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Army Logistics: Reshaped for the Future

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ABSTRACT

Directed by the President of the United State, the Department of Defense established the Defense Management Report process to improve the defense procurement process and management of the Department. Through the process, initiatives and savings goals for the Services were established to improve overall management, particularly in logistics areas.

The recommended changes and Army plans for implementation affect nearly every facet of Army Logistics. As a result of the maintenance, supply and transportation initiatives directed the Army established four themes to guide the planning. (1) Consolidate where it makes sense; (2) reduce overhead; (3) reorient the support base toward business practices; and (4) restructure the Army logistics system for the future.

This report describes the major changes to the maintenance, supply and transportation systems as currently planned and assesses the impact on Army commands. The plan is far reaching in scope and scheduled for implementation between 1991 and 1997. Although in the early stages of development and implementation the changes portend significant change for the near future. Commanders and logisticians throughout the Army must become familiar with these plans to help guide the effort and prevent Army readiness degradation. When fully implemented the Army Logistics System will be 'reshaped' to meet the challenges of the 21st century.

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INTRODUCTION

Army Logistics is currently undergoing the most significant and far-reaching management changes that have occurred in over thirty years. This carries even greater significance and impact when you consider the additional burden placed on the logistic system, at the same time, by reshaping of the Army, accommodation of Desert Storm reconstitution, and the never ending challenge of maintaining force readiness.

A review of the most significant maintenance, supply and transportation changes that have been directed by the Department of Defense, reveal that a new business sense as well as changes in operational behavior, will be required throughout the Army. Few people realize the collective impact of the management initiatives on future Army logistics and readiness. This is primarily due to the high number of separate initiatives and the necessity to separate them for implementation, savings tracking and reporting purposes. Surprisingly little has been written to explain these changes to the field, making it more difficult for commanders and logisticians to stay informed.

This paper discusses the major changes to the Army maintenance, supply and transportation systems that are planned to be implemented by 1997 to achieve Department of Defense directed savings through the Defense Management Report process. It also provides an assessment of the total impact on Army Logistics and unit operations based on current plans and projections.

BACKGROUND

Before looking at specifics it is important to understand what brought about the change. President Bush in his February, 1989 address to Congress charged the Secretary of Defense with undertaking a review of defense management practices. Further, the Secretary was asked to develop a plan for implementing the Packard Commission recommendations, the Goldwater-Nichols Defense Reorganization Act of 1986, to improve the defense acquisition process, and to focus on managing the Department of Defense and resources more efficiently and effectively. Secretary of Defense, Dick Cheney, new in the job, took the directive and the challenge seriously. (1)

In July, 1989 Secretary Cheney responded to the President with the first Defense Management Report. The report highlighted six broad goals for the first generation of Defense Management Report actions, referred to as DMR-1. These goals include:

- * Reduce overhead cost while maintaining military strength
- * Enhance weapon systems program performance
- * Reinvigorate the planning and budgeting process
- * Reduce micromanagement
- * Strengthen the defense industrial base
- * Improve observance of ethical standards in government and industry.

The real strength of this program is that it was created by

the Department of Defense. This means the people who created it will have to execute the program changes. The changes are not quick fixes to appease the President, but are significant fundamental changes to defense management bringing a business sense to the future. (2)

So far, two DoD Management Reports have been conducted. DMR-1 initially covered the period 1991 to 1995 and projected savings of \$39 billion. This year, the savings were extended to 1997 bringing DMR-1 savings to over \$57 billion. DMR-2 covers additional initiatives that will yield \$13 billion in savings during the period 1992 to 1997. This brings total projected savings from management initiatives, over the period 1991 to 1997, to over \$70 billion, including manpower savings through reduction of 50,000 civilian and 44,000 military spaces. (3) While this seems like significant savings, DMR initiatives will only account for 17 percent of the \$410 billion savings DoD must achieve over the 1991 - 1997 time period as agreed to in the budget summit. (4)

Where does the Army stand in this process? According to the Army Management Report Coordination Office (AMRCO), the Army savings initiatives include four themes. (1) Consolidate where it makes sense; (2) reduce overhead; (3) reorient the support base toward business practices and (4) restructure the Army logistic systems for the future. Using these themes, the Army projects DMR-1 savings of \$14.6 billion from 1991 to 1997 and DMR-2 savings of \$8.9 billion from 1992 to 1997. These savings include space reductions of 7,791 military and 21,896 civilians. These spaces

should not be confused with total force draw down reductions that will further reduce manpower spaces. (5)

The bottom line of the Defense Management Report Process can be summed up in four ways. First, we must change our behavior to one of 'fix before buy' to achieve savings without reducing capability. Second, the initiatives must be implemented. Third, and very key, there are no dollars available to reimburse savings the Army fails to achieve through management initiatives. In other words, the dollars are permanently extracted from programs once the initiative is established. And last, audit agencies are carefully tracking dollar and space savings. These points establish the climate and the incentive for success.

The Army Plan

As previously indicated in the DoD and Army themes, one of the central thrusts in the Defense Management Report Initiatives to date has been in logistics. The Army Deputy Chief of Staff for Logistics (DCSLOG), Lieutenant General Jimmy D. Ross, (recently elevated to General and appointed to Command the Army Material Command) has led the effort and summed it up by saying:

The current political and economic climates are shaping the Army of the 21st century and, in turn, our logistic support concepts. Reducing the size of the national debt and the Federal budget is of highest priority to the President and the Congress. The need for judicious use of scarce resources will therefore have a major influence on the structure of the Army's future logistics system. Other factors influencing the logistics system include emerging battle doctrine, future force structures, weapon and

support technologies and changes mandated by Defense Management Review decisions. (6)

In 1989, LTG Ross established the Strategic Logistics Agency (SLA), reporting directly to the DCSLOG of the Army and presented the Secretary of the Army with his plan to modernize logistics operations and improve logistics integration while dramatically reducing operating costs. (7) The Strategic Logistics Agency is not handling all of the logistics DMR initiatives. Their main thrust is to "explore new concepts for supporting AirLand Battle - Future doctrine, integrate wholesale and retail logistics into a 'seamless' system, update technology, and modernize logistics processes for both peacetime and war." (8)

Logistics DMR initiatives are not being implemented by a single organization such as SLA, therefore it is difficult for the commander and logistician in the field to keep abreast of all of the logistics system changes and how their unit readiness may be impacted. It is my purpose for the remainder of this paper to describe the major maintenance, supply and transportation management initiatives and assess their impact on the unit.

MAINTENANCE DMR INITIATIVES

There are two Defense Management Review Decisions (DMRD) that primarily affect maintenance. The first of these is DMRD 904, Stock Funding of Depot Level Repairables (DLR) and the second is DMRD 908, Consolidating Depot Maintenance. Together they will have significant positive impact on Army Maintenance in the near term. Because of the complexity I will discuss them separately.

Stock Funding of Depot Level Repairables

This is one of the most complex logistics initiatives. It requires converting the method of financing of all secondary items. These items have been funded by the Procurement Appropriation in the past and are now being converted to finance by the Army Stock Fund. This will have major impact on all units and customers because these depot level repairables will no longer be 'free issue'. These items will now have to be purchased by the unit from the Army Stock Fund, in the same way they are now purchasing other repair parts and consumables. In addition, DMRD 901, Reducing Supply Costs, further directed that all costs for, or directly related to stock funded items, be included in the price paid by customers. This means the unit will be paying for the item plus a surcharge, to be included in the price for other costs including supply system personnel, transportation, storage, and other associated costs. (9) DMRD 901 will be further discussed later under Supply initiatives.

A clear understanding of terminology is necessary to avoid confusion. Most of us are familiar with a repairable class IX spare part, that can be removed from an end item and economically repaired to a serviceable condition. A field level-repairable is a class IX secondary item that is repaired at the direct support or general support maintenance level. Field-level repairable secondary items do not require a depot-level decision to wash them out of the logistics system as nonrepairable. Units will continue to purchase these items when needed as in the past. A depot-level repairable (DLR) is a secondary item, also referred to as a spare, having a final repair level at the depot or decision to wash-out of the supply system as nonrepairable at the depot level. Examples of DLR's are components and major assemblies such as engines, transmissions, periscopes, printed circuit boards and modules. (10) Spares or DLR's are also of three types; initial, war reserve and replenishment. Initial spares issued to the unit with new equipment will continue to be 'free issue'. The Program Manager, however will have to purchase them from the Army Stock Fund using his PA2 procurement funds. War Reserve spares held in sustainment stocks will be purchased by the Stock Fund using money appropriated in the Army Stock Fund War Reserve appropriation. War Reserve spares are, and will continue to be issued to the customer at no cost. The final category, replenishment spares in support of day-to-day training and operations, will no longer be 'free issue'. Units and other customers will buy them using their Operations and Maintenance Army (OMA), operations and training funds. Depot Level

Reparable, secondary item replenishment spares, are the primary focus of this initiative because it will extend the cost of readiness from the national to the unit level.

Familiarization with the Army Stock Fund (ASF) is also required to understand this initiative. The ASF is a revolving, working capital fund designed to finance the supply pipelines between the suppliers and the ultimate user. The ASF operates like a commercial business, purchasing supplies from vendors using stock fund cash and selling those supplies to Army customers. Obligation Authority (OA) given by the Office of Management and Budget (OMB) to the ASF allows the Army to order supplies and to pay for them with stock fund cash. (11) The ASF has been used for several years to purchase consumable and field-level reparable, fuels, clothing and textiles, medical and dental supplies, food for commissary resale, general supplies and common hardware.

The Stock Funding of Depot Level Reparables (SFDLR) is not new. The Navy tested a similar program in the 1980's using shipboard DLR's and with success. They also established an unserviceable DLR return, 'carcass' tracking system to control the movement of unserviceables from customers to the wholesale supply level. After overcoming fears that units would strip serviceable components from the unserviceable returns, the Navy began stock funding of aviation DLR's in 1985. The Navy reported increases in material availability of 23 percent and unserviceable DLR returns of 12 percent. They also reduced back-orders by 13 percent, customer requirements by 10 percent and a 25 percent reduction in

customer waiting time. (12) The 12 percent increase in unserviceable returns infers more requirements were being satisfied by repairs and fewer by procurements. The 10 percent reduction in requirements reflects that only items that were truly needed were being ordered and that more repairs were being performed at lower levels. These two factors result in an overall reduction in inventories. (13)

With the Navy's success, DMRD 904, SFDLR charged the Army to implement the program with a goal of reducing demand for DLR's by 10 percent. DoD also removed the 10 percent savings per year from the Army budget from 1992 to 1995 to give added incentive to accomplish the total savings of 651 million dollars. Because of the complexity of change to supply, transportation and financial systems, the Strategic Logistics Agency (SLA) has been given the charter to prepare and implement the SFDLR Management Plan. The logistics system is not being redesigned, in line with OSD guidance to minimize changes. Most of the changes are to automated systems that will be transparent to the user, yet gain efficiency by executing the DLR program in a business-like manner.

"Moving and realigning funds will be easier, and the buyer-seller relationship of a working capital fund will provide needed financial incentives for efficiency. Instead of one fund to procure and another to repair, the ASF will finance both functions at the wholesale level. The wholesale repair facilities will repair only DLR's that can be sold by the ASF to its customers; inventory growth will be curtailed; customers will be more cost-conscious when placing orders for high-dollar items; and the retrograde pipeline will receive more intensive management." (14)

The Army plan for stock funding DLR's is nearing implementation of the last of 3 stages. The first stage began on October, 1990 when the ASF began procuring DLR's while continuing to 'free issue' using stock fund withdrawal authorization. During this period, a successful demonstration was conducted in Korea for over 7 months to identify problems and obtain unit reactions. Based on issues identified data gathering was extended into stage two. On July 1, 1991 the second stage was implemented when the ASF began funding the depots for maintenance of DLR's. The final stage begins on April 1, 1992 when 'free issue' ends for all replenishment DLR's. Units and other customers, to include depots will begin paying for all orders at that time. Units have already received increases in their OMA funds, less the 10 percent savings they must achieve. To provide some perspective there are approximately 37,000 DLR's that account for about \$6 billion in annual issues. Units will also receive credits from the ASF for turning in both serviceable and unserviceable DLR's. This provides a real incentive to units to return items promptly. Credits are planned to be granted to units within 7 to 14 days allowing all levels to maintain funding capability. The customers credit will equal the standard price minus all surcharges and the average repair and wash-out cost, equating to 50 to 60% of the standard price. (15) This will vary as experience dictates.

SFDLR Impact on Units

SFDLR implementation requires significant technical changes to

all supply, finance and transportation automated systems and handling operations. These changes can be carefully controlled and implemented with checks and tests and they will be largely transparent to the unit. The real key to success, however is at the unit level. Stock funding of DLR's goal is to achieve 10% savings through reduction in demand and consequently, reduced inventory. This can only be accomplished through a 'change in behavior' at unit level. By 'change in behavior,' I mean that commanders and logisticians will have to make conscious and smart 'fix or buy' decisions. They will have to wisely weigh their unit budget dollars against the immediacy of readiness. Only then, will the 'business sense' prevail throughout the logistics system to achieve DMR savings and management efficiencies.

Field commanders must place new emphasis on ensuring all levels of maintenance are capable of accomplishing the authorized level of repair. Added importance must be given to proper maintenance techniques, trouble shooting, fault isolation, use of test, measurement and diagnostic equipment and training of maintenance personnel. Since Commands will be making greater repairs at the lowest possible levels fewer DLR's will be passed for repair at higher maintenance levels. Repairs received at higher levels will, however be in need of more complex repairs appropriate to their level. When this is accomplished, we will have achieved the DMR goals and effected Army policy which calls for repairing all available unserviceable assets before purchasing new ones. (16)

The entire logistics community is working together closely in

preparation for SFDLR implementation and problems are being solved as they arise. Two problems, however have been surfaced that could jeopardize program success. The first of these involves the level at which the major commands plan to control the DLR program. The DCSLOG recommended that the program be controlled at Division level in order to achieve the necessary 'change in behavior' of units. While most commands have complied, DCSLOG has yielded to at least one major command that desires to control implementation at the major command level. This will make the entire program transparent to the units. It seems doubtful that the 'change in behavior' and 10 percent savings can be achieved using this method. Commanders and maintenance officers will not see the need to change their 'fix or buy' decisions. The second problem evolves from the reduction of general support capabilities at many commands over the past few years. Funding priorities and the ability to pass secondary item maintenance to the depot's without penalty has led to this problem. These same commands will now have to buy back their general support capability by reprioritizing their already scarce dollars to achieve the necessary savings. The Army leadership is aware of these problems and is attempting to minimize impact during implementation.

The Strategic Logistics Agency, U.S. Army Training and Doctrine Command and U.S. Army Combined Arms Support Command have combined efforts to insure the field is informed on SFDLR's and problems are resolved. Teams are traveling worldwide and Army schools are teaching the new procedures and 'change in behavior'.

Implementation will not be without problems but the entire logistics community is working to minimize them. It is clear to everyone involved that success can no longer be measured in achieving readiness goals alone. Achieving readiness within DMR cost saving goals is the new measurement critical to the Army's future.

Depot Maintenance Consolidation

As seen above, DMRD 904 began a series of changes that will also change the way Army maintenance depots' do business. In the past, maintenance depots received 90% of their maintenance funding in OMA P7M-Depot Maintenance dollars from Congress in the Army Budget. The remainder of their maintenance funding came from reimbursable orders from National Guard, Foreign Military Sales other Services and Agencies. These dollars were then placed in another revolving fund called the Army Industrial Fund. Since most of the dollars in the Industrial Fund were directly funded, the depots had a great deal of flexibility in performing their maintenance mission. However, it did not encourage the depots to work, manage and compete efficiently.

By the end of fiscal year (FY) '92 as DMR initiatives and budget changes are implemented, the depots will receive OMA, P7M direct funding for approximately 30 percent of their maintenance mission and approximately 70 percent will be reimbursable from customers. The customers will expect competitive pricing for expeditious and quality repairs. DoD will back up the units

expectations through their unit cost approval authority over depot price and surcharge changes. This means the depots will be forced to increase productivity, manage and compete efficiently creating a business operations atmosphere. (17)

When these initiatives are coupled with DMRD 908, Consolidating Depot Maintenance, the depots in all services take on a business approach for the future. The DMRD 908 concludes the Depot Maintenance Consolidation Study (DMCS) jointly prepared by the Military Departments after earlier rejection of a Department of Defense recommendation. The DMCS, a coordinated long range plan for reducing depot maintenance costs was approved by the Deputy Secretary of Defense on June 30, 1990. The plan mandates savings of \$3.940 billion over fiscal years 1991-1995 and specifies \$1.740 billion to be achieved through internal streamlining and reduction in size of the maintenance depot infrastructure. The remaining \$2.2 billion in savings is to result from additional management actions to reduce cost. The Deputy Secretary of Defense established a Defense Depot Maintenance Council (DDMC) chaired by the Assistant Secretary of Defense (P&L) to devise strategies to achieve the additional \$2.2 billion through; (1) an increase in interservicing of depot maintenance workloads; (2) an optimal utilization of depot capacity that ensures efficiency and provides for the infrastructure necessary to meet peacetime and contingency needs; and (3) the implementation of a comprehensive public/private competition program for depot maintenance workloads. (18) As a result, the DDMC published the Joint Corporate Business Plan (JCBP)

in February, 1991 laying out the results of commodity studies performed by Service working groups. This plan was followed in May, 1991 with the DDMC Corporate Business Plan which consolidates the Service Corporate Business Plans for achieving the JCPB study results.

The Army Materiel Command represents the Army in the DDMC. They fully supported the study effort and prepared the "Corporate Business Plan-Army". In the Plan, the Army established a near-term goal of saving \$200.4 million. DoD has now removed these dollars from the Army budget. To achieve the savings, the Army has gained approval through the Base Closure and Realignment Report to close Sacramento Army Depot (SAAD). The SAAD workload will be shifted to other Army depots. The consolidation will reduce the charged rate to customers for this workload and achieve savings of \$81 million by FY95. Through increased and more efficient capacity utilization, decreased overhead and elimination of planned military construction an additional \$94.6 million will be saved. The remaining \$24.8 million is to be achieved by realigning the CONUS automotive mission from Letterkenny Army Depot (LEAD) to Tooele Army Depot (TEAD). The near-term plan represents the conclusion of efforts that began several years ago to establish commodity centers of technical excellence. (19)

The Army long-range plan began with a DoD goal of achieving \$513.3 million in savings. After completion of the study, the Army found it could increase this to \$557.6 million. The foundation of the long-range plan rests on further consolidation of workloads to

increase each depots capacity utilization. This will achieve \$290.9 million in savings by FY95. Interservicing and competition will also contribute significantly to the savings goal with savings of \$6.2 million and \$60.1 million by FY95. Interservicing involves using another depot's capability within the DoD system rather than creating a new capability to attain maximum utilization. Competition goals will be achieved using above the mobilization core workload to public to public and public to private competition. The many specific moves are detailed in the 'Corporate Business Plan-Army'. Once all of the consolidations are made, excess capacity will be layed-away to decrease operating costs without effecting mobilization capability. (20)

The Army failed to achieve their FY91 near-term plan because of delays in Congressional approval of the Base Realignment and Closure Report. With the report now approved, the Army can move ahead and regain the momentum of the plan.

The combined effect of plan implementation actions is development of a 'business atmosphere'. Depots will be competitive with other Services and industry and overhead will be driven down through management efficiencies, such as, restructuring and consolidations. Depots will concentrate on their strengths as centers of technical excellence to focus on increasing productivity and creating economies of scale. They will also move to a more flexible work force, building in the capability to surge by using an efficient mix of permanent and temporary workers. This seems optimistic, however each Service wrote their own plan of action.

The DDMC will also continue to meet and monitor implementation progress with recommendations to the Secretary of Defense. These changes will not be easy, since the depots have been prevented from change in the past by Congressman and the depot maintenance budget has often been inflated with pork-barrel dollars. While we can expect continued interest, I believe Congress recognizes the DoD's need to change ways of doing business.

Depot Maintenance Consolidation Impact on Units

Approximately 43 percent, or \$792 million of the depot maintenance workload involves repair of secondary item spares or depot level reparable discussed earlier. The dollars for the DLR workload, beginning April 1, 1992 are in the unit commander budgets rather than the depots'. I also pointed out earlier that the new Army Master Data File (AMDF) price beginning April 1, 1992 would include surcharges for overhead, storage, handling and transportation costs. I believe these changes make it clear why the commanders and logisticians in the Army should be very concerned about the depots achieving their plan goals and sharing the burdens in downsizing, cost cutting and business efficiencies. Units now have a stake in the outcome. While they can't control the change, they can quickly let the Army leadership know when failure to control costs and implement efficiencies is adversely impacting units and readiness. In the past the system has lacked such a spokesman with direct interest in the outcome.

When a commanders' 'fix or buy' decision requires a high

dollar DLR purchase, he will expect and deserve a price that reflects an efficient business orientation on the part of the depot through the Army Stock Fund. He will also expect items to be repaired to a 'like new' condition that reflects well on the depot technical centers of excellence. Army readiness deserves and demands quality workmanship particularly in a smaller Army.

Other customers of the depot that provide reimbursable workload, such as Program Managers, National Guard, Reserves, other Services and Agencies will expect efficiency, high quality and competitive pricing in return for their scarce dollar resources. Although the Army will try to ensure the depot core workload remains intact, commercial industry could become an increasingly competitive alternative for scarce dollar resources. I believe the depot system is up to the challenge. If allowed to fully implement the plan, the readiness of the Army will be enhanced at a lower overall cost as system efficiencies are achieved and overhead costs reduced.

SUPPLY AND TRANSPORTATION DMR INITIATIVES

Congressional inquiries and numerous General Accounting Office (GAO) reports have strongly criticized the Department of Defense for the size and the rate of increase of the Services inventory of spare parts and equipment. Senator Carl M Levin (D-Mich.), chairman of the Governmental Affairs sub-committee on oversight of government management publicly stated recently that, "DoD's warehouse system creates waste by leading us to store materials we don't have to store, as well as materials we won't use; to order materials we don't need; and to throw out materials we've held too long." (21) In addition, funding requests for new storage space are being made when 165 million cubic feet of excess depot storage space already exists within DoD. This is equivalent to the total space occupied by any single Service according to a study performed by the DoD, Logistics System Analysis Office. (22)

While those comments were leveled at DoD, the Army realizes there are problems and is working with DoD to rectify them. The Army's supply and transportation systems are closely linked, therefore when poor management and lack of a business orientation exist, both are affected. Large inventories with separate wholesale and retail supply systems have led to excesses to cover system shortcomings. As a result, supply and transportation system costs have increased when lack of visibility over inventory by item managers and inefficient storage operations did not adhere to business practices. (23)

In order to rectify these problems over 20 separate supply and transportation Defense Management Report Decisions have been initiated within the DMR-1 and 2 processes. In many cases, the DMRD's are aimed at a wide area, and staff management plans with details to actually achieve the savings are still being prepared. The Army staff recently briefed the Chief of Staff on five supply initiatives and one transportation initiative that are further developed and clearly demonstrate the significant changes to supply and transportation logistics. Implementation of these five initiatives is expected to yield \$4.65 billion in savings by the end of FY95. (24)

Two of the initiatives, Defense Management Report Decision 901, Reducing Supply System Costs and DMRD 987, Inventory Reduction Plan Improvements are being consolidated because of the many overlaps in savings and initiatives. This combined DMRD will give managers total visibility over inventory and flexibility to manage supply costs more efficiently when fully implemented. Operational costs will be moved into stock fund accounts enabling the Army to better control and achieve savings in procurement costs. As discussed earlier, under DMRD 904, these operational costs for overhead, storage, handling and transportation will be reflected in stock fund surcharges added to the item price paid by units or customers. Since supply operations will no longer be directly funded and surcharges will have to be justified to Army and DoD program monitors, a business oriented efficiency will result. In addition, stockage policies will be changed to reduce

transportation costs through shipment consolidation, use of modes with competitive rates, and other transportation efficiencies while continuing to meet customer needs. Goals will be set to increase the use of commercial items and increase use of multiple year contracts. Establishment of a new policy permitting funding of drawings and technical data will also allow competitive procurement of supplies at lower costs in the future. (25)

The third supply initiative is DMRD 902, Consolidation of Defense Supply Depots. This DMRD resulted from findings that there were a total of 33 supply depots with the Defense Logistics Agency (DLA) and the Services each managing their own. Many of these are located within 50 miles of each other and some within 10 miles. Savings in overhead, system development costs, transportation costs and increased utilization can be made with consolidation, according to the DMRD. As a result, the Army has transferred its' 3 area oriented depots to the DLA. This resulted in over 93 percent of Army inventory being stored and managed at the Defense level at the end of FY91. The Army also has six smaller depots collocated with maintenance depots that principally store Depot Level Repairables. These are also in the process of transfer to DLA and will result in nearly 100 percent reliance on DLA Defense Distribution Regions by FY95 if plans proceed as expected. (26)

All Service inventory control points were also to be consolidated under DMRD 926, the fourth supply initiative. All Services resisted this move to preserve critical weapons system management, resulting in a Consolidation Study Report approved by

the Deputy Secretary of Defense on July 3, 1990. Army implementation of this Report will transfer item management responsibility for approximately 981,000 consumable items and selected cataloging tasks from the Services to DLA. The Army will centralize the remaining cataloging activities within the Army. The Army also plans to reduce inventory control points from 6 to 4 in the near future with plans to later consolidate to a single geographic location if plans are approved through the Base Realignment and Closure process. (27)

The fifth supply DMRD to be discussed is DMRD 927J, Consolidation of Wholesale and Retail Logistics. This DMRD will move the Army to a Single Supply System. (28) The two systems currently used have the same basic functions of requirements determination, receipt, storage, issue and accounting. Their separate automation systems, however have hindered repair, redistribution and asset procurement decisions. The implementation of a seamless Single Supply System is expected to resolve these problems with continuous flow visibility from the user to the supply source. (29)

The final DMRD for review is DMRD 915, Reduce Transportation Costs. (30) Before implementation, transportation was characterized by decentralized execution by the user and centralized payment of bills by the Army Finance and Accounting Center. Since the users were not paying, audits were not being conducted and excessive air shipments were being utilized to make up for supply system inefficiencies and abuses of the Issue

Priority Designator System by customers. Implementation of the DMRD will result in decentralized execution as before, however payment will also be decentralized with units or customers paying the transportation charge as part of the surcharge price. The bill auditing mechanism is currently in place and the Issue Priority Policy has been reviewed to improve supply discipline and reduce hi-priority requisitions. DLA has also taken action to consolidate shipments to save further on transportation costs. Another initiative under consideration may require units to pay additional surcharges, similar to a commercial catalog system, in the future when they desire premium transportation.(30)

The above DMRD's will drastically reshape supply and transportation logistics. Because of the complexity of DMRD 901 and 927J changes, the DCSLOG Army has charged the Strategic Logistics Agency with responsibility for development of several key programs important to successful implementation. These programs include the Single Supply System, Objective Supply Capability (OSC), Total Asset Visibility (TAV), Readiness Based Maintenance (RBM) and Usage Based Requirements Determination (UBRD). The main feature of these programs is linked automation and communication technology. Emphasis is placed on linking current systems using Standard Army Management Information Systems (STAMIS) and off-the-shelf technology. The entire logistics and automation community is cooperating in this effort, to include the new Defense Corporate Information Management (CIM) program. CIM initiatives will only be incorporated as they are developed, with emphasis remaining on

linkage of current systems.

The Single Supply System will use Objective Supply Capability (OSC), a major near term initiative that uses a computer gateway linked to all current supply systems from user to depot. Using the linked automation and communication to the gateway is expected to reduce order/ship time from the 12 to 25 days experienced now to 3 to 5 days. Batch processing will be a thing of the past, with each requisition directly transmitted and processed individually by the gateway. The user will receive immediate status of the requested item by return transmission. A recent test at Ft. Hood reduced OST to an average 6.9 days with status to the user averaging 17 seconds. The system may also be queried at any time for updated status rather than waiting for extended periods. Many units, both CONUS and OCONUS should be able to use this new system by the end of FY92. (32)

Visibility of assets is another key initiative vital to a Single Supply System. The SLA is currently working an initiative called Total Asset Visibility (TAV) that will provide a global view of the Army's inventory from unit level to depot. TAV uses interactive video technology linked to OSC and other current supply systems. This system was recently demonstrated to me at SLA. As a user, I was able to select a part from equipment breakdown video screens similar to maintenance manuals and through additional screens, locate every unit and storage site that had on-hand assets and their availability. This will eliminate unnecessary procurement action when the part is already available. It also

provides outstanding premobilization information by allowing total visibility of assets by location, quantity and condition worldwide. TAV is planned for FY94 initial operational capability. (33) It will also be able to utilize information provided by two other SLA initiatives referred to previously, Readiness Based Maintenance (RBM) and Usage Based Requirements Determination (UBRD).

RBM is a decision support system developed by Rand Corporation. Its' aim is to benefit the Army by reducing stockage levels, maintenance turnaround time for high-technology line replaceable units (LRU's) and overall supply pipeline time. To do this, it will use unit readiness data, logistics operations plan-data, such as demand rates and repair times, along with current asset position to determine repair and distribution priorities. The information will be fed into a model called Distribution and Repair in Variable Environments (DRIVE). This model will allow item managers to send assets forward for prepositioning even before requisitions can be issued or before failures in weapons systems or LRU's occur. Maintenance shop supervisors will receive repair recommendations from RBM directing order of repair which will yield the highest payoff for weapons system availability. This will be a clear improvement over the current Issue Priority System since it will be responding to the unit with the greatest need and directing repair of items that will achieve the greatest readiness improvement while reducing overall asset needs. (34) This system is in its early stages and will not be fully defined until FY93.

The final system under development by SLA is Usage Based

Requirements Determination. UBRD will provide for the review, development and integration of automated logistics information and decision support systems into current and future Army automated information systems. It will make it easier to accelerate development of automated systems that support the Single Supply System by considering them against six criteria for automation:

- * enhances data quality/accuracy
- * provides improved technology
- * supports an objective of the DMR Process
- * requirement is documented by a study or has been through a functional review process
- * provides significant cost savings or other benefits
- * provides a major improvement to the business process

Using these criteria, UBRD will establish the automation baseline for all other SLA developments discussed above and determine future automation needs for reshaping Army logistics into the 21st century. (35)

Supply and Transportation Initiative Impacts on Units

I have already mentioned many positive enhancements that the supply and transportation DMR initiatives should bring to unit supply and maintenance operations provided system implementation goals are achieved. It is still too early in the development and implementation process to be overly critical or optimistic. The Army leadership is being briefed every step of the way and full implementation authority will not be given until readiness impacts

are known. Clearly, as the Army is reduced in size and fewer dollars are devoted to defense spending it is imperative that we obtain maximum utilization of scarce resources. Implementation of DMR initiatives coupled with DCSLOG, Strategic Logistics Agency programs can meet or exceed the savings goals while improving Army readiness and weapons systems management.

The 'seamless' Single Supply System will allow both units and supply managers complete visibility of the supply system in a single transaction. No more endless queries that often baffle the most experienced logisticians. Automation and communication linkages will take the mystery out of supply systems that currently do not cross-talk. For example, unit level PLL clerks will be able to provide maintenance managers with supply status in seconds or minutes rather than days or weeks. Rather than wasting time scrounging parts, the Total Asset Visibility and Objectives Supply Capability will let you know that another unit has the part in stock. It will then release the item to you and automatically order a new item for the losing unit. System responsiveness is the key to unit acceptance and this has been shown in several proof of principle tests conducted at Fort Hood. So far units have been enthusiastic about the capabilities and responsiveness.

Unit operations planning can also be simplified through Readiness Based Maintenance, TAV and OSC systems. Together they will be able to tell commanders and logisticians in advance if the operations officers' plan can be supported. Once the decision to go with the plan is made logisticians can input data to insure

adequate assets are available to support the mission optempo. Units with the most critical readiness needs will automatically receive system priority when items are in scarce supply, based on system readiness data and criticality of the operational mission.

The business efficiencies that can be realized at all levels are readily apparent. This will be particularly true for the Defense Logistics Agency. With stockages reduced and under one Agency, the DLA can better control supply and transportation management operations. Since they will receive their operating dollar through the price surcharge paid by units, cost consciousness will become a dictum without sacrificing readiness. DLA's responsiveness during Desert Storm has significantly boosted acceptability of supply storage and procurement outside the Army.

The Supply system will also meet readiness requirements with reduced premium transportation. With customers paying the cost, better financial control will be exercised.

Units may look at these supply and transportation improvements as if they sound too good to be true. However, they are achievable and within capability over the next five years. Many key milestones have already been met. Since the dollars to be saved have already been taken from the Army budget, it seems likely that nothing can stand in the way of a reshaped Army supply and transportation system. Much remains to be accomplished, however and this area requires the full efforts of the Army to avoid serious readiness impact if not properly executed.

CONCLUSION

The world has changed, requiring and facilitating massive changes. The new National Military Strategy brought on by the collapse of the Soviet Union, the need for continued global crisis response must take advantage of expanding technology to remain viable. Computers with massive data capability and satellites with global communication must be used to maintain our global focus rather than deployed forces. World interaction will continue requiring rapid information systems and rapid transportation to project our forces where needed in spite of shrinking resources. In the face of reduced resources we must turn to a business philosophy and our unyielding appetite must give way to a smaller force with a high state of readiness. The President has charged the Secretary of Defense to reshape the Department to meet this new strategy with reduced resources. In support of the President the Department of Defense is leading the way using the Defense Management Report Process. The goal is to cause the Services to change to business practices that create efficiency and take advantage of new technology, while maintaining the same or higher levels of readiness and enhanced performance.

The Army has fully indorsed the DMR process and is moving ahead in all areas to meet the saving and objectives for change. Army logistics is at the fore-front of this effort, "breaking the mold" to meet the needs of a smaller more responsive force. Supply, maintenance and transportation systems are being

streamlined and physical structure reduced to maintain balance. Automation leverage is being used as a multiplier to link current systems rather than creating new ones. Off the shelf technology and communications are being incorporated as further enhancement. Sound business practices are being implemented to lower management overhead and effect efficiencies with reduced resources.

Maintenance system changes emphasize repair at the lowest level creating a demand for sound maintenance and training practices. Repair costs come from the unit budget, demanding sound 'fix or buy' decision making. The consolidated depot system will also be more competitive and flexible, relying heavily on customer funding of operations through controlled surcharge pricing.

Supply and Transportation will rely on greater use of automation and communications to achieve unit to depot visibility, even while in transit, creating a seamless Single Supply System. Complete asset visibility will allow managers to buy less and only what is needed, driving down inventory and storage costs. Decision support systems will be used to plan operations and stay one step ahead of unit requirements and readiness.

The planned changes are massive and filled with risk for adversely affecting Army training and readiness. It is still too early in the development and implementation process, however to be overly critical. Although there are many possible pitfalls everyone I have encountered acknowledges the need for change and displays a positive outlook for the future. It is clear, we must reduce the cost of supply and maintenance in the Army in order to

free scarce resources for training, operations and acquisition of new equipment.

Change is never easy and there will always be those who say, "I told you so." This, however is not a reason to yield to unnecessary overhead, inefficiency and operating practices that are counter to good business. I believe the Army is correctly seizing on this opportune moment in time and history to "Reshape the Army Logistics System." It is a tremendous undertaking but badly needed to create a "Reshaped Army Logistics System" prepared for the readiness challenges of the 21st century.

WORKS CITED

1. Cheney, Dick. "Report to the President," Defense Management, July 1989, p. 1.
2. "The DMR at Work: Toward Six Broad Goals," Defense 90, March/april 1990, pp. 8-13.
3. Department of Defense Update of Justification of Estimates for FY91 Defense Management Report Initiatives, April 16, 1991, pp. 3-5.
4. Ibid., p. 3.
5. "DMRD Overview," Army Management Report Coordination Office Overview Briefing, September 1991, pp. 1-13.
6. Ross, Jimmy D., Lieutenant General, "The Strategic Logistics Program," Army Logistician, March-April 1991, p. 6.
7. Pollard, Deborah L., "Roadmap for the Future," Army Logistician, March-April 1991, p. 7.
8. Ibid., p. 7.
9. Moore, Kenneth L., "Stock Funding of Depot Level Repairables," Army Logistician, July-August 1991, p. 2.
10. Ibid., p. 2.
11. "Stock Funding of Depot Level Repairables," Quartermaster Professional Bulletin, Winter 1990, p. 7.
12. Ibid., p. 9.
13. Moore, Army Logistician, p. 3.
14. Ibid., p. 6.
15. Ibid., pp. 4-6.
16. Ibid., pp. 5-6.
17. Briefing Chart, "Depot Maintenance," Program Analysis and Evaluation Division, Office of the Chief of Staff, Army, August 1991.
18. Defense Management Report Decision 908, "Consolidating Depot Maintenance," Department of Defense, November 17, 1990.
19. Defense Depot Maintenance Council, "Corporate Business Plan FY 91-95," May 1991, p. 14.

20. Ibid., p. 15.
21. Lancaster, John., "Stock Funding for Wartime Nasal Passages," Washington Post, December 11, 1991.
22. Defense Management Report Decision 902, "Consolidation of Defense Supply Depots," pp. 2-3.
23. Briefing Chart, "Supply," Program Analysis and Evaluation Division, Office of the Chief of Staff, Army, August 1991.
24. Briefing Charts, "Supply" and "Transportation," Program Analysis and Evaluation Division, Office of the Chief of Staff, Army, August 1991.
25. Defense Management Report Decision 901 "Reducing Supply System Costs," November 1989, and Defense Management Report Decision 987, "Inventory Reduction Plan Improvements," January 1991.
26. Defense Management Report Decision 902, "Consolidation of Defense Supply Depots," November 1989.
27. Defense Management Report Decision 926, "Consolidation of Inventory Control Points, November 1989.
28. Defense Management Report Decision 927J, "Consolidation of Wholesale and Retail Logistics," November 1989.
29. "Single Supply System," Quartermaster Professional Bulletin, Winter 1990, p. 4.
30. Defense Management Report Decision 915, "Reduce Transportation Costs," November 1989.
31. Briefing Chart, "Transportation," Program Analysis and Evaluation Division, Office of the Chief of Staff, Army, August 1991.
32. "Objective Supply Capability," Quartermaster Professional Bulletin, Winter 1990, pp. 12-15.
33. "Total Asset Visibility," Quartermaster Professional Bulletin, Winter 1990, p. 16.
34. "Readiness Based Maintenance," Quartermaster Professional Bulletin, Winter 1990, pp. 17-19.
35. "Usage Based Requirements Determination," Quartermaster Professional Bulletin, Winter 1990, pp. 19-20.