

**SUPPLY - CHAIN COUNCIL AWARD
FOR EXCELLENCE IN SUPPLY CHAIN OPERATIONS**



U.S. ARMY

**DISTRIBUTION
MANAGEMENT**

**The strategy to re-engineer Army
logistics processes.**



EXECUTIVE SUMMARY

Distribution Management (DM) formerly known as Velocity Management (VM) is an Army initiative to improve dramatically the performance of today's key logistics processes. It adapts to the military many of the technologies and managerial innovations that have proved successful in the commercial sector. By dramatically improving the speed and accuracy of all logistics processes, DM also seeks to reduce the need for massive logistics resources.

During Operation Desert Shield and Desert Storm, tremendous amounts of supplies sat stagnant at the ports. As a result, the Velocity Management initiative was created in November 1995 to improve the Army logistics system with the focus on improving the speed and accuracy in which materiel and information flowed through the system. Key logistics leaders throughout the Army realized the logistics supply system for the 21st century must be more efficient and focus on velocity and responsiveness. This revolutionized system would decrease reliance on stockpiled commodities and rely more on automation, speed, accuracy, and transportation to place supplies in the hands of soldiers as quickly as possible.

The VM program evolved from a series of in-depth analyses performed in the mid to late 1980s by the Military Logistics Program of RAND's Arroyo Center, a federally funded research and development center sponsored by the United States Army. To provide leadership and vision for change, the then Army Deputy Chief of Staff, Logistics (DCSLOG) instituted the Velocity Group (VG) during a January 1995 meeting of more than two dozen senior logisticians. The US Army Combined Arms Support Command (CASCOM) Commander was appointed as the Executive Agent, and tasked with managing the VM program for the Army.

Defense officials say that virtually all the Army's senior logisticians are people who took a risk with the new idea of Velocity Management seven years ago. One of them was Lieutenant General (LTG) Daniel G. Brown, who added a third star to his shoulder when he left the Army's Combined Arms Support Command to take a

transportation to drive down customer wait time and cost while improving the quality and reliability of service.

Today the program continues to be managed and lead at the highest level by the Deputy Chief of Staff for Logistics (DA G-4); the Deputy Commander, US Army Materiel Command (DCG AMC); and the Commander, CASCOM. These individuals form the Triad and jointly share oversight and responsibility for the Distribution Management program. These officers are known as the Distribution Management Group (DMG). Supported and driven by top leaders in today's Army, the DM initiative continues to be a structured, quantitative approach for driving improvements in an organization through the use of defined metrics, published policies, and proven process improvement procedures.

In December 2002 the DMG made the decision to change the name of the program to Distribution Management (DM). Along with the name change, the DM vision and mission statement were modified to better reflect the changing focus for 2003. The new vision is built on improving the Army's logistics processes by enhancing readiness through the rapid adoption of new business processes. The new mission statement reflects the continued investigation, reporting, and where possible, implementation of Army logistics best business practices to maximize end-to-end logistics support from the National level through the last tactical mile. Further benefits are being gained by institutionalizing DM throughout the Army and supporting the Army's transformation effort.

The themes and thrust of DM that were inaugurated in 1995, under the old Velocity Management program has continued throughout 2002. Those themes which remain dominant are:

- The need to accommodate the inherent uncertainty of operational customer requirements.
- The power of responsive logistics support to overcome uncertainty.
- The improvement of readiness and reduction in total systems costs by implementing logistics processes and policies based on the first two themes.

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SECTION 1 – GENERAL INFORMATION AND PROJECT COMPLEXITY

- 1) **Name of submitting organization:** Combined Arms Support Command (CASCOM)
- 2) **Responding organizational unit:** Distribution Management (DM) Team
- 3) **Mission description:** DM is an approach for improving the responsiveness and efficiency of the Army's entire logistics system. Its methodology is to define, measure, and improve the Army's logistics processes to enhance readiness through the rapid adoption of new business processes so soldiers know what right looks like and act on that knowledge. DM is impacting all Army logistics organizations and the warfighters they support.
- 4) **Award category:** Award for Supply Chain Operational Excellence
- 5) **Brief description of the supply chain and the process the submission spans:**

Distribution Management is an end-to-end supply chain process improvement program that focuses on supplies distribution through all modes to Army customers. No longer a Department of the Army project, DM has become a Total Army program, involving all MACOMs, installations, divisions, the Department of Defense (DoD) and other supporting Federal agencies. The Defense Logistics Agency (DLA) and the General Services Administration (GSA) are involved in helping the Army achieve its DM goals worldwide. Likewise, members of private industry who are integrated into the supply chain through distribution and installation support contracts have a growing role to play in helping the Army reduce overall logistics support costs. DM reflects a paradigm shift in the way Army logistics business is being conducted.
- 6) **Names of external organizations involved:**
 - Defense Logistics Agency and its Defense Distribution Center (DLA/DDC)
 - U.S. Army Materiel Command and its Logistics Support Activity (AMC/LOGSA)
 - U.S. Military Traffic Management Command (MTMC)
 - U.S. Transportation Command (USTRANSCOM)
 - The RAND Corporation's Arroyo Center (RAND)
 - General Services Administration (GSA)
 - Army National Guard (ARNG)
 - U.S. Army Reserve Command (USARC)

- Army Materiel Command (AMC)
- U.S. Army Forces Command (FORSCOM)
- U.S. Army Training and Doctrine Command (TRADOC)
- U.S. Army Europe (USAREUR)
- U.S. Army Pacific (USARPAC)
- U.S. Army, South (USARSO)
- Eight U.S. Army, Korea (EUSA)
- Army National Guard (ARNG)
- U.S. Army Reserve Command (USARC)

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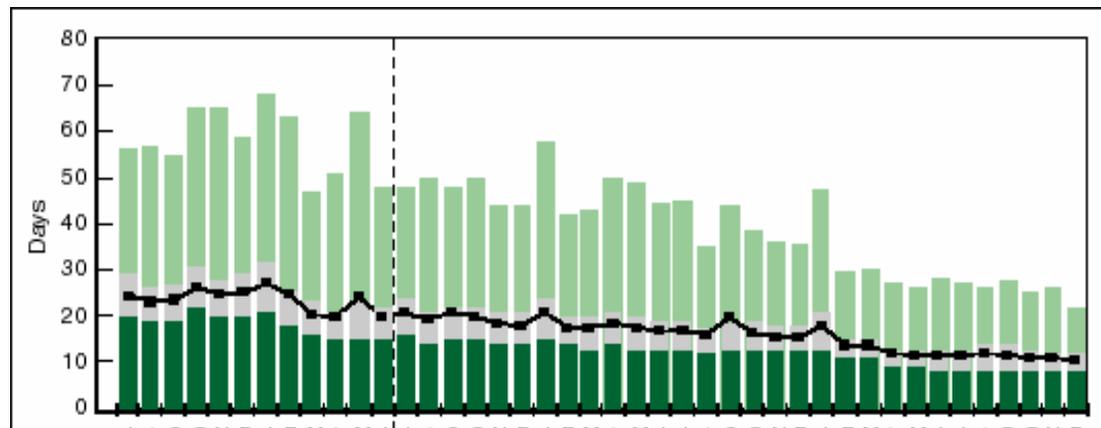
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SECTION 2 – IMPLEMENTATION

1) Describe the reason that the supply chain project was undertaken and how it was selected:

Initially known as Velocity Management (VM), Distribution Management (DM) is an Army initiative to improve dramatically the performance of today's key logistics processes. On November 6, 1995 VM began as an executive briefing to General Ronald H. Griffith, Vice Chief of Staff of the Army, and almost twenty other senior Army leaders. The initial focus was to achieve dramatic improvement in the process used by Army personnel to order and receive supplies. The order and ship process was the logical starting point for major reform for two reasons. First, its criticality to the successful operation of the logistics system was widely understood and second, it also was recognized that improvement was needed. For decades the order and ship process had been plagued by a catalog of stubborn performance problems. Each segment, from requisitioning an item to receiving the package, not only was slow but also was unreliable. Order Ship Times (OST) varied widely. Some orders were delivered in a few days, but others took weeks, even when the ordered items were in stock. Moreover, a lack of confidence in the reliability of the order and ship process led some Army personnel to hoard supplies and place duplicate orders.

Figure 2-1 below shows how dramatically the order and ship process was improved in speed and reliability under VM. The bars on the figure represent the monthly OST performance for orders for repair parts that were placed by active units in CONUS and filled by the wholesale supply system. Because this effort focused on improving the order and ship process for items on the shelf, backorders were excluded from the data. (The backorder problem was the result of a different logistics process and was addressed separately.) The vertical dashed line distinguishes two periods of performance. The period from July 1995 through July 1998 represents performance trends since the VM initiative took hold. The 12 preceding months, July 1994 to June 1995, are the baseline period and serve as the basis of comparison for gauging progress. The segments on each bar measure each month's OST performance at the 50th, 75th, and 95th percentiles. For example, the 50th percentile indicates the day at which 50 percent of the orders are filled, the 75th indicates 75 percent, and so on. The line running through all bars is the average OST.



As Figure 2-1 shows with the continuing downward slope of the bars and line, the Army made dramatic and nearly continuous improvements in the order and ship process. The performance during the baseline period was 17, 25, and 56 days for the 50th, 75th, and 95th percentiles respectively, with an average OST of just over 22 days. Corresponding figures for September 1998 were 8, 12, and 25 days, with an average OST of 10.6 days—in short, more than a 50-percent reduction at all percentiles.

Compared to CONUS units overall, some of the large Army Forces Command installations that were among the first to participate in the VM initiative achieved even greater gains, suggesting that other units also could expect to achieve further reductions. For instance, for active units at Fort Bragg, NC, the median OST declined from a baseline average of 18 days to 6 days in September 1998—a 67-percent reduction. The 75th and 95th percentiles showed similar improvement. Average OST had fallen from 26.3 days for the baseline period to 8 days for September 1998.

Efforts under VM to improve the speed and reliability of the order and ship process initially focused on CONUS OST, but they were quickly extended to units outside of CONUS (OCONUS) with similar success. For instance, mean OST for U.S. Army, Europe, units receiving parts by air shipment (by far the predominant mode) from CONUS depots declined from 23 days during the baseline period to 16.5 days in September 1998, a 29-percent improvement. Similarly, mean OST to Korea over the same timeframe decreased from 26.3 days to 13.1 days, a 50-percent improvement. Gains in other theaters were comparable. That these reductions were far less, proportionately, than those achieved by CONUS units reflected both the additional complexities of the OCONUS distribution system and the fact that VM generally was implemented later by overseas installations.

As was the case with the Army's slow and variable OST before VM, many performance deficits in Army logistics processes were longstanding. In most cases, the Army had long recognized these chronic problems, but repeated efforts to identify and eliminate their sources proved ineffective. So it was worth considering how, under the VM initiative, the Army finally made such quick and impressive headway in improving the effectiveness and efficiency of one process as well as how it had begun to extend the same improvement approach to other logistics processes.

Although initial VM implementation focused on actions taken to improve CONUS OST in peacetime, many of these actions also helped improve OST for OCONUS units, including those in deployed operations. This was a natural consequence because most of the CONUS segments of the order and ship process were also part of the OCONUS process. The streamlining of ordering, depot processing, and receiving activities contributed to the reduction of both CONUS and OCONUS OST, as did the improved positioning and sourcing of stocks to accommodate the needs of major customers of the depots. Moreover, the same process changes that made peacetime performance faster and more reliable also contributed to fast, agile, and robust wartime performance. In addition to giving customers what they needed when they needed it, a quick and reliable order and ship process also reduced the number of orders in the system because Army personnel were no longer so frustrated that they reorder a delayed part several times. They also had less incentive to hoard parts because they are more confident they would get them when they order them.

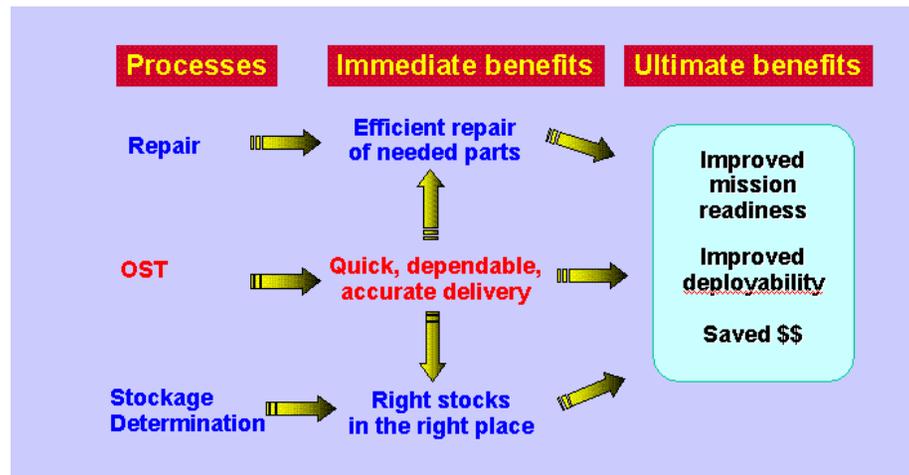


Figure 2-2. Process Improvements in Other Areas

Today, the DM initiative is no longer limited to improving just the order and ship process or to reducing cycle times. From dramatically improved OST, the revolution in performance has spread quickly and systematically to encompass all Army distribution processes. Focusing on time, quality, and cost has continued to deliver a logistics system that is faster, better, and cheaper.

2) Indicate the duration of the project. Note if the project was a pilot that is being rolled out. Note if the project is ongoing or still in development.

The themes and thrust of VM that were inaugurated in 1995, have continued as DM initiatives throughout 2002. Those themes which remain dominant are:

- The need to accommodate the inherent uncertainty of operational customer requirements.
- The power of responsive logistics support to overcome uncertainty.
- The improvement of readiness and reduction in total systems costs by implementing logistics processes and policies based on the first two themes.

The Army DM Team has further defined the themes of the program into DM Team milestones and initiatives within each Process Improvement Team (PIT). During the second half of 2002, the DM Team continued to expand the DM environment and influence. Army installations strengthened oversight, simplified rules, increased the use of new technology, reduced reviewed processes, streamlined on-post delivery, and made use of the information available from the new metrics. To continue with the progress already made, the DM team has identified the following areas for exploration in 2003:

- Integrate the program's initiatives into the overall Logistics Transformation Working Group (LTWG) effort.

- Schedule and conduct one Distribution Group Board of Directors Meeting.

3) Describe in detail, the process used to complete the initiative.

DM is based on a new way of doing business and represents a new paradigm for managing logistics. The DM concept has several components:

- A process perspective. Under DM, the logistics system is considered to be a set of processes that deliver products and services to customers. Typically these processes cut across organizations.
- An improvement focus. Management of logistics processes is focused primarily on improving their performance. Improvement is sought in three dimensions: time, quality, and cost. That is, DM seeks to make logistics processes "faster, better, and cheaper."
- An emphasis on performance measurement. Measurement is the central activity to foster improvement because it helps to identify performance deficits, monitors the effects of interventions to improve performance, and provides motivation and feedback to implementers at all levels.
- Use of cross-functional teams to increase the capability to improve. Because processes cut across organizational boundaries, and because each segment may be technically complex, no single organization or individual has sufficient knowledge or power to make dramatic changes. Coalitions of leaders are needed to guide and sustain an effective large-scale effort. In the case of DM, the Triad forms the nucleus of the Distribution Management Board of Directors, sometimes referred to as the Distribution Group (DG). The Triad membership is composed of the Deputy Chief of Staff for Logistics (DA G-4); the Deputy Commander, U.S. Army Materiel Command (DCG AMC); and the Commander, CASCOC. These individuals jointly share oversight and responsibility for the DM program. Teams of experts are needed to identify and implement needed improvements through application of the D-M-I concept model. DM is implemented by cross-functional teams of two types: Process Improvement Teams (PIT's) and Site Improvement Teams (SIT's). Each PIT is an Army-wide team composed of functional experts representing all segments of a particular process. SITs are organized by installation commanders and focus on improving logistics processes at that installation. Each Army installation has been directed to form a SIT composed of local technical experts.
- A process improvement methodology. The performance of processes is improved by applying a three-step method called D-M-I: Define the process, measure the process, improve the process. This cycle is repeated continuously.

The Distribution Management D-M-I methodology (commonly referred to as define, measure, improve) shown in Figure 2-3 consists of three (3) basic steps.

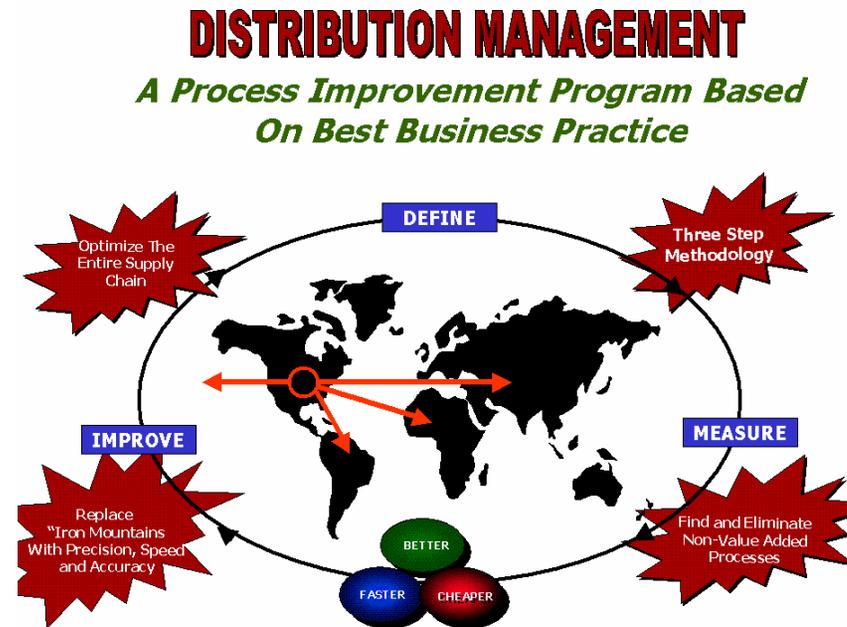


Figure 2-3. D-M-I Methodology

- **Define** the process. This first step aims at producing a clear picture of the entire process that the team is attempting to improve. It includes determining customers, inputs, outputs, and activities. This is best accomplished using the walk through process to establish a common understanding. A walk through is a physical process "tour" through the logistics offices and facilities and includes informal dialog with the soldier and civilian workforce who explain how they do their logistics processes. Information received during the process walk through will be used to develop the process map.
- **Measure** process improvements. This is accomplished through defining data requirements, establishing metrics, determining baseline performance, and obtaining performance data to use in the measurement process.
- **Improve** the existing process. The final stage of D-M-I, involves combining the end-to-end understanding of the process developed in the "define" stage with the

the process can pose its own set of challenges. These three steps are applied at every level to improve performance.

DM has become a Total Army program, involving all MACOMs, installations, divisions, the Department of Defense (DoD) and other supporting Federal agencies. DM reflects a paradigm shift in the way Army logistics business will be conducted. To support this paradigm shift and best utilize the D-M-I concept model, the DM program is organized into cross-functional teams as depicted in figure 2-4 below:

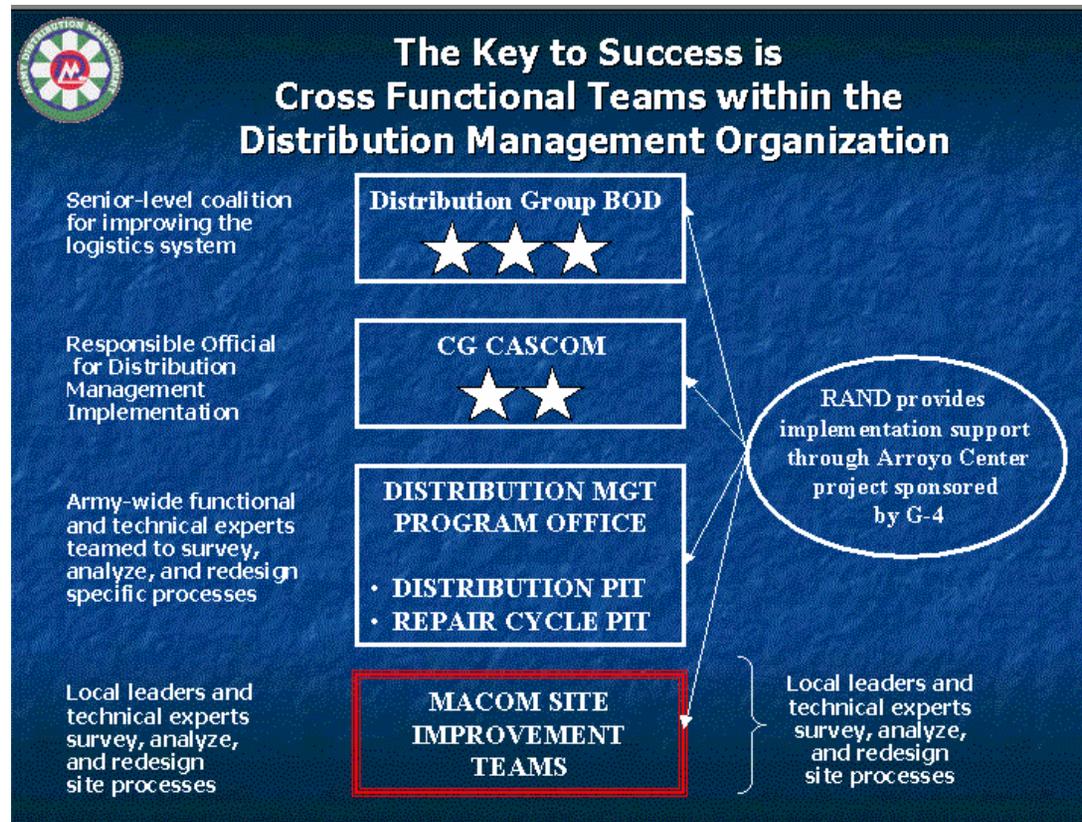


Figure 2-4. Distribution Management Organization

- **Distribution Group (DG).** The DG is a coalition of Flag Officers and Senior Executive Service civilians with a common vision: the need for change and the commitment to span the inherent organizational functionalism essential to bring about that change. The DG guides and supports DM institutionalization. It provides the leadership and vision for change, sets broad goals and guidelines, defines the scope and pace of implementation, and helps waive outdated regulations and other official policies. The DG also interfaces and coordinates with DoD agencies such as United States Transportation Command (USTRANSCOM), the Defense Logistics Agency (DLA) and the Office of the Secretary of Defense (OSD). The DG provides high-level program course direction and corrections and ensures institutional

- Change Agents (CA). A CA is an individual designated and empowered by a DG member to interact on his behalf with other CAs, Process Improvement Teams (PIT), and Site Improvement Teams (SIT). These individuals are the staff liaison for the DG member and provide advice and input to DM. The CA should have ready and visible access to the DG member appointing him. A DG participant may appoint one or more CAs. Army MACOM CAs in particular provide the initiative to guarantee implementation of process improvements proposed from DM.
- PITs are organized to focus on broad logistics processes. The DM program is currently using two PITs (Distribution and Repair). The DG establishes additional PITs as necessary. PITs examine logistics processes to determine where improvements can be made to achieve the goals of DM, develop improvement proposals, and recommend strategies for technical implementation of recommended changes. PITs bridge the functional organizational structure of the Army to deal directly with systemic logistics process problems. Each PIT identifies agencies in the Army and DoD responsible for functions that impact or will be impacted by the mission and obtain and maintain representation on the PIT. PITs span the traditional functional "stovepipes" that can inhibit communications and problem solving.
- SITs are organized on Army installations by the installation commander to focus on all logistics processes. The activities of the SIT includes review of DM metrics, translation of those metrics into logistics process objectives for the installation, and training in the worksites on the installation to define, measure, and improve local processes. SITs are formed with a sufficiently broad range of members to address the complexity of the installation logistics processes. Someone from every element involved in an installation's logistics processes is included on the team.

Process Improvement Teams have made significant improvements in 2002. Each PIT has worked individually and collectively to make the entire logistics system more responsive and efficient. A description of each PITs contribution to the overall DM effort is detailed below.

Distribution Process Improvement Team (DPIT). Under the leadership of Mr. Tom Edwards, Deputy to the CASCOM Commander, the DPIT promoted initiatives that dramatically improved the Army's stockage and distribution processes. The team continued to establish and publicize segment and source metrics which identified positive and negative performance in any portion of the Army supply chain, illuminated causes of that performance, and recommended process improvements that maximized end-to-end distribution in support of Army readiness. Approval and implementation of recommendations developed by the PIT made distribution processes more efficient and responsive to the customer. Three new Process Action Teams (PATs) were created in 2002 based on guidance from the DG Board of Directors' recommendations. These PATs were supplemented with participants from units throughout the Army, AMC, DLA, RAND, and CALIBRE Systems Inc. The PATs and their tasks associated for process improvements are as follows:

- Customer Wait Time (CWT) PAT – provides better in-transit visibility applications for end users and explores ways to acquire and use ITV technology; develops improvements in the CWT process for users; enhances institutionalization and use of CWT as a materiel readiness tool; seeks to standardize business rules for CWT between Strategic Distribution and DM; continues to monitor what goes through the pipeline, how long it takes, what is

- Backorder PAT – conducts backorder process walks with candidate field units; looks at reconciliation, verification and validation processes; establishes metrics and definitions; establishes baselines by DLA, AMC, GSA, MACOM, installation, and Routing Identifier Codes (RICs); improves reconciliation/validation processes through crosswalks that train users on appropriate actions to take in specific circumstances; continues to identify, monitor, research, and analyze persistent NIINs.

The DPIT and associated PATs accomplished the following in 2002:

- Added backorder analysis, recon and validation instruction to the Warrant Officer Basic Course (WOBC) and Warrant Officer Advance Course (WOAC) DM curriculum and field instruction during team visits.
- Worked to fix low level recon and validation process within all requisitioning activities at all installations to reduce or eliminate chasing “Bad Paper” through higher sources of supply.
- Developed a CWT Handbook. This handbook enables users to take action to reduce their own CWT.
- Participated with the Global Combat Support System – Army (GCSS-A) in developing distribution metrics for review and assessments.
- Conducted process walks at selected installations.
- Conducted a special site visit to Fort Riley to performed storage capacity and mobility analysis as well as provided warehouse optimization recommendations.
- Worked with AMC in developing Authorized Stockage List (ASL) Review Team consistent with LTWG.
- Members of RAND attended AMC/DLA MMRR VTC at TACOM Headquarters.
- CALIBRE Systems Inc. built an analysis program for Fort Drum to show the segment of time for documents backordered against due-in to stock (BB), delays due to manager review (BD) and items being procured for direct shipment to requestor (BZ).

The following additional overall 2003 DPIT objectives were developed and implemented:

- Continue to work issues pertinent to CWT, RWT, and DCB integrated Logistics Transformation Task Force (LTF).
- Continue to support the CWT-enhanced initiative.
- Work toward the goal of Army wide implementation of DCB.
- Lead a coalition on waging war on backorders by conducting process walks, establishing baselines and metrics for measurement, initiating changes, and continuing to identify, monitor, research, and analyze persistent backorder NSNs.

- Continue to monitor what goes back through the pipeline (reverse logistics).
- Continue to focus on the velocity of referrals and laterals then standardize the redistribution processes.
- Continue to analyze DCB in SSAs.
- Focus on SSAs with low fill rates and look at stock positioning.
- Establish a LTTF ASL Review Team with AMC.
- Identify DCB improvements in the areas of software changes, functional changes, and other supply classes (II, IV, III(P))
- Continue to conduct process walks.
- Continue to improve the supply chain by identifying predominate causes of variability and optimizing the supply chain flow.
- Work with DLA to improve stock positioning.
- Integrate CWT objectives with the Strategic Distribution Program for both surface and air.
- Expand CWT to capture total performance at the retail, wholesale, and local source.
- Improve supply chain performance in deployed operations.
- Reduce total Continental United States (CONUS) Class IX CWT to 10 days.
- Reduce Class IX CWT Air Lines of Communication (ALOC) for deployed operations to 13 days.
- Reduce Class IX OCONUS Air CWT to 15 days.
- Support the research and writing of AR 711-2 to institutionalize DM initiatives.
- Support the Stock Positioning initiative.
- Support the Combat Spares initiative.

Repair Cycle Process Improvement Team (RCPIT). Under the leadership of MG Mitchell Stevenson, Commandant of the Ordnance Center and School, the RCPIT continued to improve the Army's maintenance processes in support of the overall DM program. The RCPIT implemented process improvements/initiatives that affected unit maintenance operations, reduced repair cycle times (RCT), reduced costs, improved the order quality of maintenance,

website and find reference materials, standing operating procedures (SOP), proven best practice procedures, common problems with solutions, and to submit requests and provide feedback.

The focus for 2002 was direct support and organizational level maintenance, successful fielding and training of the Equipment Downtime Analyzer (EDA), and providing on-site assistance through seventeen process walks. To provide continued assistance to the soldiers in the field a re-write is on going to update the Repair Cycle Handbook. It is anticipated this handbook will eventually be transitioned into a DA Pamphlet in the 2003 timeframe. The PIT has identified development criteria and requirements for the next version of EDA. The EDA ties logistics performance to readiness, enabling users to diagnose equipment readiness. This analyzer archives and links daily deadline maintenance reports at the organizational and support levels together and integrates them with supply data. The EDA also provides graphic representation of equipment readiness for any level of command. Its current configuration is an Integrated Logistics Analysis Program (ILAP) application with a user-friendly Powerbuilder Graphic User Interface (GUI) using Oracle databases. Training in 2002 was provided to over 350 soldiers and civilians at installations throughout the Army. This training provided basic skills on how to use EDA to improve maintenance and readiness.

To continue with the progress already made, the PIT has identified the following areas for exploration in 2003:

- Work to measure and improve order quality.
- Continue enhancements (including metrics) to the EDA.
- Continue EDA sustainment training as funding becomes available.
- Capitalize on distant learning capabilities for EDA training.
- Assist units and develop best practices through PIT led process walks.
- Continue to pursue order process improvements.
- Continue to focus efforts on the two level maintenance concept in field and sustainment maintenance.
- Continue to work on improving Standard Army Maintenance System (SAMS) submissions.
- Continue to identify causes for repairs with long supply times and make improvements.
- Maintain the Repair Cycle website as a point of information.
- Support the Customer Returns initiative.
- Continue to institutionalize the EDA initiative.

Army National Guard (ARNG). The ARNG DM team has identified and eliminated non-value-adding activities and improved value-adding ARNG activities and processes used by the Army's logistics systems. Approval and implementation of specific actions developed by this DM Team have made ARNG processes more efficient and responsive to the logistics community. Under the leadership of LTG Roger C. Schultz, Director Army National Guard, the 2002 RWT goal of 46 days for all issue priority groups (IPGs) was achieved. In January 2002 the overall ARNG Class IX RWT was 37.2 days and by the end of the December 2002 the RWT was reduced to 30.8 days. They had also established segment goals of: ten days for Unit Level Logistics System/Standard Army Maintenance (ULLS/SAMS) to Defense Automatic Address System (DAAS) processing, two days for DAAS to ship, and twelve days for ship to Materiel Inventory Record Post (MIRP). The ARNG continued to post performance metrics and a rank ordering of states comparing their performance against the standard on the DM and National Guard Bureau Homepages. These statistics are reviewed quarterly by the Director of the ARNG. Efforts continue to be made to obtain 100% Work Order Logistic File (WOLF) reporting, and expand DM site visits to states with inactive SITs. The National Guard Bureau (NGB) also continues to work with DLA to establish scheduled, definite deliveries and use "round robin" where it makes sense.

United States Army Reserves (USAR). The Army Reserve DM Team has identified and eliminated non-value-added activities and improved value-adding Army Reserve activities and processes used by the Army's logistics systems. Approval and implementation of specific actions developed by this DM Team have made Army Reserve processes more efficient and responsive to the logistics community. Under the leadership of LTG James R. Helmly, Chief, Army Reserve the USAR continued to work toward meeting their RWT goals of 12 days for IPG 1, 15 days for IPG 2 and 3. By the end of December 2002, the overall USAR Class IX mean was 15.2 days for IPG 1 and 18.9 days for IPG 2 and 3. Aggressive RWT goals have been established for 2002 that include 12 days for IPG 1 requests to USARC installations and 15 days to USAR organizations. The Army Reserve DM team continues to reduce their RWT by using follow-up visits, setting age edit parameters at the Corps/Theater Automatic Data Processing Service Center (CTASC), re-energizing DM SITs and enforcing policies for closing receipts. They continue to work factors that contribute to longer RWT such as: insufficient trunk lines for data transmission for the unit level; stricter controls for funding low priority requisitions; lack of resources; and lack of full-time supply personnel assigned to some units. The USAR continues to focus on methods to improve RCT.

RAND. RAND continues its data accumulation and logistics process analysis support to DM through its Department of the Army (DA) support contract. As the United States Army's federally funded research and development center for studies and analysis, the RAND Arroyo Center's mission is to:

- Conduct objective analytic research on major policy concerns, with an emphasis on mid-to-long-term policy issues.
- Help the Army improve effectiveness and efficiency.
- Provide short-term assistance on urgent problems.

MPRI. MPRI continues its program management support to DM by providing principle logistics managers and program management support through data collection, briefings, conference coordination, record keeping, management and administration of the DM Worldwide Web Homepage, and data analysis and management for performance metrics. Strategy and programs worked by MPRI are:

- Standardized and integrated missions, functions, and execution within the DM team.
- Developed and prepared supportive, executable policies and procedures for Army logistics.
- Provided in-depth, integrated education and training for soldiers and civilians who work in Army logistics jobs.
- Prepared, conducted, and evaluated related studies and assessments arising from DM initiatives.
- Provided related program management support, to include a manager and action officer to support the DPIT.

4) Identify significant challenges encountered, the process for resolution, and the solutions. Identify any best practices employed or developed.

a) Project Control.

It's easy to think of the military as a place where improvements are accomplished with a stern order and an obedient salute, but the veterans of the DM team know that the key to the program's success is more complicated than that. Change is tough. Education is a key element in the campaign to initiate change within the Army. The Army has incorporated DM instruction in the Training Directorate at the US Army Combined Arms Support Command at Fort Lee, VA. DM is currently a part of the classroom curriculum in the Quartermaster Center and School and Ordnance Center and School's Warrant Officers Advanced and Basic Courses, and at the Army Logistics Management College's Logistics Precommand Course, Logistics Assistance Program Operations Course, and Combined Logistics Captains Career Course.

As more of the Army embraces DM, there is a growing tendency for misinterpretation of program methodology and goals. The DM team learned that it is important to repeat the basic objectives of DM wherever they go and as often as possible to maintain program integrity. The Program Manager continues to coordinate and focus DM initiatives, extending the reach of DM into new areas, enhancing the use of PITs and SITs to extend and harness the energy of the program, and sharing lessons among all SITs.

b) Visions and Goals.

A clearly defined DM vision for an organization serves as a basis for identifying and selecting goals. Visions depict what might, could, or can exist. A clearly defined vision is essential to an

- Leadership must establish a clear priority for the organization's goals. Make the hard decision to force a clearly delineated priority.
- Change in circumstances may require or even optimally change goals and/or their ranking. Nevertheless, at any point in time this ranking must be specific. People need to have objectives and goals in focus.
- Ensure goal congruence within the organization. Different segments of the organization can have additional goals. However, these goals must be congruent with organizational goals. If not, change the organizations and/or the segments goals. Alternately, assign a value to the lack of goal congruence. If the benefit/cost is acceptable, accept lack of goal congruence. However, make this a clear, conscious decision and disseminate the decision to all.
- Provide to all a clear delineation of the priorities.
- Send clear signals on priorities, expectations and the reward/penalty function.
- Clearly define and prioritize goals and the measures one will use to evaluate goal attainment.
- Provide supporting agencies (DLA, AMC, etc. suggestions, requests, guidelines, and assistance that will assist in the pursuit of your vision.

c) Developing and Instituting a DM Philosophy

With the organization's vision understood and defined, the DM team now assists the organization in focusing on the DM philosophy. The following are guidelines provided to assist in establishing the philosophy:

- DM philosophy must be specific and definable.
- Leadership of the organization must commit to the philosophy.
- Leadership must provide visible signals of commitment and expectations with regards to the philosophy and resultant DM goals.
- Leadership must rank DM within the other goals of the organization.
- Leaders and subordinates must provide clear signals about the expected commitment of members of the organization to DM.
- DM philosophy must be consistent with the organization's vision and related goals.
- Develop a system that rewards success in goal attainment.

- Establish priorities in terms of effort, resources, quality management, organizational and overall DM goal attainment.
- Establish and clearly delineate goals that are consistent with organizational and overall DM goals.
- Define success relative to attainment of goals.
- Define quality relative to goals.

d) Institutionalizing the DM Program.

Each member of the DM team, whether on the Army Staff, at CASCOM, in the MACOM staffs, on the PITs, in SITs, or in the force, has some role to play in helping the Army institutionalize DM. The DM team provides the following proven techniques in institutionalizing the program:

- Gain a wartime theater distribution battlefield application through current and future concepts such as distribution-based force projection with time definite delivery, through inclusion in doctrinal and training literature, and through instruction to officers and non-commissioned officers at Army Schools.
- Recognize and authorize essential program management personnel in authorization document(s).
- Formalize the ad-hoc DM collaboration created among the various DOD logistics leaders that collectively comprise the VG.
- Conduct a Senior Logisticians DG conference annually to provide a forum for DM PITs and selected SITs to present the status of their program objectives.
- Establish DM SITs at all ARNG and USAR installations and in appropriate commands, and support them through their CAs.
- Use the DA, ILAP (GCSS-A) Program routinely as the principal means of evaluating logistics system cycle time performance in the field Army.
- Develop, refine and use DM metrics to evaluate program performance in terms of dollar cost avoidance and savings as well as reduced cycle time.
- Include DM in Army Policy.
- Include the above objectives in Officer Evaluation Report (OER) Support Forms and Civilian Evaluation Report Support Forms and through NCO counseling.

5) Indicate the metrics used to measure progress and success

reports. ILAP data feeds supporting MACOM/Corps ILAP are accomplished through eleven dedicated ILAP servers co-located with CTASC Standard Army Retail Supply System (SARSS) 2AC/B sites while installation data feeds are accomplished through nineteen dedicated servers located at each CONUS installation. ILAP pulls data from retail level CTASCs whereas RAND pulls data from wholesale DAAS through the Logistics Integrated Data Base (LIDB). RAND is the only source for the NGB until regional CTASCs come on line in ILAP at which time ILAP will be the sole source for all RWT data reports.

2 Figures 2-5 and 2-6 are the ILAP RWT Summary Report primary selection screen and data retrieval report for CONUS MACOMS. The resulting performance report is a breakout of all CONUS MACOMS showing the time in days to establish all requisitions for the month from the SSA to wholesale and close out.

3 In Figure 2-5, selections are provided for time period, organization level (Component, MACOM, Major Subordinate Command [MSC]-Spt and RIC-Stor), report level (installation, unit, RIC), report type (source of fill, with and without backorders), priority group, and supply class.

The screenshot displays the 'RWT Summary' application window. The title bar includes 'RWT Summary' and standard window controls. The menu bar contains 'File', 'Edit', 'View', 'Data', 'Retrieve', 'Window', 'Codes', 'Help', 'Back', and 'Forward'. Below the menu bar, there are tabs for 'RWT', 'RWT SOS', 'RWT FUND', 'RWT SOS/FUND', 'RWT MODE', and 'Data Retrieved'. A 'Retrieve' button is located on the left side of the main content area. The main content area features several form fields and controls:

- Mandatory Fields Are Bold**: A red heading indicating required fields.
- mm/yy Date Format**: A section with 'Start' and 'End' date pickers, both showing '12/02'. Below them is a note: 'Enter Month or use Drop Down Calendars.'
- Organization Selection**: Radio buttons for 'CONUS' (selected) and 'OCONUS'. Below these are dropdown menus for 'ORG_Level' (set to 'MACOM') and 'MACOM' (set to 'All'). A checkbox for 'Multi-Select MACOM' is present and unchecked.
- Report Type**: A dropdown menu set to 'SC wo BO'.
- IPG**: A dropdown menu.
- SC**: A dropdown menu set to '9'.

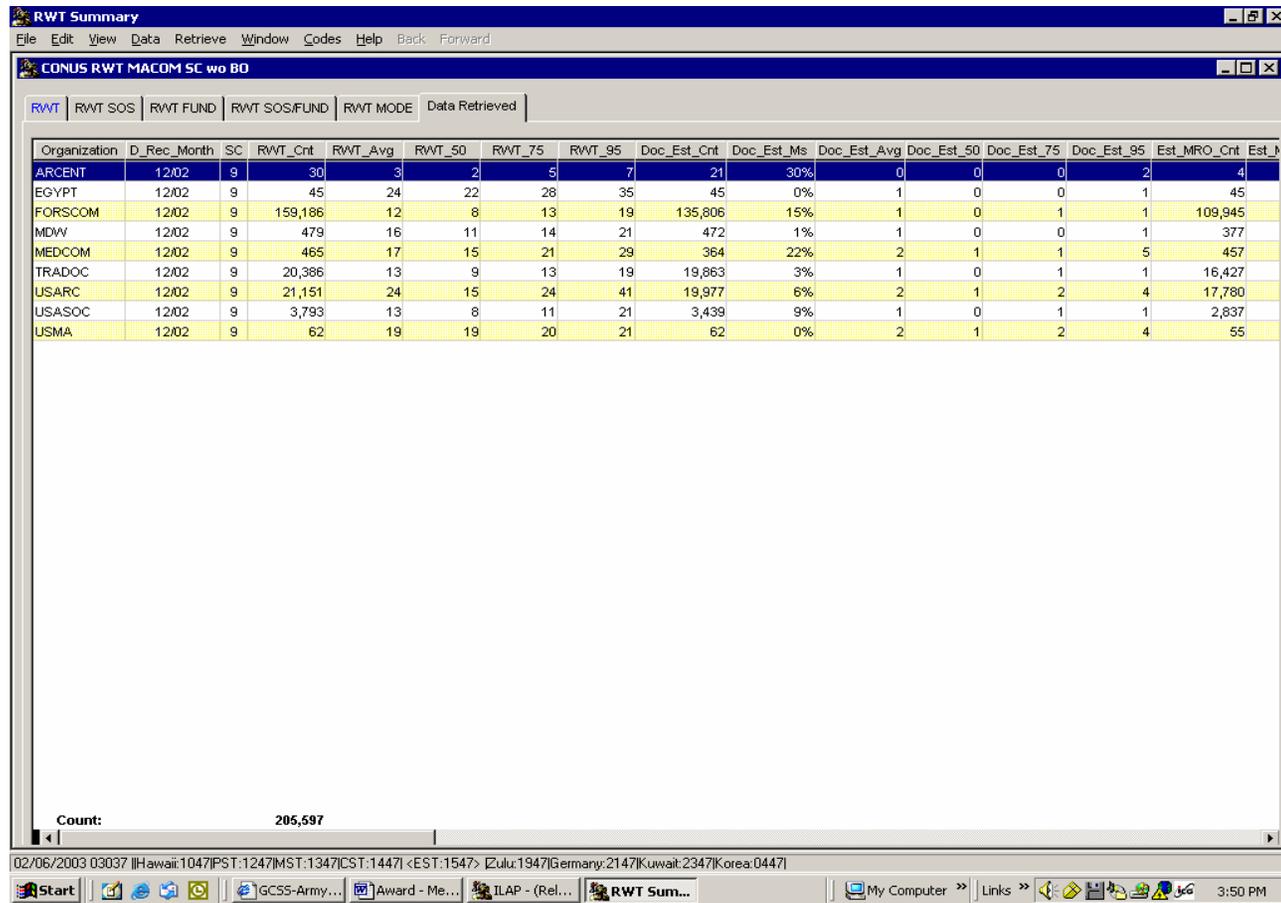


Figure 2-6. ILAP RWT Segmental Summary Report

4 Figure 2-6 shows the retrieved information in tabular format showing segmental data by supply class for each MACOM.

5 Figure 2-7 shows the sources of fill for a single MACOM accounting for all requisitions filled at wholesale and broken down by percentage of fill and percent missing.

RWT Summary

File Edit View Data Retrieve Window Codes Help Back Forward

CONUS RWT MACOM SC SOF

RWT RWT SOS RWT FUND RWT SOS:FUND RWT MODE Data Retrieved

Organization	D_Rec_Month	SC	SOF	RWT_Cnt	RWT_Avg	RWT_50	RWT_75	RWT_95	Doc_Est_Cnt	Doc_Est_Ms	Doc_Est_Avg	Doc_Est_50	Doc_Est_75	Doc_Est_95
FORSCOM	12/02	9	DVD	8,897	18	13	18	51	8,604	1%	1	1	1	1
FORSCOM	12/02	9	DVD_BO	6,849	39	21	41	120	6,727	2%	1	1	1	1
FORSCOM	12/02	9	LAT_OFF	3,959	16	13	18	36	1,757	56%	1	0	1	1
FORSCOM	12/02	9	LAT_ON	17,469	8	6	11	18	7,612	56%	1	1	1	1
FORSCOM	12/02	9	LP	4	100	100	100	100	4	0%	1	1	1	1
FORSCOM	12/02	9	REF_ON	11,039	7	4	8	18	2,639	76%	1	0	1	1
FORSCOM	12/02	9	UNK	38	20	9	16	43	36	5%	1	0	1	1
FORSCOM	12/02	9	WHSL	117,930	12	9	14	24	115,110	2%	1	1	1	1
FORSCOM	12/02	9	WHSL_BO	21,106	57	34	70	189	20,388	3%	2	1	1	1
FORSCOM	12/02	9	WHSL_GE	50	18	13	16	49	44	12%	1	1	1	1

Count: 187,141

02/06/2003 03037 | Hawaii:1112 | PST:1312 | MST:1412 | CST:1512 | <EST:1612> | Zul:2012 | Germany:2212 | Kuwait:0012 | Korea:0512

Start | GCSS-Army... | Award - Me... | ILAP - (Rel... | RWT Sum... | My Computer >> | Links >> | 4:15 PM

Figure 2-7. ILAP RWT Source of Fill Summary Report

6 Figure 2-8 shows a unique capability available in ILAP. The right mouse button can be used to drill down to the document number level for a detailed analysis of SSA performance.

The screenshot displays the 'RWT Details SUM w/o BO' window. The table contains the following columns: Document_No, RIC_Stor, PNIN, Qty, RWT, D_Docno, DIC, D_Rcpt, RIC_Fr, Pseudo, SOF, Sfx, Cnd, Discrep_Cd, DODAAC, Price, Fund_Cd, and Cat_SOS. The data is sorted by Document_No. At the bottom left, it shows 'Docno Count: 30'. The taskbar at the bottom indicates the system date is 02/06/2003 and the time is 3:53 PM.

Document_No	RIC_Stor	PNIN	Qty	RWT	D_Docno	DIC	D_Rcpt	RIC_Fr	Pseudo	SOF	Sfx	Cnd	Discrep_Cd	DODAAC	Price	Fund_Cd	Cat_SOS
W91PLQ23350002	W6S	12-190-9027	4	2	21-Dec-02	D6K	23-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$342.00	AWCF	AKZ
W91PLQ233620029	W6S	01-074-9220	2	1	28-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$463.67	AWCF	S9C
W91PLQ233600004	W6S	01-333-7632	2	3	26-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$242.00	AWCF	AKZ
W91PLQ233610031	W6S	01-133-4345	1	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$765.38	AWCF	S9G
W91PLQ233610050	W6S	01-090-7657	1	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$33.48	AWCF	S9I
W91PLQ233600004	W6S	01-333-7632	8	3	26-Dec-02	D6K	29-Dec-02	AK7		REF_ON	G	A		W91PLQ	\$242.00	AWCF	AKZ
W91PLQ23527002	W6S	01-411-5082	1	1	28-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$15,073.00	AWCF	B64
W91PLQ233600003	W6S	00-051-9450	1	3	26-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$16.22	AWCF	AKZ
W91PLQ233590002	W6S	01-195-7644	1	4	25-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$6.06	AWCF	S9C
W91PLQ233500007	W6S	01-112-6435	1	2	21-Dec-02	D6K	23-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$191.00	AWCF	AKZ
W91PLQ232570013	W6S	01-214-1344	2	6	23-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$528.00	AWCF	AKZ
W91PLQ232570004	W6S	01-192-8653	1	6	23-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$10.44	AWCF	S9E
W91PLQ233590016	W6S	00-734-6895	2	4	25-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$92.90	AWCF	S9G
W91PLQ23620020	W6S	01-155-7555	1	1	28-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$81.58	AWCF	AKZ
W91PLQ233620002	W6S	01-444-5581	1	1	28-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$17,114.00	AWCF	B64
W91PLQ233560006	W6S	00-167-0823	1	7	22-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$2.37	AWCF	S9I
W91PLQ233580009	W6S	01-203-2822	1	5	24-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$4.85	AWCF	S9G
W91PLQ233610003	W6S	01-440-6577	1	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$84,554.00	AWCF	B64
W91PLQ233560007	W6S	01-118-0789	20	7	22-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$26.78	AWCF	S9I
W91PLQ233600048	W6S	01-333-7632	1	3	26-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$242.00	AWCF	AKZ
W91PLQ233620042	W6S	00-068-0508	1	1	28-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$2.24	AWCF	S9I
W91PLQ233560003	W6S	01-093-3828	13	7	22-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$34.08	AWCF	S9G
W91PLQ233580011	W6S	01-314-1955	1	5	24-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$3.46	AWCF	S9I
W91PLQ233560009	W6S	01-120-0713	5	7	22-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$18.12	AWCF	S9C
W91PLQ233610004	W6S	01-440-6582	1	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$26,054.00	AWCF	B64
W91PLQ233610005	W6S	01-440-8046	1	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$28,616.00	AWCF	B64
W91PLQ233610053	W6S	01-450-5479	1	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$75.04	AWCF	AKZ
W91PLQ233610009	W6S	01-441-1623	1	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$24,661.00	AWCF	B64
W91PLQ233610054	W6S	01-450-5480	1	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$75.04	AWCF	AKZ
W91PLQ233610042	W6S	00-946-4802	2	2	27-Dec-02	D6K	29-Dec-02	AK7		REF_ON	F	A		W91PLQ	\$6.24	AWCF	S9I

Figure 2-8. ILAP RWT Detail Summary Report

7 RAND has developed DM RWT segmental analysis reports and provides them on the DM website. Using the Logistics Integrated Data Base (LIDB) data, RAND creates a set of monthly DM reports based on a reverse pipeline logic. This is a powerful analytical tool that reflects historical information and not current performance. This approach is useful in capturing central tendency through a historical view, and is the source of RWT data on the DM website under DM Performance Reports titled "What the Vice Chief Sees." These reports serve as status marks for the effect of process changes, but will not always provide results identical to the LIDB.

- Repair Cycle Data Collection, and Performance Reports

preventive maintenance and work arounds due to poor supply performance) and the supply chain. In short, the EDA provides information that improves the Army's ability to make well-informed decisions with regard to improving equipment readiness.

2. The EDA consists of three parts: a graphical user interface (GUI) to allow comparisons of different units and end items, reports geared to specific issues (e.g., number of failures and downtime by end item serial number or readiness driving parts by fleet), and a deadlining repair database. The GUI is pictured in Figure 2-9:

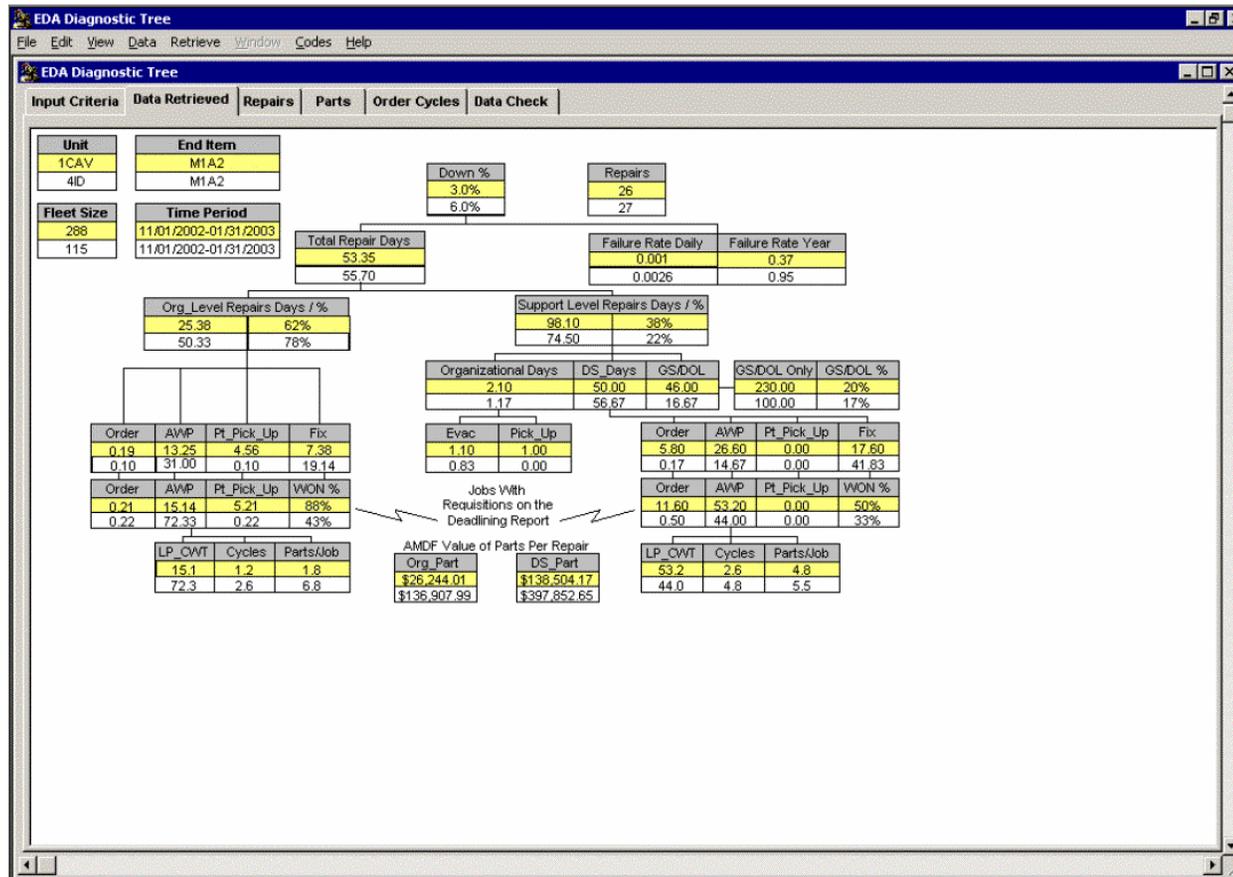


Figure 2-9. Equipment Downtime Analyzer Report in ILAP

3. The source data for the EDA reside in the Army's organizational and support maintenance Standard Army Management Information System (STAMIS) and the CTASC document history files. The EDA saves the daily deadline information that is passed from the Unit Level Logistics System (ULLS) to the SAMS system to generate the 026 print or daily deadline report (by archiving the deadline reports in the Integrated Logistics Analysis Program (ILAP) and integrates it with

Supply System (SARSS), Defense Central Accounting System (dCAS), Standard Army Financial Accounting and Reporting System (STARFIARS), and Standard Finance System (STANFINS) to track requisitions and turn-ins and combines that information from the logistics and financial management processes into standard or ad-hoc query reports.

Local sources. Unique installation management systems are also sources of information for SITs to use.

- Single Stock Fund (SSF)

1. SSF is a Department of the Army (DA) initiative to reengineer inventory management functions and associated financial processes throughout the Army. Army Materiel Command (AMC) operates the commodity-oriented wholesale level and the Army commands perform the retail level management functions at Army posts and installations. This traditional separation sub-optimizes Army logistics because it involves independent requirements determination and maintenance repair requirements processes, accumulates excess stocks, and duplicates workload requirements and processes. When it is fully implemented, the SSF will consolidate the management of existing wholesale, theater, corps, installation, and division ASL inventories into a seamless logistics and financial system, thereby creating a single virtual supply and maintenance operation. The SSF will change the way the Army operates at every installation, every corps and division support command, and every Army Materiel Command (AMC) integrated materiel management center.

2. The SSF Campaign Plan is comprised of four milestones. While movement from one milestone to the next will be event-driven, target dates have been established.

- ? Milestone 0 focused on maintaining fiscal solvency and preparing for implementation of SSF.
- ? Milestone 1 focused on incorporating theater and corps/installations Army Working Capital Fund (AWCF) assets under AMC's management.
- ? Milestone 2 focused on incorporating operations & maintenance (O&M) stocks above the Division ASL into the SSF.
- ? During Milestone 3, implementation is underway to capitalize all O&M stocks above the Prescribed Load List (PLL) and shop stock.

- Cycle Synchronization

1. The world of Army logistics processes runs in cycles, either hourly, daily, weekly, monthly, or annually. A knowledge of the timing of logistics cycles and their effect on installation logistics processes can, if used wisely, decrease total cycle time and speed the delivery of materiel to the requesting organization. SITs can examine requisition and repair cycle times, compare them to the

West Coast Cycle Synchronization

ULLS/SAMS customers submit replenishment requests to SARSS 1, which **FINISHES** closeout to SARSS 2 A/D by 1700 PST and transmits to SARSS 2A/C NLT 1800 PST. SARSS-2A/C (304th CTASC) transmits all business every 2 hours thru the SARSS Gateway (~1/2 hr transit time). All undelayed requisitions should reach ICPs by 2000 PST (2300 EST). DDJC will begin pull down from the Megacenter at 0000. That will get the installation MROs on the depot truck at 1700 that same day for next day delivery. **Total elapsed time from SARSS 1 closeout to SSA receipt can be as little as 17 hours using the AMS card to close the shipment.**

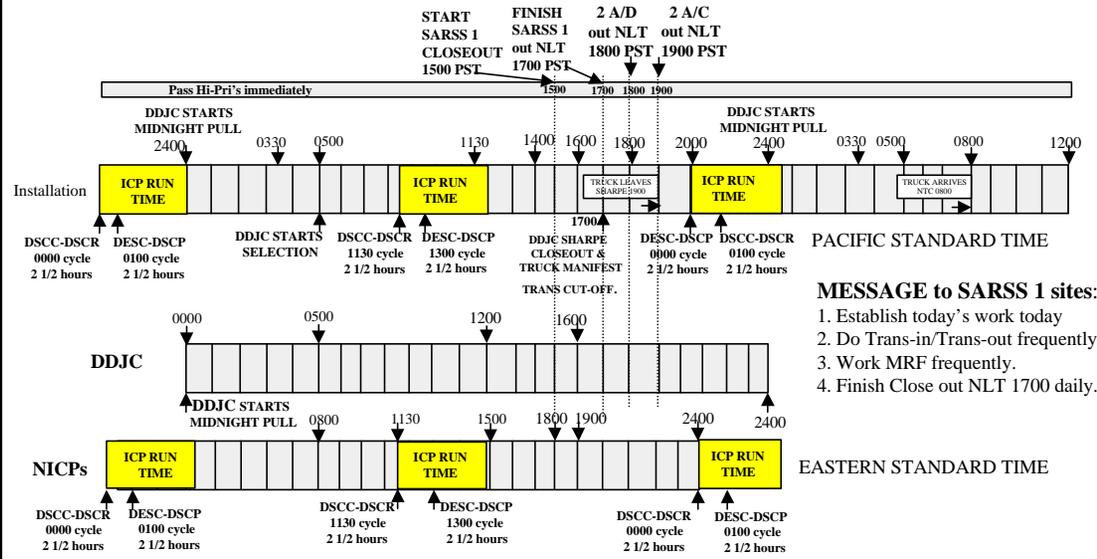


Figure 2-10. West Coast Cycle Synchronization

2. A review of the Class IX repair parts requisition cycle at a west coast installation (See Figure 2-10) revealed that there was an alternative cycle that offers the potential for improvement. The installation SARSS 2AD was closing out at 2200 hrs. daily, missing the opportunity to enter the same day (day 0) Inventory Control Point (ICP) cycles, the first of which began 2 hours earlier at 2000 hrs (PST). By missing those ICP runs, they also missed the Defense Depot San Joaquin (DDJC) midnight pulldown from the ICP MRO output cycles. The installation resupply cycle caught the midday ICP runs on day 1, but their requisitions had to wait until the next DDJC pulldown at midnight to be picked, packed, loaded on the truck on day 2 and shipped to arrive on day 3. This all assumes no interruptions, weekends, etc. which will routinely happen.

3. The DM cycle synchronization alternative proposal is for the installation to start its cycle as shown on the top bar of Figure 2-10. It amounts to a 4-hour cycle back up. By doing that, the "day 0" installation cycle will enter the ICP cycle that

East Coast Cycle Synchronization

ULLS/SAMS customers submit replenishment requests to SARSS 1, which **FINISHES** closeout to SARSS 2 A/D by 1630 EST and transmits to SARSS 2A/C NLT 1730 EST. SARSS-2A/C transmits all business every 2 hours thru the SARSS Gateway (~1/2 hr transit time). All undelayed requisitions should reach ICPs by 2000 EST. DDSP pulls down from the Megacenter up to 6 times a day. That will get East Coast MROs on the next day's DDSP truck at 2300 EST for next day delivery. **Total elapsed time from SARSS 1 closeout to SSA receipt can be as little as 30 hours using the AMS card to close the shipment.**

MESSAGE to SARSS 1 sites:

1. Establish today's work today
2. Do Trans-in/Trans-out frequently
3. Work MRF frequently.
4. Finish Close out NLT 1630 daily.

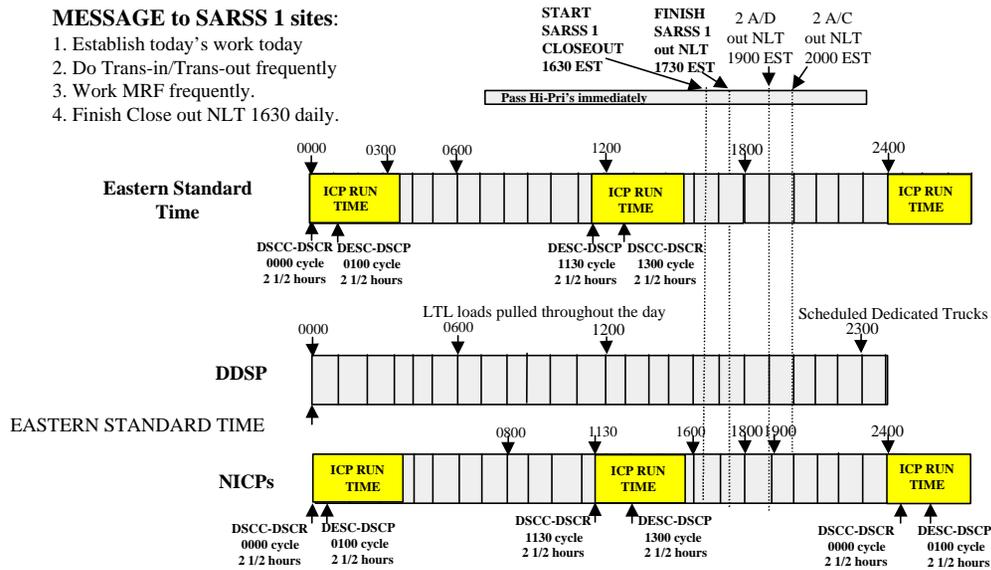


Figure 2-11. East Coast Cycle Synchronization

Mid-America Cycle Synchronization

ULLS/SAMS customers submit replenishment requests to SARSS 1, which **FINISHES** closeout to SARSS 2 A/D by 1830 CST and transmits to SARSS 2A/C NLT 1830 CST. SARSS-2A/C transmits all business every 2 hours thru the SARSS Gateway (~1/2 hr transit time). All undelayed requisitions should reach ICPs by 2100 CST. DDSP and DDJC pull down from the Megacenter up to 6 times a day. That will get Central Zone MROs on the next day's DDC trucks in time for next day or day two delivery. **Total elapsed time from SARSS 1 closeout to SSA receipt can be as little as 30 hours using the AMS card to close the shipment.**

MESSAGE to SARSS 1 sites:

1. Establish today's work today
2. Do Trans-in/Trans-out frequently
3. Work MRF frequently.
4. Finish Close out NLT 1830 daily.

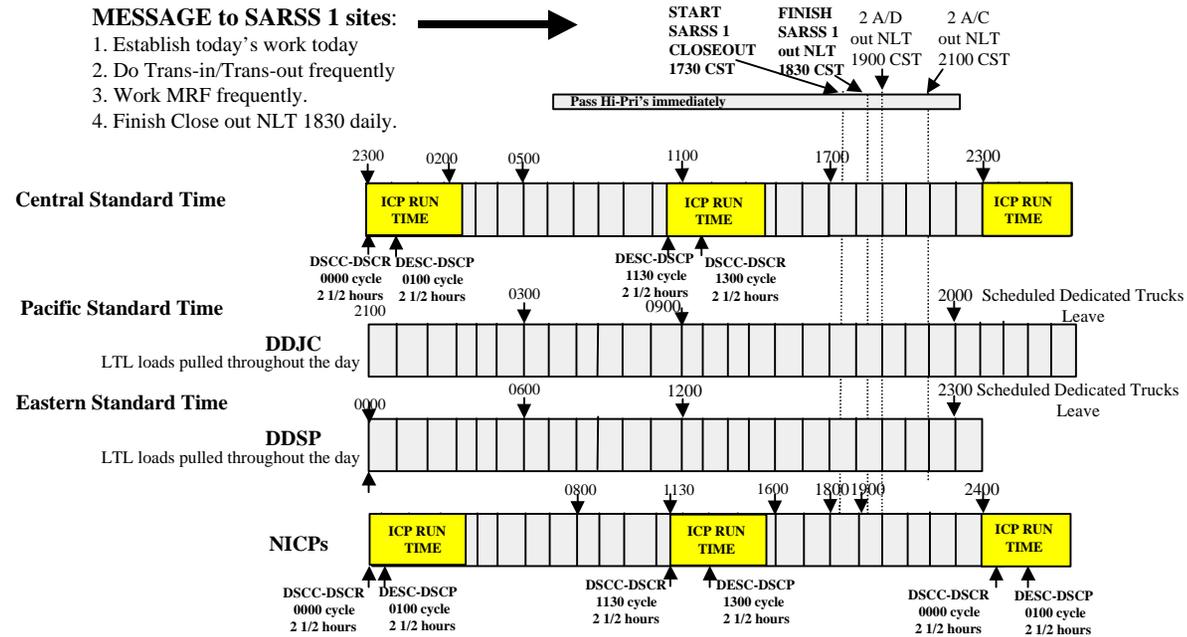


Figure 2-12. Mid-America Cycle Synchronization

5. OCONUS SARSS activities also stand to gain significant advantages by analyzing their cycles and comparing them to the national cycles. Cycle synchronization charts for OCONUS sites can be found in Figures 2-13, 2-14, 2-15, 2-16 and 2-17.

USAREUR Cycle Synchronization

ULLS/SAMS customers submit replenishment requests to SARSS 1, which **FINISHES** closeout to SARSS 2 A/D by 1530 CET and transmits to SARSS 2A/C NLT 1600 CET. SARSS-2A/C (13th COSCOM MMC) transmits all business every 2 hours thru the SARSS Gateway (~1/2 hr transit time). All undelayed requisitions should reach ICPs by 1730 CET (1130 EST). DDSP pulls down from the Megacenter up to 6 times a day. That will get USAREUR MROs on the next day's Emery truck at 1700 EST for next day delivery. **Total elapsed time from SARSS 1 closeout to SSA receipt can be as little as 40 hours using the AMS card to close the shipment.**

MESSAGE to SARSS 1 sites:

1. Establish today's work today
2. Do Trans-in/Trans-out frequently
3. Work MRF frequently.
4. Finish Close out NLT 1530 daily.

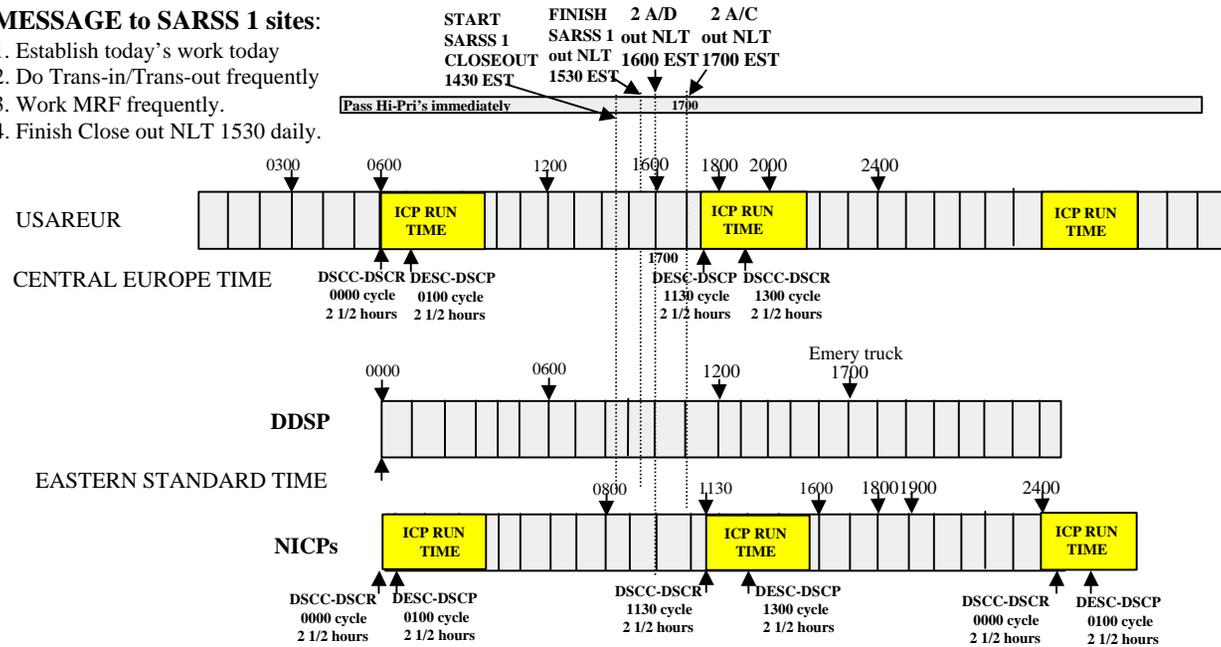
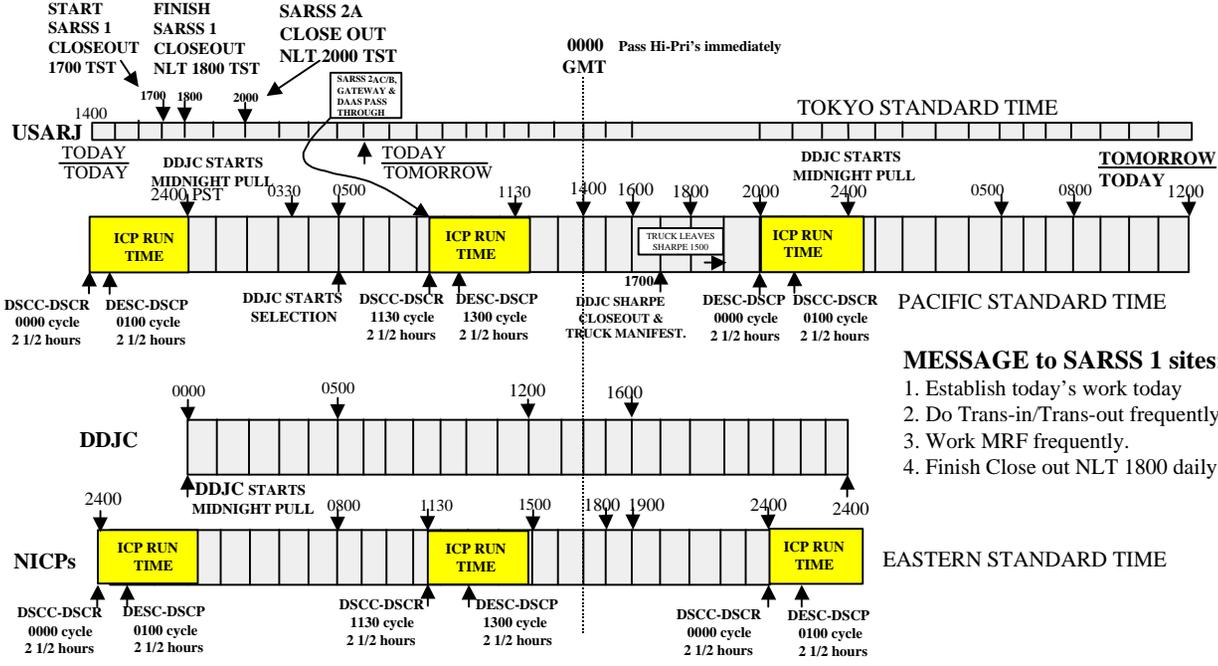


Figure 2-13. USAREUR Cycle Synchronization

USARJ Cycle Synchronization

For all ULLS/SAMS customers, submit replenishment requests to SARSS 1 by 1600 TST. SARSS 1 accounts ought to **FINISH** closeout to SARSS 2A by 1800 TST. SARSS 2A transmits to the SARSS-2AC/B NLT 2000 hrs. SARSS-2AC/B (CTASC) transmits all business every 2 hours thru the SARSS Gateway (~1/2 hr transit time). Without Gateway or DAAS hold time, all undelayed requisitions should reach ICPs by 0100 TST (1000 EST). ICP process begins at 1130 EST (0230 TST). DDJC will begin pull down from the Megacenter at 2400 PST (1800 TST). That will get USARJ MROs on the COMALOC truck at 1500 that same day for next day flight (**DOC EST to DEPOT Ship = 19 hrs**).



- MESSAGE to SARSS 1 sites:**
1. Establish today's work today
 2. Do Trans-in/Trans-out frequently
 3. Work MRF frequently.
 4. Finish Close out NLT 1800 daily.

Figure 2-14. USARJ Cycle Synchronization

USFK Cycle Synchronization

For all ULLS/SAMS customers possible, submit replenishment requests to SARSS 1 by 1500 KST. SARSS 1 accounts ought to **FINISH** closeout to SARSS 2 AD or to 2AC/B by 1900 KST. SARSS-2AC/B (CTASC) transmits all business every 2 hours thru the SARSS Gateway (~1/2 hr transit time). Depending on Gateway and DAAS hold times, all undelayed requisitions should reach ICPs by 0100 KST (1000 EST). ICP process begins at 1130 EST (0230 KST). DDJC will begin pull down from the Megacenters at 2400 PST (1800 KST). That will get USFK MROs on the COMALOC truck at 1500 that same day for next day flight (DOC EST to DEPOT Ship = 19 hrs).

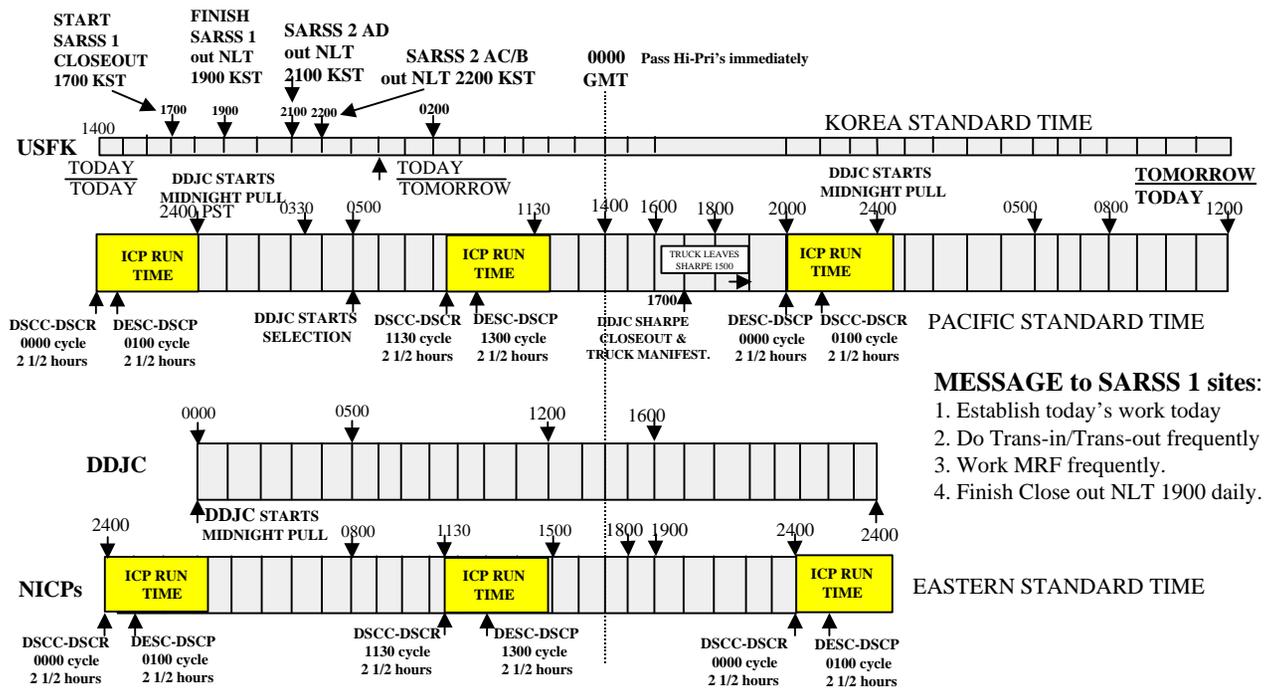


Figure 2-15. USFK Cycle Synchronization

HAWAII Cycle Synchronization

For all ULLS/SAMS customers possible, submit replenishment requests to SARSS 1 by 1200 HST. SARSS 1 accounts ought to **FINISH** closeout to SARSS 2 AD or to 2AC/B by 1400 HST. SARSS-2AC/B (CTASCII) transmits all business every 2 hours thru the SARSS Gateway (~1/2 hr transit time). Depending on Gateway and DAAS hold times, all undelayed requisitions should reach ICPs by 1800 HST (2400 EST). ICP process begins at 0000 EST (1800 HST). DDJC will begin pull down from the Megacenter at 2400 PST (2200 HST). That will get HAWAII MROs on the COMALOC truck at 1500 the next day for next day flight (DOC to DEPOT Ship = 20 hrs).

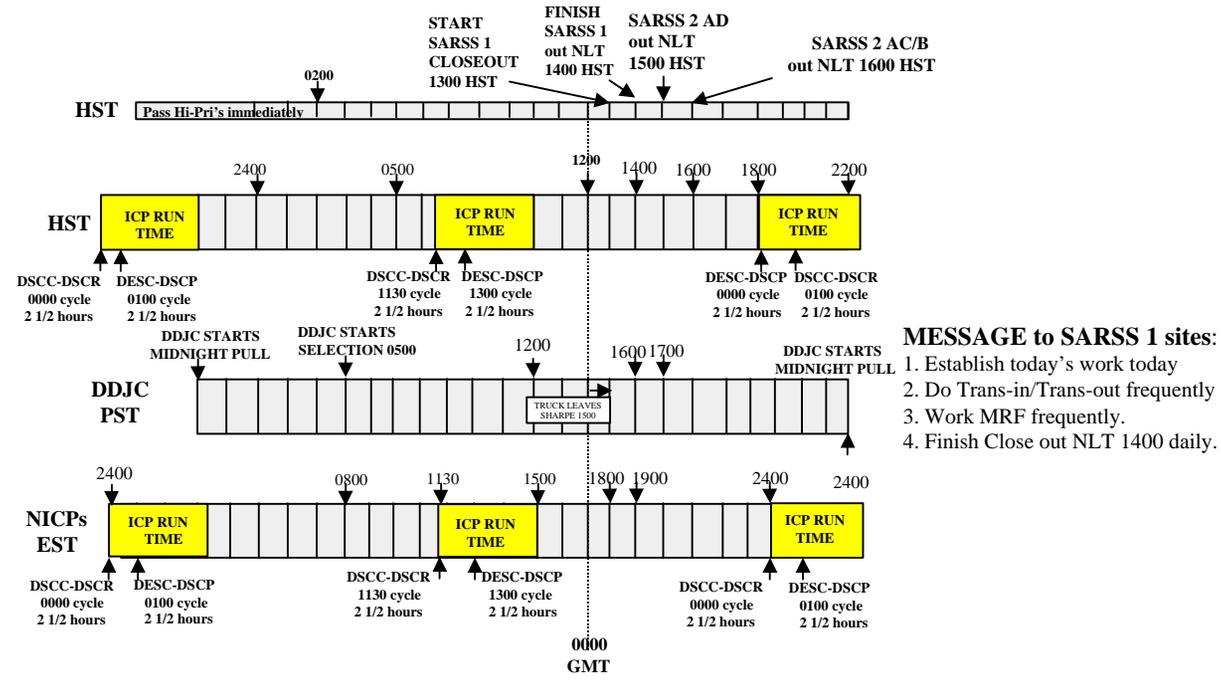


Figure 2-16. Hawaii Cycle Synchronization

ARCENT AOR Cycle Synchronization

ULLS/SAMS customers submit replenishment requests to SARSS 1, which **FINISHES** closeout to SARSS 2 A/C by 1730 MTZ. SARSS-2A/C (321ST TSCMMC) transmits all business every 2 hours thru the SARSS Gateway (~1/2 hr transit time). All undelayed requisitions should reach ICPs by 2130 MTZ (1130 EST). DDSP pulls down from the Megacenters up to 6 times a day. That will get ARCENT MROs on the next day's Emery truck at 1700 EST for next day delivery. **Total elapsed time from SARSS 1 closeout to SSA receipt can be as little as 43 hours using the AMS card to close the shipment.**

MESSAGE to SARSS 1 sites:

1. Establish today's work today
2. Do Trans-in/Trans-out frequently
3. Work MRF frequently.
4. Finish Close out NLT 1730 daily.

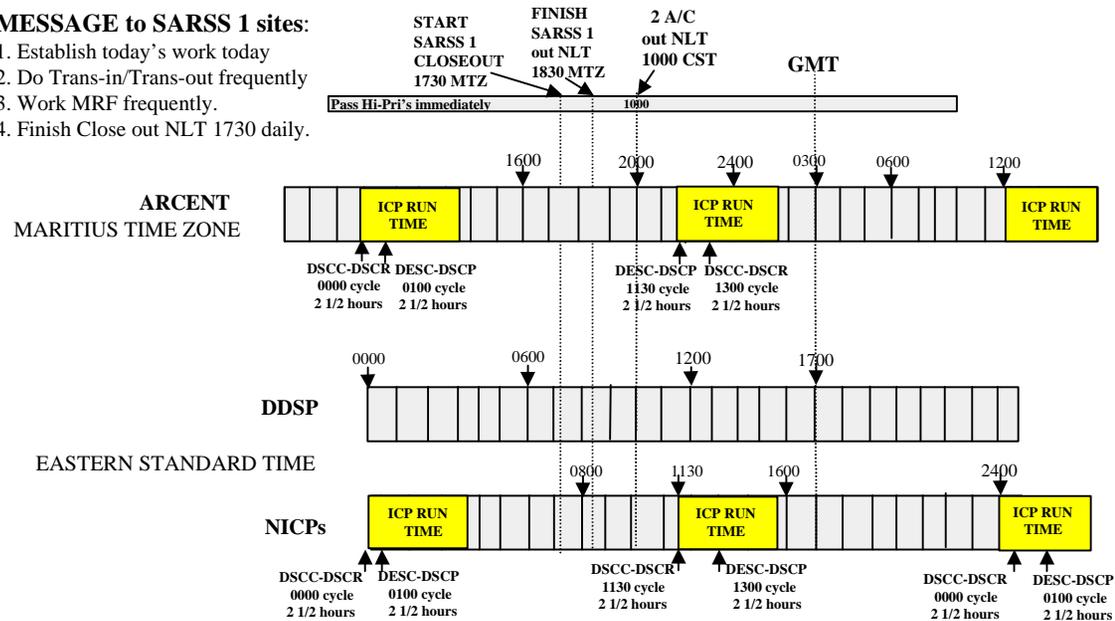


Figure 2-17. ARCENT AOR Cycle Synchronization

6) Document and quantify cost and performance benefits

Overall Process Improvement in Requisition Wait Time (RWT).

Requisition Wait Time (RWT) continues to be the Army metric that measures wholesale response time to SSA requisitions in days that the SSA waits for stock replenishment or to receive dedicated unit requests. This metric includes both retail and wholesale time when a wholesale source is involved. It does not include local source fills. In the purest sense, RWT looks at supply system performance.

Since 1995 the DM initiative has focused on improving the flow of information and materiel through the logistics processes to improve RWT. Improved processes are both faster and more

These efforts have resulted in significant improvements in the speed and reliability of the supply system. The bars on Figure 2-18 represent a reduction of 57% in RWT from 22.4 days in 1995 to and average of 9.7 days in 2002 for Class IX CONUS requisition.

RWT Performance
"CONUS Accomplishments"
1995 - 2002

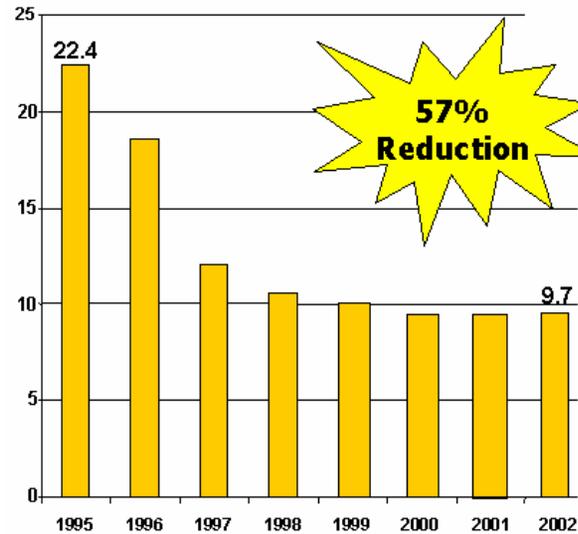


Figure 2-18 CONUS RWT

The bars on Figure 2-19 represent a reduction of 52% in RWT from 25.3 days in 1995 to and average of 12.2 days in 2002 for Class IX OCONUS requisition.

RWT Performance
"OCONUS Accomplishments"
1995 - 2002



As the two previous charts show with the continuing downward slope of the bars, the Army has made dramatic and continuous improvements in the RWT process under the DM initiative.

Reduction of Requisition Wait Time at Installations and MACOMs

Challenging RWT goals were established for 2002. In 2002, the CONUS Class IX RWT goal for all IPGs was six days, outside of the Continental United States (OCONUS), air lines of communication (ALOC) RWT was 13 days, and OCONUS surface was 40 days. The PITs also focused their efforts on achieving 12 days at the 95th percentile for all CONUS IPGs and 23 days at the 95th percentile for all OCONUS IPGs. Data analysis indicates CONUS Class IX RWT was reduced by over 60%, OCONUS Air by 55% and OCONUS Surface by 26%. Progress is monitored by matching differences between the baseline period (July 94 - June 95) and current monthly performance levels. The progress made towards the RWT goal of six days for CONUS installations and MACOMs is as follows:

Installation CLIX	Dec 02 Mean	95th Percentile	Baseline
Irwin	7.2	16	22.3
Lee	7.5	14	34.3
Knox	8.0	15	18.7
Campbell	9.2	14	20.4
Lewis	9.2	18	26.8
Benning	9.2	15	25.3
Bragg	9.6	22	26.3
Drum	9.6	16	23.0
Leonard Wood	10.0	15	22.0
Huachuca	10.4	21	27.1
Eustis	10.6	20	19.5
Jackson	11.3	17	31.5
Gordon	12.0	37	20.8
Riley	12.4	27	18.4
Stewart	12.5	28	22.4
Polk	12.7	39	24.2
Bliss	12.8	25	22.4
Rucker	12.4	25	24.2
Hood	12.9	35	23.7
Sill	13.2	31	28.8
Carson	13.1	27	22.7

CONUS MACOMs	Dec 02 Mean	95th Percentile	Baseline
AMC	11.2	31	16.5
TRADOC	11.6	26	19.8
FORSCOM	12.2	29	23.6
SOCOM	13.1	40	24.6

OCONUS Air by MACOMs	Dec 02 Mean	Baseline
KOREA	11.5	26.3
USAREUR	12.8	23.1
USARPAC	12.9	31.1
USARSO	40.8	25.0

RWT currently measures the time it takes for a requisition to be filled from the date on the Standard Army Retail Supply System level 1 (SARSS1) file to the date supplies are received by the SSA. In the future, Customer Wait Time (CWT) will express system response to unit-level requirements in days the unit waits for satisfaction. This metric includes both retail time and wholesale time when a wholesale source is involved. It also includes local source fills. CWT is aiming for total performance from the customer's perspective.

Proposed 2002 goals were established for CWT. In 2002 the CONUS CWT goal for all IPGs was 10 days and outside of the Continental United States (OCONUS), air lines of communication (ALOC) the CWT goal was 15 days.

In December of 2002 a recalculated Army CWT was initiated with a promulgation of a recalculated Army CWT baseline. New baselines were computed due to the conversion from order fulfillment to transactional. The baseline period for this data is FY 01. The new CWT is accessible through Army ILAP 6.0.

Initiatives were implemented to assist USAREUR to continue to improve their CWT. Changes were made by DLA in the airlift/sealift mix involving moving heavy, regularly ordered NIINs off the air channels and into sealift channels to reduce transportation costs. This cost saving of \$1.8 million was reinvested into scheduled air channel flights. Sealift times were improved by reducing capacity-utilization delays and better coordination of batched supply segments.

Improvements were also realized by implementing improved stock positioning initiatives. Depot stocks were redistributed to improve facing fills at Strategic Distribution Platforms. Improved facing fills have enhanced time definite delivery to all customers. The Defense Distribution Depot – Europe (DDDE) expanded their role to include serving as the Theater Distribution Platform. This new focus reduced CWT, strategic lift, and costs.

Dollar Cost Banding Initiative

RAND Arroyo Center developed a new algorithm for calculating inventory levels in SSAs. Known as Dollar Cost Banding (DCB), the new algorithm has produced immediate and significant gains in performance at little or no additional inventory cost. Improved inventory performance means that customers spend less time waiting for parts. As a result, repairs are completed more quickly, which translates into higher equipment readiness rates. The Army has moved quickly and approved the use of DCB as a policy for setting inventory at retail supply points Army-wide. A message transmitted to the field in November 2002 from the HQDA Deputy Chief of Staff, G-4 determined that DCB would be the mandatory methodology for conducting ASL reviews for all Army SSAs. It further stated that until incorporated into Global Combat Support System - Army the Integrated Logistics Analysis Program (ILAP) DCB model recommendations would serve as the basis for the ASL review process and serve as the starting point for the ASL review. Individual commanders will continue to retain the flexibility to adjust actual ASL breath and depth based on

the item available, or has the supply run out?) Improved local fill rates mean that fewer requests need to be referred to outside supply sources, thus reducing the number of delays.



Figure 2-20. Dollar Cost Banding

As Figure 2-20 illustrates, DCB has brought about improved performance by producing a new algorithm that has made it possible to expand the breadth of inventories. Traditionally, Army SSAs used a "one-size-fits-all" approach for determining whether or not to stock a particular line. An item not currently stocked would need nine requests in the prior year to be added, while an item already stocked would need three demands to be retained. These criteria were applied equally to a ten-cent screw and a \$500,000 tank engine, despite the very different levels of investment associated with each item. In contrast, the DCB algorithm adjusts the criteria for determining whether an item should be added or retained according to the item's criticality, mobility requirements, end item density, and dollar value. It uses a two-year, rather than one-year, demand history. Under DCB, a small, inexpensive, but mission-critical item might be added to inventory with only three demands and retained with just one. DCB has also automated the process for identifying nonessential, bulky items to be removed from deployable inventories. DCB also allows for greater variation in the depth of stock for those lines that have qualified for inventory. This new approach abandons the Army's traditional "days-of-supply" algorithm for determining the quantity of each authorized item to stock. The traditional approach assumed that demands were distributed uniformly throughout the year and simply divided the annual number of demands for an item by 365 to derive an average daily demand rate. To provide "extra" stock, the algorithm computed a "safety level" of five days of supply.

Through onsite training by the DM Team over 90 percent of the Army's tactical SSAs have

parts needed for a job are stocked locally, repairs can be completed more quickly because no parts need to be ordered off-post.

- Quicker repairs help improve equipment readiness. The performance improvements provided by cost banding benefit soldiers both in garrison and during deployment. Improved repair times have a direct impact on equipment readiness. If repairs are completed quickly, equipment can be returned to mission capable status.

Reducing Workarounds

Research conducted in 1999 by the RAND Arroyo Center identified local inventory reviews and returns from maintenance as the two primary sources of redistributable stock. Inventory turbulence and changes in demand trends were identified as the root causes of redistributable stock generated by inventory reviews, and it has been identified that DCB's more stable inventory review algorithms have reduced inventory turbulence.

It was found that maintainers in the Army when faced with equipment down for a long time, when in danger of "busting fleet", or when in the midst of a critical major exercise and having trouble getting the needed part or just not sure if the part is coming, will likely find a way to get the job done. In most cases the maintainer will perform a workaround. The various means of workarounds include:

- Controlled substitution
- Trade or borrow from another organization
- Local fabrication
- Local purchase
- Change repair method (e.g., use higher assembly)

The longer a maintainer has to wait for a part, the more likely they are to employ workarounds.

Prior to improvements by the DM team in reducing RWT, repair parts workarounds were performed over 50% of the time. With an improved RWT, research confirms that today only 15% of deadlining customer requests are satisfied by workarounds before the part is issued. DCB has also significantly improved RWT by shifting the fill source of many customer orders from wholesale sources to ASLs, in effect better buffering maintenance from wholesale supply and the chance that a long CWT will occur. The DM team continues efforts to improve wholesale RWT and DCB implementation, along with newly emerging backorder-reduction initiatives to further improve Army-wide RWT.

Equipment Downtime Analyzer (EDA) Fielding and Training

The focus for the RCPIT in 2002 was the completion of the EDA fielding and training. EDA ties process performance to readiness results, enabling maintainers to diagnose equipment readiness. EDA's metrics provides visibility of the equipment family sustainment processes, to include organizational level repair time and organizational time on direct support (DS) level repairs. Through the use of these and additional metrics, EDA reports provide a system view which can detect whether changes in root-level processes, such as wholesale order and ship, rise up to affect equipment readiness or whether "reactions" in other processes influence the improvement. Two SAMS-II reports serve as the basis for the EDA. The SAMS-II 01 report captures all maintenance information on all open deadlining repairs. The SAMS-II 02 file contains

USAREUR Forward Stock Initiative

Studies determined that strategic lift to USAREUR was insufficient for large-scale operations, particularly for sustainment stocks. The USAREUR DM team, with the assistance of DLA and AMC, moved large, heavy, highly demanded DLA/AMC items forward to locations at Germersheim (DDD-E) and GSC-E (Kaiserslautern). Items stocked forward were:

- Class I Operational Rations
- Class II OCIE and Maps
- Class III High Demand Package Items
- Class IV Barrier Material (Plywood, Pickets, Wire, Sandbags)
- Class IX Outsized Items (Tires, Track, Sheet Metal)

This initiative resulted in a reduction in RWT and CWT.

Winning the War on Backorders

In 2002 the DPIT launched a renewed effort on the war on backorders. In defining the problem the PIT determined that backorders:

- Affect readiness by increasing RWT, Non-Mission Capable-Supply (NMCS), and management attention.
- Increase maintenance workload through workarounds.
- Increase inventory investment.
- Have the potential to create excess.
- Tie up Operations and Maintenance, Army (OMA) funds and delay Army Working Capital Fund (AWCF) sales.

The PIT defined the problem from the customer, retail supply and wholesale supply perspectives. Studies and resulting measurements were done on backorder rates, backorder times, and cost of backorders. A plan was devised with a goal of reducing the number of outstanding backorders, improve processes so fewer backorders are generated, and decrease CWT/RWT when an item is backordered. In 2002 the following initiatives were implemented and have resulted in a reduction in backorders:

- **Field:** Implement DCB at all SSAs.
Validate and reconcile outstanding backorders.
- **AMC and DLA:** Coordinate inventory levels across echelons and ultimately move to multi-echelon inventory models.
Continue to reduce Administrative Lead Time/ Production Lead Time (ALT/PLT) by automating more decision actions and flatten decision-making structures.
Continue to establish long-term contract with vendors.
Make delivery time part of the contract.
- **AMC Repairables:** Apply lean production techniques to all workloads and inventories by separating planning and execution processes and executing a short-term forecasts.
Record all parts demands as recurring demands.
Improve parts explosion process and move to demand supported

caused some orders to be delayed (for instance, to wait until enough similar orders accumulated to fill a truck) and required the installations receiving the materiel to cope with multiple deliveries, most of them unscheduled.

The analyses showed that the delays and variability in the depot and transit segments could be reduced greatly if the Army and DLA could establish scheduled/dedicated trucks (similar to regular mail deliveries) as the primary shipping mode to Army installations. Other activities, such as depot processing, then could be synchronized with these regular delivery schedules. Most depot-to-post combinations had driving times of 2 days or less and sufficient volume to support trucks daily or every other day. In such cases, even high-priority items that formerly were shipped by air could be placed on these trucks, saving the expense of using premium transportation services such as FedEx.

Working closely with the Army, DLA increased the use of scheduled truck shipments for large installations. Under the scheduled/dedicated truck concept, depots that serve large installations place all the shipments for that installation, regardless of eligibility for air shipment or bulk considerations, on a routinely scheduled truck. To increase the opportunities for capitalizing on scheduled/dedicated trucks, DLA implemented a number of changes. Its depots applied automation to sort shipments into multipacks and added automated manifest cards for key customers on post, reducing work loads and decreasing the time required to receipt shipments.

Building on successes experienced with Army customers, DLA has expanded this concept to Air Force, Navy, and Marine customers providing a clear benefit to the entire DoD community.

DLA Stock Positioning

Research conducted by the DM team revealed a tremendous amount of duplication of stocks in the distribution depots. In many cases supplies were not stocked in quantities needed for responsiveness and in locations calculated to minimize transportation costs on inbound shipments from producers and on outbound shipments to requisitioning activities. From this starting point and with DM input, DLA has modified its stock positioning policies to streamline distribution and reduce customer wait times, reduce retail inventory and costs where appropriate, and allow savings created from streamlining distribution to be used to add more breadth of inventory and contingency stocks.

To support this process DLA is positioning the right stocks, in the right amounts, at the right distribution centers. By continuously and aggressively reviewing opportunities for moving stocks to Strategic Distribution Platforms in Susquehanna PA., and San Joaquin CA., DLA supply centers are optimizing support to the entire DoD community while minimizing costs. DLA is also improving the positioning of stock in Europe and the Pacific by redistributing highly demanded items to the two Theater Distribution Platforms located at the Defense Distribution Depot Europe, Germersheim, Germany and the Defense Distribution Depot, Yokosuka, Japan.

DLA Distribution Standards and Goals

Data analyzed by the DM team and information gathered during process walk throughs revealed that Army customers received different levels of service in the depot segment of the distribution process. It was found that DLA distribution operation responsibilities include receipt, storage, issue, packing, preservation, worldwide transportation, in-transit visibility and redirecting en-route,

shipping of the materiel must be accomplished in specific time frames. Current DLA processing timeframes that support the DM initiative and have improved the entire distribution process are identified below:

New Procurement Receipts:	1 day
High Priority Requisitions:	1 day
Routine Requisitions:	1 day
Customer Materiel Returns:	3 days

7) Outline how success of this effort supports the organizational objectives

Today's military environment is unforgiving and change is rapid. Organizations demand end-to-end integration of the supply chain, total asset visibility and real-time control in response to customer demands and unforeseen changes. Managers at all levels are struggling to tune their organizations to be more dynamic and event-driven. Leveraging and exploiting new technologies and ideas to improve logistics efficiencies is what the Distribution Management initiative is all about.

Building Enterprise Strategies

The DM team leads the way in developing distribution processes improvement strategies organized around new information technologies and infrastructures. By sharing lessons learned through the D-M-I concept model the team is helping organizations manage the complex logistics processes and transactions typical of today's fast-paced environment.

The DM mission is to investigate, report, and where possible implement Army logistics best business practices to maximize end-to-end distribution from the National level through the last tactical mile. Whether a new distribution technology or new software application, the DM team provides a bridge between the originating agency and the organizations that can benefit from this new initiative. The DM team provides a broad range of services to organizations throughout the Army, from research, studies and document prototypes, to on-site assistance to assist installation personnel in setting up or re-energizing a site improvement team. By working in partnership with industry and military organizations the DM initiative is better able to accelerate the generation, distribution, and application of new knowledge.

Benchmarking

Benchmarking is the process of seeking out and studying the best practices that produce superior performance. DM supplements the traditional metrics-focused approach with an analysis of why and how practices produce exceptional results. DM does more than help organizations understand their strengths and weaknesses - DM gives them a road map for improvement.

Benchmarking can yield great benefits in the education of managers and leaders and the realized performance improvements of operations. In addition, benchmarking can be used to determine strategic areas of opportunity. In general, it is the application of what is learned in benchmarking that delivers marked and impressive results. The determination of benchmarks allows for direct comparison. Any identified gaps are improvement areas.

Benchmarking can take several forms. Internal benchmarking studies the practices and

- Monthly backorder analysis reports charts that depict DLA/AMC backorder performance, MACOM/Installation backorders over ninety days, and total dollar volume.
- Monthly CWT performance reports that depicts mean, source of fill, and trend performance data.
- Demand Analysis Fill Rate reports that depict accommodation satisfaction and fill rates for MACOMs and installations.
- Baseline data for deployment Department of Defense Activity Address Codes (DODAACs).

These metrics are determined via a detailed and carefully analysis of supply databases. Organizations are then able to identify shortcomings, prioritize action items, and then conduct follow-on studies to determine methods of improvement.

Another form of benchmarking includes "process benchmarking," generally higher-level and less numbers-intensive than metrics. These studies demonstrate how top performing organizations accomplish the specific process in question. Such studies take the form of research, surveys, interviews, site visits, and process walks. By identifying how others perform the same functional task or objective, organizations gain insight and ideas they may not otherwise achieve. Such information affirms and supports quality decision making.

Improvement through Innovation

Webster's dictionary defines "innovation" as the introduction of something new or different. Without innovation, all we can do is try to optimize what we have, but in a world where customers are constantly requiring service that is faster, better, and more cost efficient this is not sufficient.

DM advocates that innovation is at the heart of process improvement. In most cases, someone or some group of people imagined a process within an organization different from the status quo. A new idea is then translated into a service, concept, or strategy that can be brought into practice to create new value for the organization and better service to the customer.

The DM initiative advocates risk taking in improving existing logistics processes. Logistics innovators are willing to invest in the innovation and are willing to take chances. Fear of failure, and of not getting a good return on investment, can be major barriers to taking a calculated risk. Some organizations generate more fear than they generate innovation because they're so unforgiving and intolerant of error.

Whether or not an organization is currently a logistics innovator, DM has provided the following steps to increase levels of innovation:

- Understand your assumptions, then challenge them. Look at how you do your work, and then ask why you do it that way. Then pick a few, and write them out. Find a few that are considered to be truths -- facts, not assumptions -- and replace them with something else. Replace that assumption with a new one that runs counter to what you've always done. Consider what the effect would be if you operated with the new assumption; identify what types of decisions you would make

- Lead the way. People need to be coached to be more innovative, and given the freedom to look at things in a new way. Leaders need to create organizations that builds on innovative by finding, nurturing, and supporting creative people.
- Learn. Innovators learn by listening as well as by doing. This means actively pursuing new technologies and ideas, soliciting subordinates, peers, and superiors for new ideas, being an active participant in professional associations and conferences, reading, conducting research, learning from the logistics community, and generally staying ahead of the curve.

The good news is that innovation is not dependent on dollars. The fundamental building blocks of innovation are ideas, knowledge, and a process for translating these into process changes. Under the DM philosophy every person in an organization has the ability to contribute regardless of function or rank.

SECTION 3 – KNOWLEDGE TRANSFER

1) Describe the efforts to share lessons from this effort with other internal organizations.

The DM initiative supports the work of widely dispersed individuals and workgroups involved in numerous process improvement projects. Members of these projects come from a number of different organizations, in different countries, yet have a need to access, share and exchange information and often collaborate. Dissemination of information and lessons learned is one of the most important elements of the DM program. Because of the diversity of the DM community, a greater range of options are employed to effectively disseminate information. Methods used by the DM team to share information are:

- On the DM Homepage, that displays and catalogs the entire scope of DM operations worldwide. This site provides a simple and effective means for users to search, browse, and retrieve information.
- Through the DM newsletter, that updates the field on the latest programs and issues that affect the DM program as well as the entire logistics system.
- At PIT meetings conducted at issue, storage, distribution, and maintenance facilities worldwide.
- By establishing and nurturing SITs at every FORSCOM, TRADOC, ARNG and Army Reserve installation, and throughout the overseas MACOMs.
- Through development of interrelationships with joint worldwide distribution and storage services such as TRANSCOM and DLA.
- Through process walk throughs conducted by the DM team with supporting agency representation at ports, installations, and USAR Regional Support Centers (RSCs).
- By supporting the integration of user friendly reporting software such as the Logistics Integrated Database (LIDB) and the Integrated Logistics Analysis Program (ILAP).
- Through the exchange of ideas and initiatives at quarterly DM Video Teleconferences (VTCs).
- By sponsoring an annual Distribution Group Board of Directors meeting bringing together a senior-level coalition of Army and Joint logisticians. This meeting serves two purposes:
 - To provide updates of ongoing and future initiatives.
 - To allow this senior coalition to provide leadership and vision for change, to set broad goals and guidelines, to help waive Army regulations and other official policies, and to interface and coordinate with other Department of Defense players as well as contractors.

- By continuing joint discussions on logistics process improvement with the proponents for Precision Logistics (US Marine Corps), Logistics Innovation (US Air Force), and High Yield Logistics (US Navy).
- By participating in DoD level forums.

2) Explain how this initiative can be transferred to other organizations, and specify the likely candidates for transference.

The DM program has supported key logistics and defense initiatives since 1995. In 2002 ongoing DM initiatives supported the Logistics Transformation Task Force, performance based components of the 2001 Quadrennial Defense Review (QDR), and DoD Reform Initiative Directive (DRID) # 54, (See Figure 2-21).



DM Supports Key Logistics Initiatives

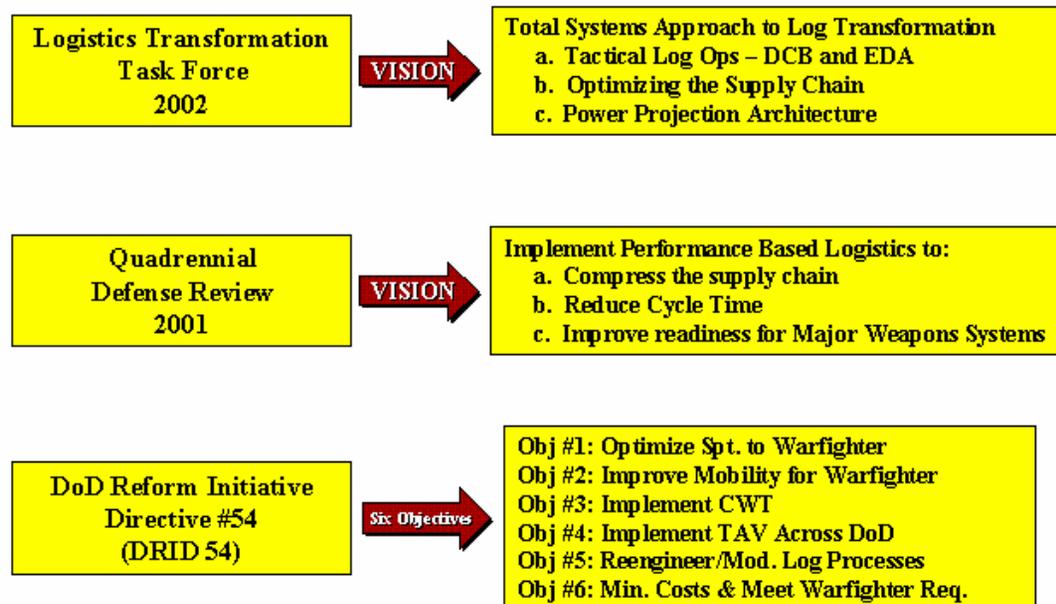


Figure 2-21. DM Support Key Logistics Initiatives

- Improving distribution processes.
- Increasing capabilities through greater simplicity or less complexity.
- Institutionalizing the DM improvement processes.
- Creating a culture of continuous improvement.

The 2001 QDR included increased emphasis on homeland defense, a shift from “threat-based” to “capabilities-based”, added the capacity for “decisively defeating an adversary in one of the two theaters in which U.S. forces are conducting major combat operations”, and a focus on transforming the military to a 21st century force capable of responding to a variety of threats across the full spectrum of conflict. The DM program supports this review by focusing on implementing performance based logistics to:

- Compressing the supply chain
- Reducing cycle times
- Improving readiness for major weapons systems.

The DM program complements the DRID #54 – Logistics Transformation. DM efforts helped determine the focus and direction of future Army logistics processes, including optimizing support to warfighters by fielding, training, and supporting the EDA initiative, implementing CWT, and re-engineering/modifying logistics processes with the DCB initiative.

Critical to the DM support mission is not only the ability to contribute to higher level programs, but to take the data and information obtained and transfer it to managers throughout the Army so it can be used to improve processes within their organizations. DM concepts and initiatives can be applied to any organization at any level of the Army to assist in improving their logistics processes.

The DM Team provides tools that can assist organizations in developing and maintaining a DM program at their location. The DM Team is continuously developing and publishing training and operating publications to assist the field Army in DM techniques. These tools can be found on the DM Homepage at <http://www.cascom.army.mil/adm>.

- DM Team Publications
 - (a) DM Program Management Plan, Updated annually. This publication contains operating instructions for the DM Team members, the DM Process Improvement Teams, and some guidance for Change Agents and Site Improvement Teams.
 - (b) An Army Model for Understanding, Managing, and Improving Customer Wait Time Performance, February 2002. This document describes how the Army uses the

(d) DM Semi-annual Report. Updated semi-annually. This document provides a historical overview of the DM program status as well as tools for developing and sharing visions, goals, and philosophies.

(e) Supply Support Activity Deployed Operations Handbook, August 2002. This publication provides a guide that assists the SSA leadership during the deployment process. In light of the world situation, this handbook is being updated with lessons learned.

(f) DM Guide for Change Agents and Site Improvement Teams, August 2002. This guide is aimed at assisting DM Site Improvement Teams and Change Agents in the Army and logistics soldiers and civilians who work in warehouses, repair facilities, and logistics systems every day.

(g) Distribution Management Repair Process Handbook, January 2001. This handbook is designed to assist maintenance leaders from the organizational to the direct support level in applying the DM methodology for process improvement to the repair process.

(h) SSA Guide to Warehouse Operations, May 2000. This is a guide designed for use by commanders and supply managers at the SSA, in the Division Material Management Center (DMMC), in the Corps MMC, and at the Theater level. This guide will aid in understanding the functions, relationships, and day to day operations of the SSA and how SSA leaders can achieve world-class operations.

(i) Guide to SSA Operations Using Velocity Management Techniques and Procedures, May 1998. This document, prepared with the assistance of an Army-wide group of Supply Warrant Officers and NCOs, is a short explanation of how to be successful in SSA operations.

(j) VM Training Plan, 1997. Developed with the help of CASCOM Training Directorate, this is a program of instruction used in the logistics schools to train soldiers on DM principles and processes.

(k) DM Newsletter. This newsletter is published on a quarterly basis and discusses on-going initiatives and developing programs. Distribution in paper format is made to select individuals at the Joint, Army, MACOM and Installation level. This document is also available on the DM Homepage.

- DM Homepage. The CASCOM Website hosts the DM Homepage at <http://www.cascom.army.mil/adm>. This site contains all of the references mentioned in this document and much more information about the DM program.
- Team visits. MACOM CAs normally initiate and lead instructional walk throughs at their sites. These events may be enhanced with participation by the DM Team. The MACOM CA routinely calls for support from DoD, DLA, RAND, TRANSCOM, Army Materiel Command, and others to augment the resident CASCOM staff and to create a synergistic capability for these visits. The context of these visits includes an inbrief intended to advise the local

CONCLUSION

Distribution Management is intended to be a continuous, iterative process. The concept of DM is not a simple, single corrective action that will fix the Army logistics system. DM is a different way of thinking about Army logistics. It involves refocusing logisticsicians on meeting the needs of their customers in an ever-changing environment. The intent of DM is to change the Army culture, reinforced by formal training for logistics leaders and managers that accept the tenants of effective and efficient logistics support and deliberately applies the DM paradigm on a daily basis. With the assistance of soldiers and civilians associated with the DM initiative, the Army will continue to transform its logistics system into a major strategic asset that can support new concepts for deploying and fighting.

GLOSSARY

A	
AAC	Acquisition Advice Code/Activity Address Code
ABF	Availability Balance File
AGCCS	Army Global Command and Control System
AIT	Automatic Identification Technology
ALOC	Air Lines of Communication
ALT/PLT	Administrative Lead Time/Production Lead Time
AMC	Army Materiel Command
AMS	Automated Manifest System
AMSAA	Army Materiel Systems Analysis Activity
APOD	Aerial Port of Debarkation
APOE	Aerial Port of Embarkation
AR	Army Regulation
ARNG	Army National Guard
ASF	Army Stock Fund
ASL	Authorized Stockage List
ASLP	Army Strategic Logistics Plan
ATCCS	Army Tactical Command and Control System
AUEL	Automated Unit Equipment List
AWP	Awaiting Parts
AWCF	Army Working Capital Fund
B	
BLAST	Blocked Asynchronous Transmission
C	
CA	Change Agent
C2	Command and Control
C ³ A	Command, Control, Communications, and Automation
CAISI	CSS Automated Information Systems Interface
CASCOM	Combined Arms Support Command
CMD	Command
CMMC	Corps Material Management Center
CONFIG	Configuration
CONUS	Continental United States
COSCOM	Corps Support Command
CP	Command Post
CRP	Central Receiving Point
CR2	Combat Readiness/Customer Response
CS	Combat Support
CSG	Corps Support Group
CSS	Combat Service Support
CSSAMO	Computer Service Support Automation Management Office
CSSCS	Combat Service Support Control System

DCSLOG	U.S. Army Deputy Chief of Staff, Logistics
DDC	Defense Distribution Center
DDJC	Defense Depot San Joaquin
DFAS	Defense Finance and Accounting System
DG	Distribution Group
DIC	Document Identifier Code
DISA	Defense Information Systems Agency
DISCOM	Division Support Command
DLA	Defense Logistics Agency
DM	Distribution Management
DMC	Distribution Management Center
D-M-I	Define, measure, improve
DMMC	Division Materiel Management Center
DoD	Department of Defense
DODAAC	Department of Defense Activity Address Code
DODAAF	Department of Defense Activity Address File
DOIM	Directorate of Information Management
DOL	Director of Logistics
DRID	DoD Reform Initiative Directive
DRM	Director of Resource Management
DRMO	Defense Reutilization and Marketing Office
DRMS	Defense Reutilization and Marketing Service
DS	Direct Support
DS4	Direct Support Unit Standard Supply System
DSA	Direct Support Activity
DSPA	Deployment Stock Package Analyzer
DSU	Direct Support Unit
DTAV	Department of Defense Total Asset Visibility
DTO	Division Transportation Officer
DVD	Direct Vendor Delivery
E	
EDA	Equipment Downtime Analyzer
EMIS	Executive Management Information System
EOQ	Economic Order Quantity
EUSA	Eighth U.S. Army, Korea
EUWS	End User Work Station
F	
FEDLOG	Federal Logistics Catalog
FM	Field Manual
FORSCOM	Forces Command
FSB	Forward Support Battalion
FSB/M	Forward Support Battalion/Maintenance
FSB/S	Forward Support Battalion/Supply
FSC	Federal Supply Classification
FTP	File Transfer Protocol

GS	General Support
GTN	Global Transportation Network
H	
HQ	Headquarters
HQDA	Headquarters, Department of the Army
I	
IAW	In Accordance With
IC3	Integrated Command and Control, and Communications System
ICP	Inventory Control Point
ICS3	Integrated Combat Service Support STAMIS
IDAPR	Individual DSS (Direct Support System) Activity Performance Report
ILAP	Integrated Logistics Analysis Program
ILOGS	Integrated Logistics Systems
IPD	Issue Priority Designator
IPG	Issue Priority Group
IPR	In Process Review
ITO	Installation Transportation Office
ITV	Intransit Visibility
J	
JTF	Joint Task Force
L	
LG/LOG	Logistics
LIA	Logistics Integration Agency
LIDB	Logistics Integrated Data Base
LIF	Logistics Information File
LIN	Line Item Number
LOC	Line(s) of Communication
LOGMARS	Logistics Marking System
LOGSA	Logistics Support Activity
LSE	Logistics Support Element
LTF	Logistics Transformation Task Force
LTWG	Logistics Transformation Working Group
M	
MACOM	Major Army Command
MCC	Movements Control Center
MCT	Movement Control Team
MIRP	Materiel Inventory Record Post
MMC	Materiel Management Center
MOU	Memorandum of Understanding
MRD	Material Release Denial
MRO	Materiel Release Order
MROCS	Materiel Release Order Control System
MSC	Major Subordinate Command
MT/MAINT	Maintenance
MTMC	Military Traffic Management Command

NTC	National Training Center
O	
OCONUS	Outside of the Continental United States
ODCSLOG	Office of the Deputy Chief of Staff, Logistics
OER	Officer Evaluation Report
OMA	Operations and Maintenance-Army
ORG	Organization or Organizational
OSC	Objective Supply Capability
OSD	Office of the Secretary of Defense
OSRAP	Optimum Stockage Requirements Analysis Program
OST	Order-Ship Time
OSTPIT	Order and Ship Process Improvement Team
P	
PAM	Pamphlet
PAT	Process Action Team
PC	Personal Computer
PD	Priority Designator
PIT	Process Improvement Team
PLL	Prescribed Load List
PM	Project Manager
PMCS	Preventive maintenance checks and services
POC	Point of Contact
POD	Port of Debarkation
POE	Port of Embarkation
PST	Pacific Standard Time
Q	
QDR	Quadrennial Defense Review
QM	Quartermaster
R	
RBS	Readiness Based Sparing
RC	Reserve Component
RCT	Repair Cycle Time
RCTPIT	Repair Cycle Time Process Improvement Team
RDD	Required Delivery Date
RF	Radio Frequency
RO	Requisition Objective
ROD	Report of Discrepancy
RON/DON	Requisition Order Number/Document Order Number
ROP	Reorder Point
RP	Release Point
RQN	Requisition
RSC	Regional Support Centers
RWT	Requisition Wait Time
RX	Repairable Exchange
S	

SITREP	Situation Report
SOP	Standing Operating Procedures
SPBS-R	Standard Property Book System – Redesign
SPO	Support Operations
SPT	Support
SRA	Stock Record Account
SRC	Standard Requirements Code
SSA	Supply Support Activity
SSF	Single Stock Fund
STAMISs	Standard Army Management Information Systems
STANFINS	Standard Finance System
STARFIARS	Standard Army Financial Inventory Accounting and Reporting System
T	
TAV	Total Asset Visibility
TC/TRANS	Transportation
TCN	Transportation Control Number
TDA	Table of Distribution and Allowances
TDM	Total Distribution Management
TDP	Total Distribution Program
TM	Technical Manual
TOE	Table of Organization and Equipment
TRADOC	Training and Doctrine Command
TQM	Total Quality Management
U	
ULLS	Unit Level Logistics System
ULLS-A	Unit Level Logistics System – Aviation
ULLS-G	Unit Level Logistics System – Ground
ULLS-S4	Unit Level Logistics System – S4
UMMIPS	Uniform Materiel Movement & Issue Priority System
URS	Unit Reference Sheet
USAREUR	U.S. Army European Command
USARC	U.S. Army Reserve Command
USARPAC	U.S. Army Pacific Command
USARSO	U.S. Army Southern Command
USTRANSCOM	United States Transportation Command
V	
VG	Velocity Group
VM	Velocity Management
W	
WOLF	Work Order Logistics File
WS	Workstation