MAGTAF) level and a Force Movement Control Center (FMCC) at the Marine Expeditionary Force (MEF) level.<sup>10</sup> The LMCC is a small control element organic to the MAGTAF. The FMCC is an adhoc organization brought together when a MEF deploys to a theater of operation. Colonel Tom Shea notes in his research, that the LMCC is one of the few sources that

offers the joint commander the opportunity to draw from an existing structure to augment the CINC's JMC.<sup>11</sup>

The preponderance of DoD force structure dedicated to MC is located within the Army. The Army MC structure consists of a Theater Army Movement Control Agency (TAMCA) with subordinate movement control battalions (MCB) at the theater level, a Movement Control Center (MCC) at the corps level, and the Division Transportation Officer (DFO) and Movement Control Officer (MCO) at the division level. The army units germane to this discussion are the TAMCA and MCB.

The TAMCA has a well defined organizational structure that is embedded in our Tables of Organization and Equipment (TOE). The mission of the TAMCA is to "provide movement management services and highway traffic regulation and to coordinate for personnel and material movements into, within, and out of the theater."<sup>12</sup> Incumbent in the TAMCA's duties is a responsibility for working with host nations and allied nations on movement procedures, mutual support and coordinating access to in-country facilities and commercial assets. The TAMCA has the mission of serving as the combatant command MC element when the Army is designated by the CINC to perform the mission.

The TAMCA is organized with the following divisions:  
Plans and Programs, Freight Movement, Highway Traffic,

Data Processing and Communications Division, Passenger Movement Division, Special Movement and Movement Information. Its structure is designed to provide the theater transportation planning capability, ITV, and control for unit and logistics traffic through the Communications Zone (COMMZ).<sup>13</sup>

In addition to its headquarters the TAMCA normally has MCBs assigned to provide area coverage. These battalions serve as the direct point of contact for units within the area of operation, the transportation mode operators, and commercial vendor support. The movement control teams (MCT) assigned to the MCBs, provide the eyes and ears of the transportation system at the user level. The MCTs work directly with mode operators, using units and commercial vendors. The MCTs provide services based on the priorities and apportionment decisions given by the TAMCA through the MCBs.

The size of the Army's MC structure makes it the logical choice for providing MC support at the component command level for all the services. As in the case of the JMC, it would seem logical to designate the Army as the lead component for MC on a permanent basis. This would preclude confusion among the services during an actual crisis on who was providing the support.

## HISTORICAL PERSPECTIVE

"Command action is made possible by movement control at all levels...The more efficient and responsive transportation and movement control system the lower can be the levels of overseas supplies necessary to support combat operations." (RADM Eccles)<sup>14</sup>

How do we link MC in a meaningful manner to the mission of the combatant commander? Success under our current force and the Force XXI concept is contingent upon the ability to dictate the tempo of any operation. We intend to operate inside the enemy's decision cycle.<sup>15</sup>

Operating inside the enemy's decision cycle implies a need for informationally aware, agile, flexible, and mobile forces. Admiral Eccles, in his book Logistics in the National Defense, points out that logistics is an essential element of operational momentum or, in Force XXI vernacular, tempo. He notes that logistics momentum is a function of mass and mobility. He goes on to define logistic mass not as sheer bulk, but the "hard core" essentials as represented in "true economy" of supply. True economy is defined as "the careful planning and build up of supply levels to provide those supplies and facilities which are essential to firepower and movement; and the concomitant ruthless elimination of non-essentials".<sup>16</sup> Eccles goes on to state that MC is the commanders means of controlling logistics momentum. MC is responsible for

ensuring we don't allow the distribution system, at any point on the strategic to tactical continuum, to overburden the system with supplies or forces that hinder the commander's ability to operate.<sup>17</sup> Eccles is essentially laying down what we call "just in time logistics" today. MC is the tool essential for managing the flow of supplies and units through the transportation system, consistent with the commander's priorities, and within the unit reception capabilities.

Perhaps the best way to view MC is to treat the distribution system as a standard transmission. High gear is represented by USTRANSCOM, the high speed interface between the CONUS sustainment base and the theater (strategic to operational level). At the theater level we have a series of gears that represent the distribution systems of the respective services to their deployed units. In order to adjust USTRANSCOM's high speed gear to mesh cleanly with the services' system, a synchronizer is needed. The synchronizer is MC. Without MC the gears fail to mesh cleanly, creating a friction that damages or locks up the distribution flow. Friction translates to supplies and/or units at the wrong time and place. The Russian strategist Svechin spoke to the importance of logistics at the strategic and operational level. Svechin states

"Operational art should place troops in the best tactical position. Strategic art must place our operations in the best possible communications vis-a-vis the enemy."<sup>18</sup>

Svechin is making reference to positioning and provisioning the force. He notes that having quality forces without support did not add power to the position, but rather detracted power because of the unsupported or excess elements consumption of scarce resources. It is MC that synchronizes the process to ensure strategically and operationally we are positioned for success. In every war we have fought since WW II, control of the distribution system has frustrated commanders, forcing them to adapt their operational tempo to the distribution system. And in every war we have fought, we never established a central MC agency prior to the commencement of hostilities.

In WW II our breakout of Normandy was slowed and eventually stopped because supplies could not reach the advancing forces. Eccles writes "Thus when the breakout from Normandy came and a tactical success was scored, full exploitation could not be achieved for lack of sufficient transportation...In September, 1944 the allied armies halted their advance toward Germany because of lack of logistical support at the front, although there were ample supplies ashore in Normandy Base area, 300 miles away."<sup>19</sup> Clearly,

the implication is that you either control logistics distribution or it will control you. At Normandy we failed to heed Svechin's advice.

General Williston B. Palmer writes much the same about his experience in WW II and Korea. Palmer writes "(WW II) supplies were landed in such an excess of tonnage over the capabilities of the local logistics organization to cope with it, that pretty soon many things could not be found at all. The next thing, the Zone of the Interior had to rush out a shipload of something which was right there in the theater - and always at a time when ships were worth their weight in gold. Soon the war moved on and supplies were left behind, which are still being gathered up and sorted out to this day (1953). Two years after the Korean War started, I visited Pusan. They had been working hard, and by the time they had sorted 75 percent of the supply tonnage on hand there. Twenty-five percent of the tonnage on hand was not yet on stock record and locator cards; they just did not know what it was or where it was."<sup>20</sup>

Interestingly enough we started Vietnam with a reasonable system in place. General Fuson notes (prior to 1964) "The key to smooth operation was matched capabilities- both the port and the customer."<sup>21</sup> However with the surge in units and support for Vietnam starting in 1964 the system



breaks down. Ships are backlogged for months waiting offload and the entire distribution system became backlogged. General Heiser notes that "the zeal and energy and money that went into the effort to equip and supply U.S. forces in Vietnam generated mountainous new procurements, choked supply lines, overburdened transportation systems, and, for a time, caused complete loss of control at depots in Vietnam."<sup>22</sup> So why did it happen? General Fuson notes on his return to Vietnam in 1966 that we failed to follow basic transportation principles i.e. we are not matching the ports capabilities to receive and ship with the customer's capability to receive.

"Up to this period in Vietnam, the Transportation Corp's principles of movement planning and movement control did not govern shipments to or within the country. Each Service requested and shipped its own equipment and supplies into Vietnam, as did the AID and other agencies. The MACV had established the Traffic Management Agency (TMA) to control movement, but it did not become effective until early 1967.

The existing procedures and organizations had four deficiencies at the outset. First, a coordinated movement organization did not exist in the combat zone. Second, no agency had responsibility for providing CINCPAC with logistics information, for advising CONUS of immediate requirements of CINCPAC and COMUSMACV and component commanders, or projecting the cargo input to Vietnam, to CINCPAC and MACV headquarters. Third, procedures had not been established to coordinate inter-and/or intra-theater shipping with its ability to be received in Vietnam. Lastly, considerable cargo was moving to Vietnam outside of the Defense Transportation System and without the knowledge of any DOD movement control agency"<sup>23</sup>

Our Vietnam experience demonstrates the need for a JMC to enforce the commander's priorities and provide visibility over what is flowing in the distribution system. It further highlights the need to link the JMC to the component command movement system to insure effective coordination. Last, it

clearly demonstrates the need to look at the distribution system in total. Failure to match the distribution flow to the strategic, operational and tactical distribution unit capabilities results in transportation backlogs, lost cargo and lost combat power. As we move towards FORCE XXI and Joint Vision 2010 with focused logistics and a smaller logistics element, the failure of MC could lead to unit and cargo backlogs that rob the combat commander of his mobility.

Despite our past experience we went on to perform in much the same manner in Desert Shield. The U.S. Central Command (CENTCOM) did establish a Joint Movements Center (JMC) early in the deployment for Desert Shield/Storm. CENTCOM stood up the JMC with eleven people from its Mobility Division. This eleven member team was given responsibility "to monitor and coordinate deployment of U.S. forces, assist in coordinating aircraft beddowns and initiate theater transportation networks."<sup>24</sup>

The CENTCOM JMC experienced limited success. Menarchik, in his book Powerlift-Getting to Desert Storm, spends considerable time discussing the same issues of unit and logistics flow beyond the theater logistic units' capability to handle.<sup>25</sup> He quotes General Kross (J3/4 USTRANSCOM), in talking about the deployment and sustainment

flow, as stating the "U.S. military created a push system that tried to push too much into Saudi Arabia too fast, and almost splintered it. The idea was to schedule lift to match reception capability in Saudi Arabia. MAC (Military Airlift Command) went from 100 to 115 outloads at 35 locations in the U.S. to 3 offload sites in Saudi Arabia."<sup>26</sup> Fortunately for us the war was short and the shipment of supplies fell off quickly.

From the VII Corps perspective there was a lack of synchronization between the airlift and sealift flow resulting in VII Corps personnel arriving in theater several days ahead of their equipment. The early arrival of VII Corps soldiers added to the burden of the already stressed support system in theater.<sup>27</sup>

As noted in my earlier reference to Svechin, we put forces in theater that were not capable of performing a mission, placed a drain on the support structure and created a drag for the combatant commander had the enemy decided to engage CENTCOM forces. This is precisely the problem that raises the question of who the JMC should work for. Should the JMC be subordinate to the J-3 in order to be closer to the deployment process? Or should the JMC come under the J-4? In Desert Shield decisions were made on timing of units that were impossible for the system to make.

USTRANSCOM responded by meeting the timelines as quickly as possible. USTRANSCOM's action contributed to the backlog at the PODs in country. This backlog, further contributed to RSOI problem in clearing the ports.

Instrumental in shaping the backlog at the PODs was the decision, by General Schwarzkopf, to delay deployment of logistics units in order to get additional combat forces on the ground. Menarchik points out that "While in-theater logistics worked well under the circumstances, the quality of the reception of the strategic transportation suffered from clogged pipe lines."<sup>28</sup> As in Vietnam we failed to match transportation capabilities with port and customer reception capabilities. Lack of material handling equipment at ports, uncoordinated movements, and insufficient reception capability slowed the deployment process and created cargo backlogs. Visibility over the intra-theater movement was further hampered by the failure to deploy the TAMCA. The 318th Movement Control Agency (MCA) didn't arrive in theater until late October 1990, at the end of the Desert Shield deployment phase.

Rather than being employed under the J-4, ARCENT the 318th MCA was placed under the Assistant Chief of Staff for Transportation (ACS TRANS), 22d Support Command (SUPCOM). This took the TAMCA oversight mission away and placed it

under the direct control of the SUPCOM. The ASC Trans now had the 7th Transportation Group, 32d Transportation Group and the 318th MCA all working for him. Rather than sticking to the doctrinal approach of the 318th MCA passing all tasking to the operational groups a dual tasking link was established. Both the ACS Trans and the 318th MCA were tasking the 7th and 32d Transportation Groups.<sup>29</sup>

The situation was further complicated by the assignment of some MCTs to mode operators as opposed to the MCB of the 318th MCA. This detracted from the 318th MCA's ability to control movements. Doctrinally we failed to employ the MCA and subordinate elements correctly during Desert Shield/Storm. After action reports indicate movements problems were based on a lack of training and knowledge in employing MC on the part of the movements community and unit commanders as well. The recommendations centered on training people on the role of movements control in the deployment process and better preparing units for deployment.<sup>30</sup> While I concur with the need for additional training of MC units and unit movement officers, the real issue lies at a much higher level. Until senior combat leaders understand that MC units, along with units making up the RSOI element, are an integral part of the teeth of the force, we will continue to muddle through deployments and sustainment operations.

The decision to not have a standing JMC, until a crisis, robbed CENTCOM of a trained element to perform movement control and transportation management. Once again we established an adhoc organization to synchronize movements at the strategic to operational interchange points. Second, delaying the RSOI elements needed to support the transition of combat forces from the reception area to their assembly areas assured delays at the Air PODs. By delaying the deployment of the 318th MCA we forced the development of an adhoc system, under the 22d SUPCOM ACS Trans, to monitor the flow. Because we lacked transportation units we took MCTs and used them to develop truck battalion headquarters, further stripping the movements system. Lack of the support structure, visibility of assets, and customer requirements complicated movement control operations.

Much of the blame for our historical problems in deployment and sustainment is tied to the issues of in-transit visibility (ITV), cargo documentation and long order-ship times. But undergirding all these problems are three root causes. First, as noted we never establish a central movements control agency until after the conflict starts. Second, we seldom if ever identify what is to be moved in terms of units and equipment prior to the start of deployment. And third, we generally determine that combat

elements, to the exclusion of logistics units, need to deploy first. It is the consistent failure to address these three issues prior to deployment, that ensures we will repeat the mistakes of the past.

Establishment of a central MC organization in peacetime would help alleviate the undergirding issues. The standing JMC creates an advocate in the planning process for MC and logistics units needed to support the RSOI and deployment process. It assesses the theater distribution system as a whole to synchronize movements with transportation and reception capabilities of units.

## SUMMARY

I have defined the role of MC as central to the distribution and deployment process. MC provides the control link for the commander to the transportation system, enabling him to synchronize it to support his operational tempo.

I have identified the current structure for MC at the combatant and component command level. The doctrine and force structure for the CINC's key element in synchronizing the distribution system doesn't exist or exists in shell form until time of crisis. MC, at the CINC's level, comes together at the height of crisis to develop and work the intricate business of a deployment and simultaneous sustainment operations on a joint and multinational front. At the theater level MC units arrive late or are mal-assigned to perform their roles in the distribution system.

From a historical perspective I have shown that we traditionally do not establish central MC prior to the start of a crisis. Further, that the lack of MC control contributes to an overloading and consequent slow down of the distribution system. The slow down of the distribution system in turn forces the combatant commander to adjust operational tempo to the pace of logistics.





## RECOMMENDATIONS

What are the possible options for addressing the organizational shortfall of MC at the combatant command and Army Component Command level? I have several recommendations that I believe will improve MC's role in force deployment and sustainment.

At the combatant command level the fixes are straight forward, though not necessarily easy. The fixes involve both doctrine and force structure issues.

Doctrinally, we need to decide what it is that we want MC control to do at the combatant command level. Failure to fix doctrine at this level will only serve to muddy the waters below the combatant command level.

First doctrine needs to define the JMC as the sole organization responsible for MC at the combatant command level. It is unrealistic to allow several possible organizations for MC at the Joint level. Once you fix the type organization you can define the roles it will play, how it will be organized, and build the doctrine to support it. This doctrine in turn serves as the base line for all services in understanding and implementing MC.

Second, I would expect joint doctrine to specify the JMC force development and tracking responsibilities along with distribution responsibilities in relationship to the J-

3. It is essential that the JMC serve as the watch dog for both deployment and sustainment movements for the force. Control of the JMC should remain with the J-4. However an element of the JMC should be collocated with the J-3 to facilitate coordination of MC for deployments and operational movements.

Third, doctrine needs to spell out HN coordination and contracting responsibilities of the JMC. As we move towards a smaller force we will become more reliant on commercial contracting for logistical support to reduce the size of the deploying force. The role of the JMC in identifying commercial transportation vendors and/or HN transportation support will have a direct impact on the size of the support force required to deploy.

Fourth, doctrine needs to clearly articulate the operational mission of the JMC in support of force tracking for deployment and operational moves. It is critical that the CINC has a element that is dedicated to the force tracking function to identify choke points that will impact his operational tempo. A portion of the JMC needs to be closely linked with the J-3 in order to adjust the flow to meet the commander's objectives. Closely linked doesn't mean that the JMC should work for the J-3 as opposed to the J-4. The JMC should be allowed to stop the flow of units and or sustainment at locations within the transportation

system to preclude creating log jams. The JMC should be the J-4's advocate to ensure the RSOI element of the deployment includes the sustainment units essential to supporting the combat structure. The JMC needs to be identified as the validator for the operational transportation feasibility of the J-3 plans, just as USTRANSCOM validates the strategic feasibility of plans.

The next step in the process is physically establishing the JMC in each operational theater. The reasons are obvious. You can't develop a professional staff without setting it up, training it, and running current operations.

The standing JMC offers significant advantages for the deployment process. It provides a planning group that can address in detail the reception capabilities and shortfall for a theater. Coordination on host nation support, country clearance procedures, highway regulation and commercial transportation can all be addressed with allies and members of the multi-national force prior to crisis.

Perhaps the most important advantage of a standing JMC is the ability to work with subordinate commands and build the vertical and horizontal communication links needed to make the MC system function. It is this information flow between the JMC, USTRANSCOM, supported units, intermodal hubs, and distribution centers that allows the JMC to

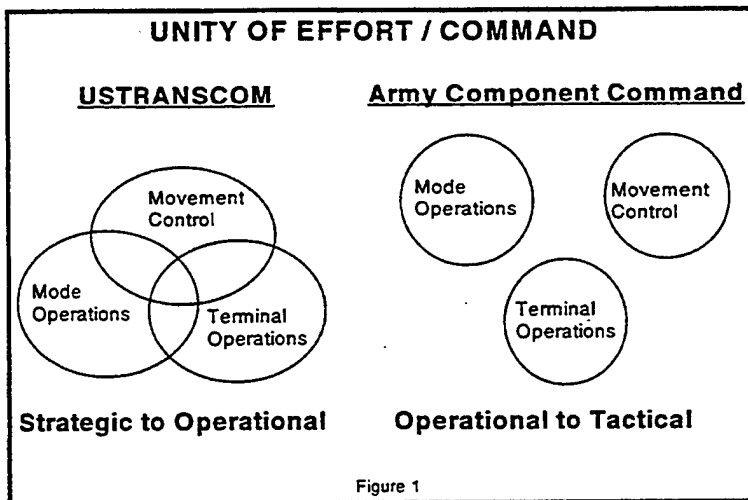
provide the CINC with solid recommendations for action. This information flow is best established under peacetime conditions.

The standing JMC can serve as a validator in the Emergency Deployment Readiness Exercises (EDRE) for forces apportioned to CINCs. This serves to keep the JMC and component commands current with joint doctrine and the deployment process. Further it solidifies the relationship of the JMC in the deployment process between the J-3, USTRANSCOM, and the deploying force.

At the army component command (ACC) level we need to re-think MC and the role of transportation units in general. To make MC effective at the theater level requires fighting the tides to move the TAMCA under the SUPCOM. It means changing how we view MC below the TAMCA and who owns it. It means restructuring the way we look at army operational transportation units in general.

Figure one represents the current state of affairs for transportation at the strategic and operational level. Like the trend in civilian industry, USTRANSCOM has consolidated responsibility for the strategic level under its control. USTRANSCOM's subordinate commands, Military Traffic Management Command (MTMC), Military Sealift Command (MSC), and Air Mobility Command (AMC) all perform the three primary functions of transportation: movements control, mode

operations, and terminal operations. USTRANSCOM provides the centralized control (transportation management) and its subordinate elements provide decentralized execution. The combatant commander turns to one organization, USTRANSCOM, for his strategic transportation support.



At the ACC level transportation lacks centralized control and decentralized execution. Under our current force structure we view MC, mode operations and terminal operations as separate functions.<sup>31</sup> We design separate movements, mode, and terminal battalions to perform the mission. This defies the logic of current commercial and military doctrine. Where is the unity of command and effort in this process? Colonel Donald Woodsworth (USAF), writing on ITV, points out that successful commercial operators develop closed loop systems where they dictate control from input to output both for information requirements and

operations. "The goal is to move things so quickly and reliably that shippers will not even feel the need to track shipment status."<sup>32</sup>

I believe the solution is to create a single organization that the commander of the SUPCOM or ACC can turn to and direct action. That organization must be equipped with the tools to accomplish the task: MC to provide visibility of requirements, mode operations to resource requirements and terminal operations to conduct inter-modal operations. When we assign a transportation organization to a force it must have the complete package and serve as an extension of the overall transportation system.

The first step in fixing the structure is eliminating the TAMCA and transferring its responsibilities to a separate transportation brigade that would serve as the USTRANSCOM equivalent at the Operational level. This eliminates the diffusion of limited transportation expertise across the old three tiered command structure, creating a single transportation manager.

The transportation brigade could be aligned under the combatant command, ACC, or SUPCOM Commander. If aligned under the ACC or SUPCOM the brigade would serve as the single coordination point for the JMC and ACC subordinate commands for transportation requirements. If the brigade

worked for the combatant command level it could serve as the theater transportation command to support each of the component commands. It also stands to reason that at the theater level the brigade could be a joint organization as opposed to all army.

The second step would be to eliminate MCBs, terminal battalions, and mode operating battalions. Under the brigade I would establish multi-functional battalions capable of performing transportation MC, mode operations, and terminal operations. The multi-functional battalion would become the basic building block for transportation support.

The structural change would allow transportation commanders to leverage the improvements in ITV and communications to support units. Combining the functional areas of transportation under one unit forces the commander to account for all three. The natural outcome is a transportation commander who must concern himself with receiving, clearing and throughput of deploying units and sustainment supplies. The second benefit is the development of transportation officers who understand the entire spectrum of transportation from strategic down to tactical level. And the key benefit is that the supported organization, at each level, gets a transportation unit capable of addressing all their unit's transportation needs.



## Conclusions

The shortfalls in MC demonstrated in this paper are major stumbling blocks for our power projection force. Army Force XXI and Joint Vision 2010 demand more of the movements community. Both concepts make it clear that the force structure of the future will be smaller, highly mobile, informationally aware, lethal, and capable of full spectrum operations. We will operate as a joint force generally in conjunction with a multinational coalition. Emphasis from the logistics perspective is on the RSOI process and leveraging automation, where possible to reduce the logistics tail. It creates a "new CSS (combat service support) system necessitating weaving of the current strategic, operational and tactical levels of logistics into a seamless continuum."<sup>33</sup>

If we are to attain the strategic mobility and agility called for in Joint Vision 2010 the current situation in MC has to be fixed. We can't afford a JMC that meets for the first time as the crisis is evolving. Likewise, we can't afford the lack of centralized transportation at the component command level.

To meet the future transportation needs of the force requires establishing the JMC at the combatant command level now. The strategic and subsequent operational employment of

forces necessitates a team that understands the commander's intent and priority in flowing the force. To complement the JMC a new transportation brigade needs to be established with all the functional transportation elements needed to manage the transportation system.



## ENDNOTES

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- <sup>3</sup> Joint Chiefs of Staff, Joint Tactics Techniques and Procedures for Movement Control, Joint Publication 4-01.3 (Washington: Joint Chiefs of Staff, 21 June 1996), pGL-4.
- <sup>4</sup> Ibid., pV.
- <sup>5</sup> Ibid., pIII-1.
- <sup>6</sup> Ibid., pIII-3.
- <sup>7</sup> Ibid., pGL-4.
- <sup>8</sup> Ibid., pIII-1.
- <sup>9</sup> Chief, Mobility Division, COL Dave Randel, Joint Movement Center", concept briefing, Tampa Florida, 17 November, 1996.
- <sup>10</sup> Shea, Thomas M., Role, Organization and Functions of Joint Movement Control in Reception, Staging, Onward Movement and Integration, (U.S. Army War College, Carlisle Pa, 1996):p13.
- <sup>11</sup> Ibid., p13.
- <sup>12</sup> Department of the Army, Movement Control In A Theater of Operations, Field Manual 55-10 (Headquarters Department of the Army, Washington, DC, 8 December 1992), p3-2.
- <sup>13</sup> Ibid. p3-5.
- <sup>14</sup> Henry E. Eccles, (Rear Admiral), Logistics in the National Defense, (The Stackpole Company, Harrisburg, Pa, 1959), p179.
- <sup>15</sup> Department of the Army, Force XXI Operations, TRADOC Pamphlet 525-5 (Headquarters Department of the Army, Washington, DC, 1 August 1994), p 1-4.
- <sup>16</sup> Eccles, p124.
- <sup>17</sup> Ibid., p124-127.
- <sup>18</sup> Aleksandr Andreevich Svechin, Strategy, (East View Publications Inc., 12215 North 28th Place, Minneapolis, Minnesota, 1927), p260.
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- <sup>22</sup> Joseph M. Heiser, A Soldiers Supporting Soldiers, (Washington: Center For Military History, United States Army), 1991), p150.
- <sup>23</sup> Fuson, p113.
- <sup>24</sup> Eanes, John T. (COL), "USCENTCOM as Focal Point of Mobility Effort", Defense Transportation Journal vol. 47, no. 3 (June 1991): p72.

<sup>25</sup> Douglas Menarchik, Powerlift-Getting to Desert Storm, (Praeger Publishers, 88 Post Road West, Westport, CT, 1993), p43-46, 73-81.

<sup>26</sup> Menarchik, p72.

<sup>27</sup> 1st Infantry Division (FWD), VII Corps Debarkation and Onward Movement (Germany: 1st Infantry Division (FWD), 1991), B-3-1.

<sup>28</sup> Menarchik, p 43.

<sup>29</sup> 318th Movement Control Agency, Desert Shield After Action Report (New York: 318th Movement Control Agency, 1991), p10.

<sup>30</sup> U. S. Army Transportation School, Transportation/Distribution Lessons Learned, (Ft Eustis: Army Transportation School, May 1991), p2.

<sup>31</sup> U.S. Department of the Army, Transportation Operations, Army Field Manual 55-1, (Washington: U.S. Department of the Army , 3 October 1995), p3-1.

<sup>32</sup> Woodsworth, Donald A. Jr., "Air Transportation In-Transit Visibility", Defense Transportation Journal, vol. 49, no. 5 (September-October, 1993), p17.

<sup>33</sup> TRADOC Pamphlet 525-5, p 3-14.

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