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Analysis of the United States Marine Corps' Utilization of Defense Logistics Agency Disposition Services as a Source of Supply

3 December 2011

by

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ANALYSIS OF THE UNITED STATES MARINE CORPS' UTILIZATION OF DEFENSE LOGISTICS AGENCY DISPOSITION SERVICES AS A SOURCE OF SUPPLY

ABSTRACT

The mission of Defense Logistics Agency (DLA) Disposition Services (DDS) is to provide centralized Department of Defense (DoD) disposal management of excess and surplus military property supporting U.S. military forces worldwide, federal agencies, state agencies, and foreign military sales. An important component of this mission is the *reutilization* of excess military equipment within the military services in order to prevent wasteful DoD purchases. DoD reutilization—the use of excess or surplus property to meet known or anticipated requirements—has been a prominent topic within the U.S. Congress since a Government Accountability Office (GAO) report in 2005 uncovered billions of dollars in wasteful DoD purchases. Since that report, the DLA has launched several initiatives to improve Service reutilization of military equipment. Projected nearterm DoD budget cuts will serve to further highlight the topic.

The purpose of this research is to analyze the extent to which the United States Marine Corps (USMC) is implementing reutilization through its use of DDS as a source of supply. The results and recommendations of this study will enable decision-makers within the USMC and DLA to address institutional and systemic obstacles to maximum DDS reutilization within the USMC, thereby improving overall DoD economy.



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Finally, we would like to thank our wives, Tina and Cara Ann, for their support and encouragement during the research and writing process.

– Todd Paulson and Nathanael Leon



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ABOUT THE AUTHORS

Nathanael Leon, Captain, U.S. Marine Corps, Student, Graduate School of Business and Public Policy. Capt Leon earned a BA in political science in 2004 from the University of Mississippi. Capt Leon is a ground supply officer with 17 years of active service, having served 10 years as an enlisted Marine. He has served in a wide range of operational and staff assignments, including his most recent tour as a warfighting instructor at The Basic School in Quantico, VA. Upon graduation from the Logistics Management Program at the Naval Postgraduate School in December 2011, Capt Leon will serve in the Logistics Capabilities Center at Marine Corps Logistics Base Albany, GA.

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Capt Paulson was born September 18, 1973, at Colorado Springs, CO, and was raised on various Air Force bases in the United States and Europe. He was commissioned a Second Lieutenant in the Marine Corps in August 2001, having completed his undergraduate education in marketing at Arizona State University.

Following The Basic School and Logistics Officer Course, he was assigned to 3rd Battalion, 6th Marines in August 2002. During this tour, Capt Paulson served as assistant logistics officer, maintenance management officer, and motor transport officer. He deployed to Afghanistan during this tour in support of Operation Enduring Freedom.

From August 2005 until July 2006, Capt Paulson served as series commander for Company B, 1st Battalion, Recruit Training Regiment at Marine Corps Recruit Depot in San Diego, CA. He remained there until his opportunity came to serve in Receiving Company as company executive officer from July 2006 to June 2007 and ultimately company commander from July 2007 to June 2008.



Upon completion of his tour at the Marine Corps Recruit Depot, Capt Paulson executed orders to Twentynine Palms, CA, where he served as commanding officer for Transportation Support Company, Combat Logistics Battalion 7, Combat Logistics Regiment 1, 1st Marine Logistics Group from 2008 to October 2009. During that time, he deployed to Iraq in support of Operation Iraqi Freedom. Upon his return from Iraq, Capt Paulson was provided the ultimate experience to serve as Coyote-4 (logistics officer) for Tactical Training & Exercise Control Group. He remained there from October 2009 to May 2010 until executing orders to Monterey, CA, to attend the Naval Postgraduate School.

Capt Paulson's personal decorations include the Navy-Marine Corps Achievement Medal and the Navy-Marine Corps Commendation Medal; he received his Combat Action Ribbon in support of Operation Enduring Freedom.

He is married to the former Tina Lynn Broome of Tucson, AZ.



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LIST OF ACRONYMS AND ABBREVIATIONS

AMCOM ATLASS	Aviation and Missile Life Cycle Management Command Asset Tracking Logistics and Supply System		
BN CMDR	Battalion Commander		
CMO	Chief Management Officer		
CONUS	Continental United States		
CVC	Combat Vehicle Crewman		
DAISY	Defense Reutilization and Marketing Automated Information System		
DASF	Due and Status File		
DC I&L	Deputy Commandant, Installations and Logistics		
DCMO	Deputy CMO		
DDS	DLA Disposition Services		
DLA	Defense Logistics Agency		
DODAAC	Department of Defense Activity Address Code		
DRMO	Defense Reutilization Marketing Office		
DRMS	Defense Reutilization Marketing Service (now known as DDS)		
DSR			
	Disposal Service Representatives		
DSS	Distribution Standard System		
DTID	Disposal Turn-in Document		
EBS	Enterprise Business System		
EMALL	Electronic Mall		
FTP	File Transfer Protocol		
FY	Fiscal Year		
GAO	Government Accountability Office		
GCPC	Government Controlled Purchase Card		
GCSS-MC	Global Combat Support System-Marine Corps		
GL	Government Liquidation		
GSA	General Services Administration		
GSOC	Ground Supply Officers Course		
HQMC	Headquarters Marine Corps		
IT	Information Technology		
LOGCOM	Logistics Command		



MAISTR MARADMIN MEF MIDAS MILSTRIP	Marine Corps Logistics Base Albany Automated Information Systems Transaction Router Marine Administration Marine Expeditionary Force Management Information Distribution and Access System Military Standard Requisitioning and Issue Procedures
NATO	North Atlantic Treaty Organization
NSN	National Stock Number
O&M	Operation and Maintenance
O&MMC	Operations and Maintenance, Marine Corps
OSD	Secretary of Defense
PEI	Principal End Items
PMC	Procurement Marine Corps
PSE	Personnel Support Equipment
RTD	Reutilization, Transfer, and Donation
SABRS	Standard Accounting and Budgeting System
SAC	Stores Account Code
SAMMS	Standard Automated Materiel Management System
SASSY	Supported Activities Supply System
SERVMART	Service Mart
SMU	SASSY Management Unit
SOP	Standard Operating Procedures
T/E	Table of Equipment
TAMCN	Table of Authorized Material Control Number
USMC	United States Marine Corps
XO	Executive Officer



EXECUTIVE SUMMARY

The purpose of this research is to analyze the extent to which the United States Marine Corps (USMC) is implementing reutilization through its use of Defense Logistics Agency (DLA) Disposition Services (DDS) as a source of supply. The results and recommendations of this study will enable decision-makers within the USMC and DLA to address institutional and systemic obstacles to achieve maximum DDS reutilization within the USMC, thereby improving overall DoD economy.

Our research showed that the USMC currently lags the other Services in reutilization, which is defined as the use of excess or surplus property to meet known or anticipated requirements and is measured by the percentage of service operation and maintenance (O&M) budget for which reutilized equipment is valued at full acquisition cost. Based on our research, we estimate that the USMC is annually forgoing approximately \$28 million in potential cost savings through the lack of DDS use for supply items in Condition Codes A and B (like-new and good condition, respectively).

We find that there are situations for which reutilization is not currently appropriate—for instance, when lead time is the highest priority. This can be overcome through transportation and distribution solutions. Also, there are many factors impeding USMC reutilization. The most important factor is the inability of the USMC's main supply system—the Supported Activities Supply System (SASSY)—to interface with DDS inventory. This issue will not be resolved with the implementation Global Combat Support System-Marine Corps (GCSS-MC) in the short term; it must be resolved at the national level by DLA through the integration of their inventory systems. Furthermore, we find that many USMC supply officers are reluctant to use DDS for three main reasons: lack of confidence in system accuracy, lack of incentive, and lack of knowledge of the system and its benefits. In addition, many supply officers bemoan the "extra step" required in screening DDS inventory on the Reutilization, Transfer, And Donation (RTD) website.



We offer the following recommendations (with the targeted stakeholders in parentheses at the end of each recommendation):

Recommendation 1: Until such time that GCSS-MC and DDS are seamlessly linked, establish service policy in orders, directives and standard operating procedures (SOPs) that requires the screening of available DDS inventory prior to inducting standard supply system requisitions, particularly for Class II supplies. (Deputy Commandant, Installations and Logistics [DC I&L])

Recommendation 2: Provide incentives for USMC supply community to more frequently use DDS as source of supply. This can be accomplished through performance appraisal, as well as through a USMC or DoD-level awards program for reutilization. (DC I&L, and DLA)

Recommendation 3: Maximize the untapped potential of the DoD Electronic Mall (EMALL), which provides on-hand visibility of DDS supplies in Condition Code A, by enabling USMC Military Standard Requisitioning and Issue Procedures (MILSTRIP) requisitions within the DoD EMALL. For accountability purposes, such requisitions must be visible to the Standard Accounting and Budgeting System (SABRS) and SASSY and post to each supply activity's Due and Status File (DASF). (DC I&L, and Logistics Command [LOGCOM])

Recommendation 4: Establish a national DLA marketing plan to raise awareness for the potential of DDS reutilization among all the Services, including the USMC. A key part of any such plan should be the use of DDS Disposal Service Representatives (DSRs) to conduct training visits to USMC supply activities in order to educate Marines on DDS reutilization systems. (DDS)

Recommendation 5: Establish a seamless interface between the DLA's Enterprise Business System (EBS) and Defense Reutilization and Marketing Automated Information System (DAISY) so that all requisitions placed via the GCSS-MC and Asset Tracking Logistics and Supply System (ATLASS)/SASSY can be filled, when possible and to the maximum extent possible, by DDS on-hand inventory. (DC I&L, and DLA)



Recommendation 6: DDS must ensure 100% accuracy in inventory management data—most importantly supply condition codes, National Stock Numbers (NSNs), and quantity—so that all orders meet customer expectations. This effort must begin with maximum effectiveness in the receipt process and continue through the entire reutilization cycle. If necessary, current receipt processes should be overhauled so that DDS employees can effectively manage workload and ensure 100% accuracy in inventory management data. This will guarantee accurate order fulfillment during the final stage of reutilization. (DDS)

Recommendation 7: The DLA must ensure the integration and communication of its new and developing information technology (IT) systems in order to ensure that all USMC demanded items are screened against available DDS stock throughout the entire RTD cycle. This will prevent the sale, transfer or donation of items for which the USMC has a valid need. (DLA)



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I. INTRODUCTION

A. OVERVIEW

Economical business practices within the DoD have become a national priority. As of August 2011, the United States federal debt was \$14.6 trillion. In a speech given at the Naval Postgraduate School in August 2010, then-Chairman of the Joint Chiefs of Staff Admiral Mike Mullen labeled the U.S. federal debt as the nation's "biggest national security threat." Media coverage of the 2011 federal debt debate in Congress focused much attention on the biggest contributors to U.S. federal spending, including the DoD.

In an effort to mitigate the spiraling of the federal debt, the Budget Control Act of 2011 called for \$917 billion in federal budget cuts over 10 years, of which the DoD is expected to contribute \$350 billion. Additionally, a provision of the bill mandated \$500 billion in additional cuts for the DoD and related federal security agencies if lawmakers cannot reach consensus on an overall \$1.5 trillion deficit reduction plan. Against this political backdrop, the mandate is clear: in the next decade, the DoD will be expected to analyze all aspects of its procurement, operations, compensation, and research and development activities in order to ensure maximum economy in helping to rein in federal spending.

A readily available tool for immediate DoD savings is equipment *reutilization*, which refers to the reuse or initial use of excess or surplus property to meet known or anticipated requirements. Reutilization saves the DoD billions of dollars each year in operations costs by enabling both internal and intra-Service transfer of excess supplies and equipment, thereby preventing wasteful purchases of new property within the DoD However, according to a 2005 Government Accountability Office (GAO) report (2005a), a subsequent 2006 congressional hearing (*DoD Excess Property*, 2006), and a 2011 DoD Inspector General report, the DoD can and should do much more to capitalize upon the economic benefits of reutilization.



Within the USMC, reutilization occurs at the headquarters level via intra-unit transfers of principal end items (PEI), and at the unit level through the use of DLA DDS field sites. USMC utilization of DDS is typically conducted for requisitions of consumable supply items, repair parts, garrison furniture, clothing, and any other items for which a Table of Equipment¹ (T/E) restricted quantity has not been established by Headquarters, Marine Corps.

B. STATEMENT OF THE PROBLEM

Studies conducted by the GAO indicate that the military Services are requisitioning vast quantities of supplies and equipment at full cost, despite identical items being available for free issue within the DDS inventory in supply Condition Codes A, B, and C (serviceable re-use condition). When these reusable assets are not reutilized, they are sold by DLA through a private liquidation contractor for pennies on the dollar; converted to scrap; or transferred or donated to eligible federally approved public and educational organizations. The end result is potentially wasteful procurement, initially at the Service level and ultimately at the national level.

To prevent wasteful purchases of supplies and equipment—and realize significant organizational savings that might be used in other critical areas—the USMC must fully utilize the DDS inventory in order to meet its current and anticipated requirements. The USMC must develop doctrine, standard operating procedures (SOP), supply techniques, and automated systems that permit the full utilization of the DDS inventory. The USMC supply and logistics "service culture" must foster and reinforce the utilization of DDS as truly a first source of supply.

C. PURPOSE OF THE PROJECT

The purpose of this project is to analyze, describe and provide recommendations on the extent to which the USMC is utilizing DDS as a source of supply in order to gain maximum economy in its O&M budget. The results and recommendations of this study

¹ Table of Equipment refers to the listing of authorized major items of equipment resident within each USMC unit.



will enable decision-makers to address institutional and systemic obstacles to maximum DDS utilization.

D. RESEARCH QUESTIONS

In conducting our research, we sought to address the following questions:

- To what extent is the USMC utilizing DDS as a source of supply? How does it compare to the other Services?
- When is reutilization appropriate, and for which classes of supply?
- What are the barriers to reutilization?
- What federal and Service mandates and guidelines govern the use of DDS as a source of supply?
- What cost savings could be achieved within the USMC and DoD by increased utilization of DDS inventory?
- To what extent does the USMC institutionally address this issue in its supply community training and operating procedures?

E. ORGANIZATION OF THE PROJECT

We begin our report with a literature review of DoD reutilization within the context of DoD business transformation and efficiency. We then provide an overview of the DLA and DDS, and review GAO reports and congressional hearings defining the problem of reutilization. We then describe, by each supply classification, the benefit of utilizing DDS as a source of supply within the USMC.

During the analysis phase of this research, we analyzed data collected from DLA and Marine Corps Logistics Command (LOGCOM) that shows the effectiveness of current USMC reutilization efforts, including a cross-Service comparison between the USMC and the other Services. We also computed potential USMC savings through reutilization, discuss information technology (IT) barriers, and describe the Service culture for reutilization within the USMC based on comments from company-grade supply officers.



We conclude our study with recommendations for improvements in current USMC and DLA tools, techniques, and procedures that enable reutilization. Finally, we provide recommendations for further research.



II. LITERATURE REVIEW

A. DEPARTMENT OF DEFENSE SEEKS ECONOMIC CULTURE CHANGE

The War on Terrorism that has driven DoD operations in the period since September 11, 2001, has enjoyed much support from the U.S. Congress in the form of seemingly limitless financial outlays. In a 2010 article for *The Journal of the Society of Military Comptrollers*, Debra S. Del Mar identifies a "blank check of sorts" that occurred between 2001 and 2010 for DoD acquisitions, bonuses, pay increases, medical care, and morale programs. Because of the warfighting focus during this period, significant efforts to transform DoD business practices and economize within the mammoth agency took a back seat to operational requirements.

However, the U.S. financial crisis that began in 2007 and continues to persist, coupled with a spiraling U.S. national debt, has meant that government leaders are placing renewed focus on cutting federal spending or re-allocating funds to better use. Responding to then-Secretary of Defense Robert Gates' 2010 challenge to the DoD to eliminate waste, cut overhead and "bloated Pentagon bureaucracy" costs (p. 49), and reprogram funds for the warfighter, Del Mar (2010) identified several measures to gain cost savings and operational efficiencies. She stated: "We must shift our thinking from the 'unique and complex' to embrace simple, standard, and proven processes, capabilities, and enabling systems for our FM [financial management], human resource, acquisition, and logistics system requirements. Standardization must become the new byword" (p. 50).

To achieve standardization across the myriad systems used by the DoD, Del Mar (2010) offers a number of suggestions. Within the context of more efficient DoD acquisitions (for example, reutilization) many of Del Mar's observations apply to this report. We summarize Del Mar's recommendations in the following list:

Launch a Back-to-Basics Campaign. Launching a back-to-basics campaign would entail reducing the inventory of legacy systems throughout the DoD by leveraging the capabilities of proven non-legacy systems that meet "overlapping functional requirements" across DoD



organizations. As an example, Del Mar (2010) cites the DLA Enterprise Business Solution (discussed throughout this report), which could be used throughout the DoD rather than just at the DLA.

- Mandate Standardization. DoD agencies must carefully consider the adoption of new systems that contain unique dashboards, performance metrics, open government transparency reporting, and/or business intelligence tools. Del Mar (2010) pointed to experts that estimate that each complex system interface costs about \$100,000 over its lifetime to design, develop, operate and update, often at little value added to the warfighter. To counteract these costs, the DoD should share capabilities across systems and organizations.
- Establish a Consistent Program Examination Methodology. The DoD must develop and mandate use of consistent methodology to examine current initiatives, determine the relevancy of unique needs, make hard choices, and create hard savings. To accomplish this, the DoD must be designated as a single enterprise at the level of the Secretary of Defense (SECDEF) that owns and shares all capabilities and data. Re-use must be rewarded; waste and duplication are the enemies of all.
- Eliminate Impediments. Outdated paradigms, such as the fiscal year (FY)end scramble to obligate funds, should be removed. Economy and creativity should be rewarded. The Office of Management and Budget, the GAO, Congress, and the DoD should coordinate efforts to fix laws, policies, and regulations that currently inhibit progress and add no value.
- Promote a "Mission First" Mindset and Accountability. Del Mar (2010) cited the DoD acquisitions community's ability to acquire mine-resistant, ambush-protected vehicles in a matter of months—rather than years—in 2007 as an example of a "mission first" approach to business practices. She further mentions a need to "assign accountability for achieving results."

B. DOD CULTURE CHANGE IS A CHALLENGE

The changes recommended by Del Mar (2010) are especially challenging within the DoD. Due to constant personnel turnover, extended bureaucratic hierarchies, numerous stakeholders, and organizational complexity, changing culture within DoD business enterprises is a significant challenge. Doane and Spencer (1997) conducted a cultural analysis case study of implementing acquisition reform within the DoD. They studied two major Navy and Air Force acquisition programs through the elements of mission and strategy, goals, means, measurement and correction. The purpose of their



research was to study "*how* the DoD culture impacts its ability to enact change and *why*, after nearly 50 years of reform measures, little change has occurred" (p. 6).

Doane and Spencer's cited definition of culture was, "a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptations and internal integration, that has worked well enough to be considered valid, therefore, to be taught to new members as a correct way to perceive, think, and feel in relation to those problems" (p. 25). They found two prominent cultural obstacles to DoD acquisition reform. These include the following:

- 1. Little incentive for the workforce to change. Most government employees believe there is little competition or threat to their organization's existence. Since the DoD operated without a profit and loss sheet, the workforce did not feel the pressure to meet the bottom line, feel the fear that comes with realizing their organization may cease to exist, or feel the need to take risks.
- 2. The acquisition system, like the DoD is risk averse. The acquisition system has been quick to penalize employees who make mistakes or take risks. The workforce is conservative, strict about following rules, and self preservationists. By taking risks and being innovative, the front line of the workforce worries that its actions will be questioned by lawyers, the Inspector General, or even Congress. They are accustomed to routine and ordinary work and are skeptical of initiatives and major change.

Additionally, Doane and Spencer (1997) identified major cultural differences between military personnel and civilians who interact in the DoD business realm. They stated: "from the eyes of the civilian world, military personnel bring short-term views to the program but appear more open to change. Civilian personnel seem to bring a more long-term perspective to the program but are more cautious when it comes to change" (p. 80). Although these differences can bring both positive and negative effects to the organization, they need not subvert cultural change if managed properly.

According to Doane and Spencer (1997), it is critical to align the culture of the organization with the philosophies of acquisition reform to achieve the true benefits of the reform initiatives. However, this alignment is difficult within the DoD because "most incentives and motivations are not apparent for either government or industry" (p. 84). Doane and Spencer (1997) stated that industry incentives and motivation seem to be based on the same profit and loss theories that were present before acquisition reform.



Concurrently, the only incentives for government employees are personal pride in their jobs and respect for their peers. Doane and Spencer (1997) further found that "if the workforce had a leader they respected and one that supported them, they would work without question for no reward other than to 'please' their boss" (p. 84.) However, due to the constant rotation of supervisors within the DoD, this is often difficult to achieve.

So what can be done to transform culture in pursuing better DoD business practices? Doane and Spencer (1997) recommended strong leadership that questions old assumptions and can overcome organizational inertia and apprehension. They stated that "leaders must find a way to provide the emotional surety and confidence to the organization so that its members will be willing to accept the need for change and be able to begin the learning process" (p. 92).

Additionally, leaders in a changing organization must foster open lines of communication and cooperation among other leaders and the organization's members. They must be accountable for their actions and empower the members of the organization, allowing them to fail and question authority without fear of reprisal. This empowerment will allow for new perspectives.

In addition to strong leadership, changing organizations must have a *common vision*. In their research on acquisition reform, Doane and Spencer found disconnects between leaders, program managers, contracting officers, and engineers with respect to *consistency* and *commonality* in leadership, direction, and implementation. To overcome this, all stakeholders must share a common language, a common understanding of why change is needed, and a common understanding of what successful change looks like (for example, clear metrics and goals).

C. DOD BUSINESS TRANSFORMATION IS PROCEEDING SLOWLY

1. GAO Findings on DoD Business Transformation.

According to a 2011 GAO report, the DoD spends billions of dollars each year to maintain key business operations, including systems and processes related to the management of contracts, finances, the supply chain, support infrastructure, and weapons



systems acquisition. The GAO identified many of these areas as "high risk" due to their vulnerability to fraud, waste, abuse, and mismanagement. To counteract this risk, the GAO has recommended for several years that the DoD adopt a strategic-level approach to business transformation in order to coordinate and synergize various business transformation efforts across services and agencies.

In 2005, the GAO identified the DoD's approach to business transformation as a high-risk area because (1) the DoD had not established clear and specific management responsibility, accountability and control over business transformation–related activities and applicable resources and (2) the DoD lacked a clear strategic and integrated plan for business transformation with specific goals, measures, and accountability mechanisms to monitor progress (GAO, 2011).

Since 2005, the DoD has addressed the GAO's findings by

- issuing directives broadly defining the responsibilities of a newly created Chief Management Officer (CMO) and deputy CMO (DCMO);
- establishing an office of the DCMO;
- designating an assistant DCMO;
- establishing governance entities, such as the Defense Business Systems Management Committee, the Deputy's Advisory Working Group, and the Business Transformation Agency; and
- naming CMOs and DCMOs in each of the military departments.

However, the GAO reported in 2011 that in response to the SECDEF's 2010 initiative to reduce overhead costs and find more efficient and effective ways of doing business, the DoD is not positioned to respond to this challenge because "the [CMO and DCMO] have not been assigned specific roles for integrating, monitoring, or otherwise institutionalizing the ongoing efficiency initiative in the long term." Furthermore, the GAO reported opportunities for the CMO and DCMO to take the lead in initiating financial management reform, supply chain management reform, and other logistics processes identified in the DoD's Logistics Strategic Plan. Finally, the GAO reported that as of January 2011, the DoD and the military departments have made limited progress in developing business transformation plans, supported by a strategic planning process, which enable them to align goals and planning efforts and to measure progress.



D. CONCLUSION

Although the DoD has made some improvements in paving the way for the type of business transformation envisioned by the SECDEF in 2010 and pursued for at least 50 years, much more needs to be done to marry goals with strategic plans, with individual and organizational responsibilities, and with metrics and measurable outcomes. The DoD acquisition and procurement culture must be changed to reflect a different fiscal environment from the one that has predominated for 10 years since the terrorist attacks of 2001.

Waste and inefficiency persists. A November 2011 DoD Inspector General report showed that the Army Aviation and Missile Life Cycle Management Command (AMCOM) paid millions of dollars in overpayments to Sikorsky Aircraft Corporation and also purchased repair parts from Sikorsky that were already on-hand within the DoD inventory, parts valued between \$47 million to \$58 million. Often the DoD had ordered those same parts at lower prices than those that Sikorsky charged. The report further stated that some purchases duplicated items for which the military actually had overstocked the parts in DoD warehouses, including one part for which the DoD has a 37-year supply.

The previous example is yet another illustration of non-connected DoD inventory management systems, a problem that is a key component of this research report and contributes to fiscal waste. On a larger scale, it is symptomatic of a DoD enterprise struggling, due to sheer size and complexity, to transform its business processes in a coherent and coordinated manner.



III. BACKGROUND

A. INTRODUCTION TO REUTILIZATION

The Federal Property and Administrative Services Act of 1949, as amended, placed responsibility for the disposition of government real and personal property with the General Services Administration (GSA). That agency delegated disposal of DoD property to the Secretary of Defense, who in turn delegated it to DLA.

It is DoD policy to utilize excess and surplus property to the maximum extent possible to fill existing needs, a concept termed reutilization (DoD, 1997, p. 5–1). As the DoD agency charged with implementing DoD reutilization, the DLA executes this mission through its DDS field activity. In this chapter we provide an overview of the DLA and DDS. We then discuss the GAO's findings in 2005 and 2006 that identified major deficiencies in DoD reutilization. These findings will provide context for the problem of USMC and DoD-wide reutilization efforts.

B. DEFENSE LOGISTICS AGENCY

The DLA is the DoD's combat support agency under the supervision, direction, authority, and control of the Under Secretary of Defense for Acquisition, Technology, and Logistics. Operating in 48 states and 28 countries, the DLA's stated mission is to "provide best value integrated logistics solutions to America's Armed Forces and other designated customers in peace and in war, around the clock, around the world" (Brletich, 2010). As America's combat logistics support agency, the DLA provides the DoD, other federal agencies, and combined and allied forces with logistics, acquisition, and technical services. The DLA sources and provides nearly 100% of the DoD's consumable items, food, fuel and energy, uniforms, medical supplies, and construction and barrier equipment (DLA, 2011). Headquartered at Fort Belvoir, VA, the DLA employs approximately 26,000 employees, supplies more than 84% of the military's spare parts, manages the reutilization of military equipment, provides catalogs and other logistics information products, and offers document automation and production services.



According to the DLA, in fiscal year 2010 the DLA provided \$28 billion in sales and \$41 billion dollars in services to the DoD while managing eight supply chains and five million items (DLA, 2011). In addition, the DLA processed nearly 230,000 requisitions and more than 11,000 contract actions per day.

As one of six field activities of the DLA, DDS executes DoD property disposal to include reutilization. Figure 1 shows the organizational structure of the DLA.



Figure 1. DLA Organizational Structure

C. DEFENSE LOGISTICS AGENCY DISPOSITION SERVICES

DDS—formerly known as Defense Reutilization and Marketing Service (DRMS)—is responsible for DoD property disposal and reutilization, which includes the redistribution of new and used excess DoD equipment and supplies, precious metals recovery, recycling, hazardous property disposal, demilitarization of military equipment, and sale of surplus DoD equipment and supplies. Property is considered excess when one



particular agency determines it is not needed for its particular use, while property is considered surplus when it is no longer needed by the federal government.

According to the DLA, during FY 2008 over \$2.2 billion (acquisition value) of property was reutilized through DDS (Grasso, 2010). The basic documents regulating disposition management of DoD excess and surplus property are DoD 4160.21-M *Defense Materiel Disposition Manual* (Office of the Deputy Under Secretary of Defense, 1997), and DRMS Instruction 4160.14 *Operating Instructions for Disposition Management*.

DDS provides its services to the DoD through its 124 locations around the world (C. Knowles, personal communication, October, 2011). DDS locations are categorized as *field activities* (also known as *disposition sites* or "*hubs*"), *field offices*, *controlled demilitarization centers*, or *controlled property branches*. Some locations can be dually classified. Field offices serve as cross-docking locations that provide limited DDS services to selected DoD installations. Field office employees assist DoD customers in preparing paperwork and shipments of excess or surplus equipment to be transported to DDS field activities. Field activities provide the full range of DDS services, including stocking excess or surplus equipment for potential reutilization, transfer, donation, resale, or downgrading to scrap status. Figures 2 and 3 show the current locations of DDS activities.




Figure 2. DDS CONUS Locations (C. Knowles, personal communication, October, 2011, slide 9)





Figure 3. DDS OCONUS Locations (C. Knowles, personal communication, October, 2011, slide 10)

D. REUTILIZATION, TRANSFER, AND DONATION (RTD)

1. Overview

DDS disposes of DoD property by means of reutilization, transfer, donation, demilitarization or scrap disposal. RTD extends the economic value of surplus or excess equipment by offering it for reuse within the DoD, by transferring it to other federal agencies, or by donating it to qualifying state and local governments and other organizations. Federal regulations require all DoD activities to screen available excess supplies and equipment prior to initiating new procurement, and each Service maintains its own internal redistribution policies for excess equipment. When a military Service or DoD agency identifies property that is surplus or excess, the property is first offered for intra-agency redistribution. If still deemed surplus, the property is turned in to a DDS



field office and offered across the DoD for *reutilization*. If not reutilized, it is offered to all federal agencies through *transfer*, and if still not used it is finally offered to selected organizations and state and local governments through *donation*.

2. RTD Asset Processing

Equipment to be reutilized is taken to a DDS field office where its characteristics are entered into DAISY for inventory control and asset visibility. DDS then posts descriptive information about the property on its RTD website (https://www.dispositionservices.dla.mil/rtd03/index.shtml). The RTD website lists property that is available for reutilization by DoD units and specially designated programs, for transfer to federal agencies, and for donation to states . Figure 4 shows the homepage for the RTD website.



Figure 4.Screenshot of DDS RTD Homepage(https://www.dispositionservices.dla.mil/rtd03/index.shtml)



ACQUISITION RESEARCH PROGRAM Graduate School of Business & Public Policy Naval Postgraduate School DoD customers may use the RTD website to screen for usable equipment, and they may use the site to build "want lists" in order to be notified via e-mail when certain items of equipment enter the DDS inventory. DoD customers may then place requisitions through the site using Military Standard Requisitioning and Issue Procedures (MISLTRIP).

Turn-ins of excess DoD property are reported on DoD Form 1348, Disposal Turn-In Document (DTID), using a either a hard-copy form or an electronic version submitted via the DDS DTID web-based system. In both cases, a hard-copy form is required to accompany the equipment at time of turn-in. In accordance with *Material Disposition Manual* (DoD, 1997), upon arrival at a DDS field office, excess equipment is to be inspected, and the item descriptions, quantities, condition codes, and demilitarization codes are to be verified prior to induction into the DAISY system. If the items are in new, usable, or repairable condition (see Figure 5), redistribution from one DoD unit to another—known as reutilization—allows the government to make full use of its resources, avoids unnecessary procurement of property, and results in economy of operations. Transfers and donations of excess DoD property to special programs, federal agencies, and states helps to conserve these programs' and agencies' budgetary resources. Unusable items are usually sold as scrap via contracted service.







3. Reutilization, Transfer, and Donation Screening Timeline

Within the continental United States (CONUS), excess DoD property is available for RTD during a 49-day screening period following turn-in to DDS. After initial receipt, DDS processes the equipment into the DAISY system within seven working days. It is then made available solely to DoD customers for a 14-day screening period. During this initial period, DoD customers may requisition the equipment electronically via the RTD website (https://www.dispositionservices.dla.mil/rtd03/index.shtml), or DoD the EMALL, or a physical walk-in at a DDS field office. On Day 21, the property is then offered for transfer to all federal agencies for a 21-day period via the GSA's GSAXcess web-based system, while also remaining available to DoD Services. On Day 43, the property becomes available for donation to eligible state, educational, and community organizations as listed in Material Disposition Manual (DoD, 1997). Finally, on Day 50, the property becomes available for commercial sale via Government Liquidation, LLC, a contracted company that manages the sales website. The property is offered to the general public, provided the equipment is properly demilitarized and not sensitive. Figure 6 shows the screening timeline, and Figure 7 shows the RTD process.



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Figure 6. RTD Screening Timeline (C. Knowles, personal communication, October, 2011, slide 28)





Figure 7. DDS Excess Property Disposal Process

E. GOVERNMENT ACCOUNTABILITY OFFICE FINDINGS

The reutilization of DoD supplies and equipment continues to be a focus of the U.S. Congress. GAO reports in 2000 and 2005 (2005a) cite significant deficiencies in the DoD's reutilization systems, techniques and procedures. The 2005 report identified \$2.2 billion dollars in "substantial waste and inefficiency" (2005a, p. 4) because "new, unused, and excellent condition items were being transferred or donated outside of DoD sold on the internet for pennies on the dollar, or destroyed rather than being reutilized." The report also found that the DoD purchased at least \$400 million of identical commodities in fiscal years 2002 and 2003 instead of reutilizing available A-condition excess items. The GAO (2005a) identified numerous examples of DoD equipment sales and donation



of items that were later requisitioned by the DoD at full acquisition cost. A portion of the report reads:

We [GAO] requisitioned at no charge a medical instrument chest, two power supplies, and two circuit cards. Although these items had an original DoD acquisition cost of \$55,817, we paid only about \$5 shipping cost to obtain them.

We also purchased at minimal cost, over the Internet at govliquidation.com, tents, boots, gasoline burners (stove/heating units), a medical suction apparatus, and bandages and other medical supply items. Although the total reported acquisition cost for these items was \$12,310, we paid a total of \$1,466 to obtain them, about 12 cents on the dollar, including buyer's premium, tax, and shipping cost. (pp. 4–5)

The GAO offered 13 recommendations to the DoD for improving reutilization, many of which the DLA already had underway or subsequently implemented. In a 2006 hearing before the House Subcommittee on National Security, Emerging Threats, and International Relations, Gregory Kutz, the GAO's managing director of Forensic Audits and Special Investigations, estimated that DoD reutilization improvements saved \$38 million in the first half of FY 2006. However, he further stated, "We see the potential for several hundred million more of savings" (*DoD Excess Property*, 2006, p. 11).

F. CONCLUSION

In this chapter, we discussed a literature review of equipment reutilization and identified the background and role of DDS within the DLA and DoD. We also discussed the concepts of reutilization, transfer and donation within the DoD and identified the general process of DoD equipment reutilization. Finally, we discussed the GAO's findings and financial implications of equipment reutilization within the DoD.



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IV. UNITED STATES MARINE CORPS REQUISITIONING POLICY AND SYSTEMS

A. INTRODUCTION

This chapter discusses the current policy and systems the USMC uses to procure supplies and equipment and includes a discussion of the USMC's access to the DDS inventory as a source of supply. We begin with an overview of the USMC's supply classifications—describing the procurement policy for each—and continue with a discussion of the utility of using DDS as a source of supply for each class. We conclude with an analysis of current USMC information technology requisitioning systems, describing the inability to enable or prevent the utilization of DDS as a source of supply.

B. UNITED STATES MARINE CORPS SUPPLY CLASSIFICATIONS

1. Overview

The USMC *Consumer-level Supply Policy Manual* (MCO, 1999) describes USMC procurement policy at the consumer level of retail supply. USMC units at this level are typically battalion-sized, consisting of between 800 to 1,200 personnel. Supplies found at this level are considered to be retail stocks. The USMC divides such stock into two categories: allowance items and demand supported items. In both cases, there is potential to use DDS as a supply source to fill requisitions.

2. Allowance Items

Allowance items are items for which a unit is restricted to a specified quantity formally established on a unit's T/E either by Headquarters, Marine Corps (HQMC; for Type 1 items) or by a Major Subordinate Command commander (for Type 2 items). A third type of allowance item (Type 3) consists of allowances for unusual situations; for example, a unit conducting cold weather or desert operations. Such allowance items are usually issued for short duration and are not typically seen on a unit's allowance list.



a. Type 1 Allowance Items

All Type 1 items are identified by a Table of Authorized Material Control Number (TAMCN) issued by HQMC. The majority of these items are PEIs, also known as Stores Account Code (SAC) 3 items. PEIs usually consist of expensive pieces of equipment: weapons systems, vehicles, machinery, and test equipment. As such, PEIs are normally distributed to USMC units via LOGCOM and are not normally sourced through DDS except in an emergency situation. USMC units are not required to budget for these items because they are managed at the Service level.

Non-PEI Type 1 items (known as SAC 1 items) are not managed by LOGCOM and are usually requisitioned by the unit directly from the DLA. Such items include military clothing, unit ceremonial items, and lesser-value maintenance and test equipment. These items could potentially be sourced through DDS on a free-issue basis, provided the unit does not exceed authorized allowances.

b. Type 2 Allowance Items

Type 2 items are identified by either a HQMC-issued TAMCN or a locally generated TAMCN assigned by the unit's supporting SASSY Management Unit (SMU). These items are frequently commercially procured, open-purchased items needed for the unit's day-to-day operations, such as digital cameras, commercial tactical clothing and eyewear, plasma televisions, lawn equipment, and so forth. These items could potentially be sourced from DDS on a free-issue basis, provided the unit does not exceed authorized allowances.

3. Demand-Supported Items

Demand-supported items are non-allowance items that a unit maintains on-hand based on supported or limited stockage criteria. The most common types of demand-supported items in the USMC are repair parts, batteries, and individual components of sets, kits, chests, and equipment (known as stock-list 3 or "SL-3" components). These items could potentially be sourced from DDS on a free-issue basis.



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4. Personnel Support Equipment

The USMC *Garrison Property Policy Manual* (MCO, 1992) prescribes the policy and procedures governing the acquisition, management, and control of garrison property used at USMC bases, air stations, districts, and other independent commands. As defined in the manual, personnel support equipment (PSE, also known as "base property") is furniture, furnishings, and equipment for existing bachelor enlisted quarters and bachelor officers quarters, and furniture and furnishings in administrative offices and mess halls. Funds for such purposes are sourced from the Operations and Maintenance, Marine Corps (O&MMC) except for cases in which the individual unit cost exceeds \$15,000 (in which case Procurement Marine Corps [PMC] funds are used).

The installation property control officer is vested with the responsibility for program management, budgeting, and standardization of PSE and is directed to provide amplifying local guidance for inventory control, accountability, and procurement. As with the other classes of supply previously mentioned, DDS is a potential source of supply for base property aboard USMC installations.

5. Administrative Office Supplies

The USMC sources its administrative supplies from the U.S. GSA through both brick-and-mortar retail stores (known as "Servmarts") located at USMC installations and a web-based retail store (known as USMC Servmart Online). Procurement of such supplies is prescribed in *Policy for Management and Oversight of Marine Corps Servmart and Virtual Servmart Operations*. DDS is a potential source of supply for administrative supplies. Items such as office supplies, small appliances, cleaners and minor hardware are often procured from the GSA while simultaneously being available for free within the DDS inventory in new or used condition.

6. Summary

Figure 8 shows a summary of potential DDS usage for the various classes of USMC supply items described in this section.



Supply Type	Description	DDS as Potential Source?
Allowance Items		
- Type 1 (SAC 3)	Principle End Items	YES, requires HQMC authorization
- Type 1 (SAC 1)	General Supply	YES
- Туре 2	General Supply	YES
Demand Items		
- Repair Parts	Class IX Supply	YES
- Batteries	Class IX Supply	YES
- Kit Components (SL-3)	Class II, IX Supply	YES
- Meals, Ready-to-Eat	Class I Supply	NO
Administrative Supplies	Office supplies, cleaning supplies, minor hardware	YES
Petroleum, Oils, Lubricants	Class III Supply	NO

Figure 8.	Supply Classificati	ons
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C. MARINE CORPS REQUISITIONING INFORMATION TECHNOLOGY SYSTEMS

1. Introduction

Supplies and equipment ordered in support of USMC units are typically requisitioned under the authority of a commander-appointed, company-grade supply officer (O-1 to O-3), who supervises a supply section of approximately 15 Marines. In conducting day-to-day requisitions, USMC supply personnel use various information technology systems. In the following section, we describe these systems and their utility in accessing DDS inventory as a source of supply.

2. Supported Activities Supply System

The Supported Activities Supply System (SASSY) is the primary database linking USMC organizational supply activities to the DLA via the SMU mainframe database. The SMU acts as a centralized warehouse and distribution agent for consumable items located at the USMC's three largest installations. Once a USMC supply activity submits a



request via its retail-level Asset Tracking Logistics and Supply System (ATLASS) to SASSY, the SMU fulfills the order with its organic inventory. If a requested consumable is not in stock, the SMU electronically forwards the requisition to the DLA. The DLA then uses its internal asset visibility system—EBS—to fill the order from a DLA supply warehouse, finally shipping the item to the customer using the Distribution Standard System (DSS). SASSY has no direct interface with DDS's inventory management system, known as DAISY, and therefore, cannot be used to fill orders from the DDS inventory. Additionally, once an order is passed from SASSY to the DLA, the DLA's EBS system is not connected to DAISY and therefore cannot seamlessly screen DDS inventory for supply Condition Code A stock to fill the order (although it may do so through manual workarounds).

3. Asset Tracking Logistics and Supply System

ATLASS is used at the retail unit level for USMC requisitions and inventory management and provides the electronic interface from a USMC organizational supply activity to SASSY/SMU. The ATLASS system can "control, distribute, and replenish equipment and supplies" to both units in garrison and deployed (Kelly, 2009). Once a requisition passes from ATLASS to SASSY, personnel at the SMU use SASSY to search their on-hand inventory and either fill the order or pass the requisition on to the DLA. SMU personnel provide order feedback status to the customer on a 24-hour cyclic basis via the SASSY file transfer protocol (FTP) site. ATLASS does not interface with DDS inventory systems and cannot be used to requisition DDS stocks.

4. DoD EMALL

The DoD EMALL is an online shopping website (dod-emall.dla.mil) managed by the DLA that allows DoD units to purchase goods and services from the DLA, the GSA, or contracted commercial sources using either a unit government controlled purchase card (GCPC) or a unit DoD activity address code (DODAAC). DoD EMALL vendors and requisitioning processes must be in full compliance with applicable federal laws described in the federal acquisition regulations. A key benefit of the DoD EMALL is its



ability to compare prices across several sources of supply. More importantly, the DoD EMALL allows DDS inventory visibility and requisitions via DoDAAD MILSTRIP orders.

Currently, supply organizations within the Navy, Army, and Air Force are able to use MILSTRIP procedures to order supplies and equipment from DDS by using the DoD EMALL. However, unlike the other services, Marine Corps supply organizations are restricted from using the DoD EMALL for MILSTRIP orders, including DDS orders, due to restrictions defined in Marine Administration (MARADMIN) 0602/09 (Logistics, 2011). Due to the lack of interface between the USMC's Standard Accounting and Budgeting System (SABRS) and the DoD EMALL's DoDAAC payment functionality, USMC units are unable to use DoD EMALL for non-GCPC purchases, including orders. MARADMIN 0602/09 states: "DoD EMALL has been instructed to disapprove any orders from USMC commands procured with a Department of Defense Activity Address Code (DODAAC) and fund code (at this time) until a proper interface with Standard Accounting, Budgeting and Reporting System (SABRS) can be established." This restriction prevents a USMC unit from ordering supplies and equipment from DDS, despite the benefits of DoD EMALL's asset visibility tool.

5. Summary of Current Marine Corps Access to Defense Logistics Agency Disposition Services Inventory

Although the ATLASS/SASSY/DLA supply chain is capable of filling USMC requisitions for brand-new items at full acquisition cost from the DLA, it is currently not configured to screen and access identical DDS Condition Code A items that are on-hand and available for free issue. In the next chapter, we discuss this interface problem in more depth, as well as proposed DLA solutions in the near future. In the meantime, USMC units are confined to two methods for accessing DDS on-hand inventory: (1) the DLA's RTD website (https://dispositionservices.dla.mil/rtd03/index.shtml) and (2) a physical walk-in at a DDS facility. A third and more valuable option—the DoD EMALL—could be available immediately if the USMC corrected its functionality and interface problems between SABRS and the DoD EMALL. Figure 9 depicts the entire supply chain described in this section.





Figure 9. USMC and DLA Supply Systems Interface (IT Systems in Red)

6. Global Combat Support System Marine Corps

The Global Combat Support System Marine Corps (GCSS-MC) is a major USMC IT procurement initiative designed to completely replace ATLASS/SASSY. The goal of the program is to provide an end-to-end, real-time logistics information service for requisitions and in-transit and on-hand asset visibility, as opposed to the ATLASS/SASSY 24-hour cycle.

The GCSS-MC uses commercial, off-the-shelf Oracle software with modifications. The system began to be fielded to the USMC in three blocks, each possessing progressively more complex functionalities, beginning in 2011. At the time of this report, the Block I GCSS-MC version had been fielded to the 3rd Marine Expeditionary Force (MEF) headquartered in Okinawa, Japan. However, it has not yet been introduced within the USMC's other active-duty MEFs and is not scheduled for full



Block I fielding for at least two years. As such, we do not address the GCSS-MC in depth in this report. Nonetheless, it is worth noting that the current fielded version of the GCSS-MC has no capability to interface with DDS inventory, and therefore provides no increased requisition capabilities for DDS stocks beyond current ATLASS/SASSY functionality.

D. CONCLUSION

In this chapter we introduced the various USMC procedures and systems used for routine requisitions. None of the current legacy USMC systems possesses the ability to source inventory stock directly from DDS's on-hand inventory. Additionally, the new GCSS-MC does not have that functionality in its initial Block I capability set. Therefore, the only tools that Marines currently possess for requisitioning supplies and equipment from DDS stocks are the DLA RTD website and physical walk-in at a DDS facility. In an emergency situation, a MILSTRIP requisition could be placed via telephone between a USMC customer and a DDS facility, but this constitutes an administrative burden that is not ideal.

In the next chapter, we analyze data collected from the DLA and LOGCOM showing the effectiveness of current USMC reutilization efforts, including a cross-service comparison between the USMC and the other Services. We also compute potential USMC savings through reutilization, discuss IT barriers in greater detail, and describe the Service culture for reutilization within the USMC based upon comments from company-grade supply officers.



V. ANALYSIS OF MARINE CORPS REUTILIZATION EFFORTS

A. INTRODUCTION

Increased USMC reutilization of excess DoD supplies and equipment has the potential to save the Service millions of dollars each year. In this chapter, we analyze how current Marine Corps reutilization efforts compare to the other DoD Services in this effort. Additionally, by analyzing real-world requisitions processed by USMC Supply activities in FY 2010 and FY 2011, we show the potential cost savings that could be achieved by an increased use of DDS as a source of supply. We also describe further the IT interfaces within the DLA, DDS and the USMC that either enable or hinder the use of DDS as a source of supply. Finally, we discuss current attitudes, assumptions and actions displayed by USMC company-grade supply officers (O-2 and O-3) with regard to equipment reutilization, as seen in anonymous feedback provided to the authors during the planning portion of this research.

B. COMPARISON OF USMC REUTILIZATION TO OTHER DOD SERVICES

Savings from DoD equipment reutilization impact each DoD Services' O&M budget. The O&M category of appropriations is composed of many appropriation titles, for example Operation and Maintenance Army, Operation and Maintenance Marine Corps Reserve, Operation and Maintenance Air National Guard, and so forth. O&M appropriations traditionally finance those items whose benefits are derived for a limited period of time, and that comprise expenses rather than investments. Examples of costs financed by O&M funds are travel, fuel, minor construction projects of \$750,000 or less, expenses of operational military forces, training and education, recruiting, depot maintenance, spare parts, base operations support, and assets with a system unit cost less than the current procurement threshold of \$250,000 ("Operations and Maintenance Funds," 2009). O&M appropriations are normally available for obligation for one fiscal year and are budgeted using the annual funding policy. USMC equipment reutilization has the potential to save USMC O&M funds that could then be re-allocated to other uses.



Tables 1 through 3 compare the USMC reutilization rates to that of the other services. We define *reutilization rate* as the acquisition value of reutilized equipment in Supply Condition Codes A through H as a percentage of each Service's O&M funding. The DLA provided data on the amount reutilized, and the O&M budget amounts were sourced from the Office of the Secretary of Defense (OSD) budget estimates for the applicable years. These tables show that the USMC had the lowest reutilization rates of all the Services over the last three fiscal years. We discuss some reasons why the Marine Corps is performing poorly in this regard and offer some solutions for improvement.

 Table 1.
 DoD Reutilization Rates for Fiscal Year 2008

	FISCAL YEAR 2008					
MIL SVC	AMOUNT REUTILIZED	O&M Budget	REUTILIZATION RATE			
MARINES	\$ 7,715,701.00	\$ 9,256,100,000.00	0.08%			
NAVY	\$ 74,296,155.00	\$ 39,923,200,000.00	0.19%			
ARMY	\$ 136,513,483.00	\$ 82,838,400,000.00	0.16%			
AIR FORCE	\$ 61,250,572.00	\$ 43,490,600,000.00	0.14%			

 Table 2.
 DoD Reutilization Rates for Fiscal Year 2009

	FISCAL YEAR 2009					
MIL SVC	AMOUNT REUTILIZED	O&M Budget	REUTILIZATION RATE			
MARINES	\$ 9,022,663.00	\$ 9,757,100,000.00	0.09%			
NAVY	\$ 73,495,085.00	\$ 39,847,100,000.00	0.18%			
ARMY	\$ 104,777,760.00	\$ 82,877,200,000.00	0.13%			
AIR FORCE	\$ 77,291,963.00	\$ 45,388,500,000.00	0.17%			

 Table 3.
 DoD Reutilization Rates for Fiscal Year 2010

FISCAL YEAR 2010					
MIL SVC		AMOUNT REUTILIZED		O&M Budget	REUTILIZATION RATE
MARINES	\$	8,608,010.00	\$	10,327,300,000.00	0.08%
NAVY	\$	49,757,887.00	\$	43,129,600,000.00	0.12%
ARMY	\$	99,352,677.00	\$	90,793,300,000.00	0.11%
AIR FORCE	\$	54,194,481.00	\$	46,869,800,000.00	0.12%



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C. POTENTIAL USMC COST SAVINGS THROUGH REUTILIZATION

1. Method

To get a clearer picture of the potential cost savings that the USMC could realize through increased reutilization, we analyzed all USMC ATLASS/SASSY NSN² requisitions inducted during four two-week periods throughout FY 2010 and FY 2011. It is important to note that NSN requisitions alone do not show the full breadth of total USMC requisitions, and therefore cannot fully capture potential cost savings. Many items do not have an NSN or are assigned a SMU-generated "local NSN." Nonetheless, NSN requisitions show the full volume of requisitioning traffic conducted through the USMC's standard ATLASS/SASSY supply system. LOGCOM provided a history of demand. We chose the specific dates to represent each of the calendar year seasons in order to capture a wide breadth of possible demand patterns. The specific dates of analysis were

- November 8–22, 2010;
- February 14–28, 2011;
- April 4–18, 2011; and
- August 8–22, 2011.

After capturing a history of demand for all NSNs over the specified sample periods, we then captured DDS's on-hand inventory for the same two-week periods using data pulled from DDS's Management Information Distribution and Access System (MIDAS). By comparing these two NSN listings side-by-side, we were able to calculate the projected cost savings that the USMC could have achieved if it had used on-hand, available DDS inventory to the maximum extent possible to fill its requisitions. We conducted this analysis for two sample groups. Group 1 included a cost savings roll-up for NSNs listed only in Supply Condition Code A (like-new condition), while Group 2 consisted of a cost savings roll-up for NSNs listed in Supply Condition Codes B and C (serviceable condition)

² An NSN is a 13-digit number that identifies standard use inventory items. The first 4 digits of the NSN represent the Federal Supply Classification, such as 8430 for men's footwear, followed by a 2-digit North Atlantic Treaty Organization (NATO) code and a 7-digit designation for a specific type of boot, such as cold weather boot.



2. Results

a. Condition Code A

Table 4 shows the results of our analysis of Group 1, indicating the potential cost savings for each of the four two-week periods. We computed the total acquisition value in the table by multiplying the quantity available at DDS for each unique NSN in the specified period by the full acquisition price for the NSN. If these data were extrapolated over an entire year,³ we forecast an approximate potential USMC annual cost savings of \$21,768,610.

 Table 4.
 Potential Savings for DDS as Source of Supply (Condition Code A)

	Nov 8–22, 2010	Feb 14–28, 2011	Apr 4–18, 2011	Aug 8–22, 2011
Number of Unique NSNs	196	193	284	857
Total Acquisition Value	\$464,329	\$1,465,013	\$315,153	\$1,104,550
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Total potential savings for eight-week period:\$3Total potential annual savings:\$3

\$3,349,045 \$21,768,793

b. Condition Code B

Table 5 shows the results of our analysis of Group 2, indicating the potential cost savings for each of the four two-week periods for supplies in Condition Code B. If these data were extrapolated over an entire year, we forecast an approximate potential USMC annual cost savings of \$6,690,333.

 $^{^{3}}$ These data come from using a sample multiplier of 6.5, calculated as follows: 52 (weeks) / 8 (sample periods).



	Nov 8–22, 2010	Feb 14–28, 2011	Apr 4–18, 2011	Aug 8–22, 2011
Number of Unique NSNs	66	104	2	143
Total Acquisition Value	\$123,853	\$194,053	\$3,080	\$708,296
Total potential savings for eight-week period:				\$1,029,282

 Table 5.
 Potential Savings for DDS as Source of Supply (Condition Code B)

Total potential savings for eight-week period:\$1,029,282Total potential annual savings:\$6,690,333

3. Example of Potential DLA Disposition Services Use

In Section 2 we used the four sampled periods to describe how USMC requisitions represent a wide variety of supplies and equipment—from inexpensive repair parts to major pieces of equipment—all of which were available within the DDS inventory at no cost. To further isolate potential cost savings that the USMC could have achieved by utilizing DDS, Table 6 provides a snapshot of the two most expensive items (Condition Code A only) from each of the four sampled periods.

Table 6.List of Most Expensive National Stock Number Requisitions for
Sample Period (Condition Code A)

NSN	NOMENCLATURE	ACQ. VALUE	QUANTITY	POTENTIAL
			AVAILABLE	SAVINGS
1010012589638	Slip Ring, Twelve CH	\$8,023	1	\$8,023
6230012541666	Light Set, General Illu.	\$14,048	1	\$14,048
1385014569129	MK3MOD0	\$193,058	1	\$193,058
5855015387023	Pan and Tilt Assembly	\$61,137	8	\$489,096
2540015464267	Armor Set, Supplement.	\$27,146	2	\$54,292
2330011087367	Trailer, Tank	\$12,955	1	\$12,955
2530014841419	Wheel and Tire Assy.	\$23,422	2	\$46,844
8340014563637	Lightweight Maint. Encl.	\$16,498	1	\$16,498
			TOTAL	\$834,814

In addition to showing the most expensive types of supplies that could be filled from DDS stock, we sought to determine which types of supplies would be most appropriate for reutilization. Using the USMC NSN requisition data from the four sampled periods, we compared—by NSN— the total quantities of USMC requisitioned items to the total on-hand quantities available at DDS for the same NSNs, during the same ordering periods. This analysis allowed us to see which types of supplies had the greatest probability of filling orders from DDS inventory. Table 7 shows the three



supplies most requested by USMC units during the four sampled periods that were simultaneously available for issue within DDS inventory.

NSN	DDS Inventory	USMC Requisitions	Nomenclature	Unit Price
8465011150026	235	2032	Canteen, Water	\$5.08
5660002701510	1139	1800	Post, Fence, Metal	\$6.75
7105009350422	1063	1238	Cot, Folding	\$70.06
8440005437779	2300	1193	Socks	\$1.45
6515015217976	1133	852	Tourniquet, Non-pneumatic	\$43.50
8465008600256	7503	500	Cover, Water Canteen	\$5.85
8465011178699	460	498	Bag, Duffel	\$22.90
5310012349416	3598	470	Washer, Flat	\$0.01
2590015762424	329	274	Cutter, Cable, Vehicle Mounted	\$14.28
1095015216087	477	263	Bayonet, Knife	\$116.18
8465014783009	5010	240	Strap, Webbing	\$6.62
8415012968878	424	186	Vest, Tactical Load Carrying	\$48.68
8460006068366	320	158	Kit Bag, Flyer's	\$28.98
7240000893827	74	154	Can, Military	\$18.77
1005005506573	91	121	Case, Small Arms Cleaning Rod	\$6.82
6220015164926	468	113	Light, Marker, Clearance	\$9.63
6240000802012	112	96	Lamp, Incandescent	\$0.25

Table 7.DLA Disposition Services Supply Availability for USMC Requisitions
(Condition Code A)

4. Sales Through Government Liquidation

Government Liquidation (GL), LLC is a privately contracted company used by the DLA to sell excess DDS property to the public after the property has undergone the full RTD screening cycle. Sales are conducted using a web-based, auction format using GL's website (www.govliquidation.com). According to the GAO (2005a), public sales through the GL website return pennies on the dollar to the federal government, and do not constitute the most efficient use of resources. According to the DLA, in FY 2009 sales through GL generated a total of \$31.04 million for the DLA, and in FY 2010 the total amount was \$29.06 million.

We analyzed every sale of NSN items conducted by GL for FY 2010 using an NSN listing provided by the DLA. We compared this list with the NSN requisitions conducted by the USMC during the four sample periods previously described. Our goal



was to identify cases in which the DLA sold supplies and equipment through GL for which the Marine Corps had a valid need in the same fiscal year. We found that there were 9,909 unique NSNs in Condition Code A sold in FY 2010 through GL that were also requisitioned by the USMC during the four sampled periods. Although we could not determine whether these items were available at the same time they were requisitioned by the USMC, our findings nonetheless show that the DLA is selling supplies to the public for which the USMC possesses a valid need and continues to order at full acquisition cost.

5. Summary of Requisition Analysis

The bypassed potential annual cost savings of the USMC's maximum use of DDS as a source of supply for equipment in Condition Codes A and B is estimated at \$28,459,126. This amount represents the full acquisition value of supplies that were on-hand and ready-for-issue within the DDS inventory at the same time that USMC personnel requisitioned them. Rather than these orders being filled from DDS on-hand inventory, they were instead filled by brand-new supplies and equipment from standard inventory control points and Prime Vendors at full acquisition cost.

In some cases, filling non-DDS orders may have been necessary due to the need for expedited delivery (for instance, supplies ordered with Force Activity Designator priority 3 or higher). The lead time for DDS order fulfillment is longer than that of standard order fulfillment. However, as we will show, an equally likely reason is that Marine Corps supply officers are frequently not aware of the potential benefits of DDS use, or they lack confidence in the DDS supply chain. If these obstacles can be overcome through creative solutions, both the USMC and the DLA can achieve substantial cost savings.



D. NONINTEGRATED SYSTEMS IMPAIR REUTILIZATION

1. Introduction

As we discussed in Chapter III, and as the GAO reported in 2005 (2005b), supply management IT systems enabling reutilization within the USMC and the DLA are outdated and nonintegrated. Both the USMC and the DLA currently have IT initiatives underway to correct this deficiency; however, it is critical that these efforts be integrated from a DoD-wide perspective. The following sections provide more detail on the legacy and emerging IT systems that will be key components in improved reutilization efforts.

2. USMC Standard Automated Materiel Management System

SASSY was fielded in the 1970s and does not directly interface with the DLA's inventory management system (DAISY). Instead, USMC supply transactions are first filled, if possible, at the SMU. If the SMU does not have the item in stock, it passes the requisition to the Marine Corps Logistics Base Albany Automated Information Systems Transaction Router (MAISTR, managed by LOGCOM). Such transactions are grouped together at each SMU and transmitted to Albany at the end of each working day (24-hour cycle). MAISTR then interfaces with the Defense Automated Address System, finally resulting in a requisition at the DLA that is screened by the EBS, ordered by DSS, and finally shipped directly to the customer. The entire process from requisition to delivery averages several days' customer wait time, depending upon availability and customer priority.

SASSY is a Marine Corps program that was not developed for DoD-wide supply chain integration. It is scheduled to be replaced by the GCSS-MC, a major DoD acquisitions program that is aligned with the other Services' GCSS family of systems. It seeks to seamlessly integrate with the DLA's inventory and asset visibility systems, providing real-time demand and visibility tools to USMC customers. However, GCSS-MC has not yet reached Block I fielding and its current Block I capability set does not improve upon SASSY's ability to screen DDS stock. The GCSS-MC will not interface with DAISY. Therefore, the GCSS-MC alone will not be the solution for reutilization



efforts. The solution will reside in the DLA's ability to seamlessly integrate its DDS inventory management system—currently DAISY—with its national system, the EBS, in filling USMC requisitions.

3. DLA Systems

Prior to the GAO's findings on outdated DLA systems (GAO, 2005b), the DLA had begun an IT transformation effort known as Business Systems Modernization. As part of that effort, in 2006 the EBS replaced the Standard Automated Materiel Management System (SAMMS). DAISY—fielded in 1990—is still in use and unable to communicate directly with the EBS. However, a current DLA initiative known as Reutilization Business Integration seeks to ultimately roll all data and functions from DAISY into the EBS/DSS beginning in April 2012. Once this occurs, it may be possible to directly source supplies from DDS inventory in fulfillment of USMC—and DoD-wide—requisitions. The implications for improved reutilization will be profound, provided that DDS can be used as a source of supply with the same credibility and accuracy as current DoD suppliers (a claim of which the GAO was skeptical in its 2005 report [GAO, 2005a] and which we discuss in the next section). Figure 10 shows the current DLA systems construct.





Figure 10. Nonintegrated Defense Logistics Agency Systems

E. USMC ORGANIZATIONAL CLIMATE FOR REUTILIZATION

1. Introduction

Prior to beginning our research, we sought advice from approximately 300 Marine Corps company-grade supply officers on the types of data and reutilization topics we should explore. We contacted these supply officers via e-mail, using contact information available at the Marine Corps' Marine Online personnel management website (https://sso.mol.usmc.mil/SSO/LoginRequest.do). Our goal was to use their various insights to help steer our research into the most relevant and timely areas. Although this outreach did not constitute a scientific survey or formal interview—responses were



voluntary, anonymous, and used solely for background information—we nonetheless received some observations and perceptions that we believe are useful to leaders within the DLA and the USMC.

2. Results of Supply Officer Feedback

A total of 62 supply officers in the grades O-2 and O-3 provided general comments about their experiences using DDS as a source of supply, as well as their usage level and predominant method of DDS requisition. All respondents consented to anonymous citation in this report, and their comments are found in the Appendix.

Of the 62 respondents, 41 indicated that they had used DDS on at least one occasion to order supplies, and 21 supply officers said that they had never used DDS for requisitions. The most common method for requisition was the RTD website, followed by physical walk-in at an installation DDS field site. Most respondents who had used DDS as a source of supply were at least somewhat satisfied with the results, though some mentioned errors in the accuracy of supply condition code and item identification.

Of the respondents who did not use DDS as a source of supply, the most common reason was the lack of financial incentive to do so. These supply officers mentioned that their budgets were sufficiently large to procure new supplies at full cost.

Others who did not use DDS cited a lack of confidence in DDS's inventory accuracy, based upon their experiences of turning in property at a DDS field site. The procedures for unit turn-ins of excess, damaged, or obsolete property (see Chapter II, Section C, Subsection [2]) place heavy reliance on the unit turning in equipment (known to DDS as the "generator") to ensure paperwork accuracy. However, the generators have little incentive to ensure 100% accuracy because the equipment will no longer be in their custody. DDS employees are often unable to provide a redundant check due to either manpower constraints or a lack of expertise concerning the property being turned in. The end result is that property often enters DAISY with an improper NSN, nomenclature, supply condition code, or demilitarization code (*The Defense*, 2011).



This inaccurate inventory data was also mentioned by the GAO (2005b), wherein they cite "unreliable excess property inventory data" as a root cause for "billions of dollars in waste and inefficiency." In response, the DLA implemented several changes, including the consolidation of numerous field sites for better property control, changes to their batch-lotting⁴ process, and the installment of a Senior Executive Service Director to oversee the organization (*DoD Excess Property*, 2006). However, our research shows that many USMC supply officers remain skeptical of inventory accuracy.

Finally, many supply officers did not use DDS because they were simply unaware of the ability to use the RTD website to screen inventory nationally and internationally. Marine Corps supply schools train students to use the RTD website, but this training should be analyzed for uniformity, rigor and skills retention. Of those who did use the RTD website or a physical walk-in, many said that DDS simply did not have the item they needed on-hand. This problem could be potentially mitigated by improved inventory visibility, accuracy, and access via systems integration previously described.

⁴Batch-lotting involves the grouping of identical, low-cost items as a single unit for requisition purposes.



VI. CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY

In this research we explored the extent to which the USMC utilizes DDS as a source of supply, with the goal of highlighting opportunities for cost savings for both the USMC and the DLA through increased reutilization. We provide a summary of Chapters I through IV in the following paragraphs.

In Chapter I we described the purpose, background, scope, and significance of reutilization within the DoD as a whole, and the USMC in particular. We illustrated the methods and resources used to develop the analysis. We provided context to the research topic. Chapter I served as a foundation for the analysis, which sought to identify the current level of effectiveness of USMC equipment reutilization via DDS, and provide informed recommendations related to a more effective use of DDS as source of supply for USMC supply activities.

In Chapter II we presented a literature review on the imperative of transforming DoD business processes to achieve cost savings and greater efficiency within the DoD in light of projected budget cuts. We described the significant challenges of culture change in implementing better DoD business practices. We also presented the GAO's findings with respect to the progress of current DoD business transformation.

In Chapter III we introduced the concept of *reutilization* within the DoD and provided an overview of the DLA and DDS. We then discussed the DoD process for RTD disposition and concluded with the GAO's findings in 2005 and 2006 that identified major deficiencies in DoD reutilization. These findings provided context for the problem of USMC and DoD-wide reutilization efforts.

In Chapter IV we discussed the current methods and systems the USMC uses to procure supplies and equipment, and discussed the USMC's access to the DDS inventory as a source of supply. We began with an overview of the USMC's supply classifications—describing the procurement policy for each—and continued with a



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discussion of the utility of using DDS as a source of supply for each class. We concluded with an analysis of current USMC information technology requisitioning systems, describing how each either enables or prevents the utilization of DDS as a source of supply.

In Chapter V we discussed how current USMC reutilization efforts compare to the other DoD Services. Additionally, by analyzing real-world requisitions processed by USMC supply activities in FY 2010 and FY 2011, we showed the potential cost savings that could be achieved by an increased use of DDS as a source of supply. We also showed which types of supplies are most appropriate for DDS reutilization based on real-world analysis of supply availability within the DDS inventory. We also described the information technology interfaces within the DLA, DDS, and the USMC that either enable or hinder the use of DDS as a source of supply. Finally, we discussed current attitudes, assumptions, and actions displayed by USMC company-grade supply officers (O-2 and O-3) with regard to equipment reutilization, as seen in anonymous feedback provided to the authors during the course of this research.

B. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis of equipment reutilization with the USMC, we offer six principle conclusions that represent the most notable characteristics of current USMC reutilization efforts. Following each conclusion, we present a recommended course of action with the targeted stakeholders listed in parentheses after each recommendation.

Conclusion 1: The USMC is not currently maximizing procurement of available DDS on-hand inventory, lagging behind the other services and annually foregoing approximately \$28.4 million in potential cost savings.

Recommendation 1: Until such time that GCSS-MC and DDS are seamlessly linked, establish service policy in orders, directives, and SOP that requires the screening of available DDS inventory prior to inducting standard supply system requisitions, particularly for Class II supplies. (DC I&L)



Recommendation 2: Provide incentives to the USMC supply community to more frequently use DDS as source of supply. This can be accomplished through performance appraisal, as well as through a USMC or DoD-level awards program for reutilization. (DC I&L, DLA)

Conclusion 2: Many USMC supply community leaders are not aware of the breadth and utility of the DDS inventory as a source of supply, assuming most items to be "junk," and therefore neglecting to use the system. Although supply officers receive training on DDS screening at the Ground Supply Officers Course (GSOC), this one-time class is not reinforced in the fleet, and many supply officers opt to use the standard supply system, the GSA, and open purchases for all orders despite the availability of DDS inventory.

Recommendation 1: Maximize the untapped potential of the DoD EMALL, which provides on-hand visibility of DDS supplies in Condition Codes A, by enabling USMC MILSTRIP requisitions within the DoD EMALL. For accountability purposes, such requisitions must be visible to SABRS and SASSY and post to each supply activity's DASF. (DC I&L, LOGCOM)

Recommendation 2: Establish a national DLA marketing plan to raise awareness for the potential of DDS reutilization among all the Services, including the USMC. A key part of any such plans should be the use of DDS Disposal Service Representatives (DSR) to conduct training visits to USMC supply activities in order to educate Marines on the use of DDS reutilization systems. (DDS)

Conclusion 3: DLA and USMC distribution, requisition, and inventory management systems are not connected, and therefore prohibit seamless requisitions of DDS supplies using the standard USMC supply system.

Recommendation: Establish a seamless interface between the DLA's EBS and DAISY so that all requisitions placed via the GCSS-MC and ATLASS/SASSY can be filled, when possible and to the maximum extent possible, by DDS on-hand inventory. (DC I&L, and DLA)



Conclusion 4: Many USMC supply professionals do not have faith in DDS as a source of supply due to either previous experiences with the turn-in and reutilization processes or a misunderstanding of the DDS fulfillment process; therefore, they neglect to use the system.

Recommendation: DDS must ensure 100% accuracy in inventory management data—most importantly supply condition code, NSNs, and quantity—so all order fills meet customer expectations. This effort must begin with maximum effectiveness in the receipt process and continue through the entire reutilization cycle. If necessary, current receipt processes should be overhauled so DDS employees can effectively manage workload and ensure 100% accuracy in inventory management data. This will ensure accurate order fulfillment during the final stage of reutilization. (DDS)

Conclusion 5: The DLA annually sells supplies and equipment to the public for which the USMC possesses an ongoing requirement.

Recommendation: The DLA must ensure the integration and communication of its new and developing IT systems in order to ensure that all USMC demanded items are screened against available DDS stock throughout the entire RTD cycle. This will prevent the sale of items for which the USMC has a valid need. (DLA)

C. RECOMMENDATIONS FOR FURTHER RESEARCH

In this report we analyzed the extent to which the Marine Corps utilizes DDS as a source of supply, as well as the implications and opportunities for improved reutilization. The observations and analysis presented in this report serve as a foundation of research that should be examined with more detail. The following are recommended future studies that supplement the research conducted in this report:

• Conduct a feasibility analysis on whether DDS can be used as a source of supply with the same level of confidence as traditional DLA supply centers. The analysis should include sampled data indicating the degree of accuracy in DDS's inventory based on supply condition codes, NSNs, quantities, and generator turn-in data. The objective of the study would be to determine whether DDS inventory management has sufficient credibility and accuracy to serve as a reliable supply source for DoD customers, and to make recommendations for improvement.



• Conduct an analysis of the progress made within the DLA to improve overall DoD reutilization within the context of GAO reports, the most recent in 2006, showing significant waste and inefficiency in the RTD process. The study should focus on the 13 recommendations made by the GAO to the DLA in 2005, showing the extent to which the DLA has acted on these recommendations as well as the success or failure of these initiatives in meeting the DLA's desired goals.



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APPENDIX. USMC SUPPLY OFFICER COMMENTS

Satisfied Users⁵

"I have always loved DRMO as a sort of 'diamond in the rough' SOS."

"Useful in Okinawa because you can go to DRMO and look through the gear (helpful for Class IX parts that are slow arriving, as well as random items you may not be able to purchase on-island). Minimal experience with DRMO in Lejeune, but it is not as widely used, nor did it seem to be as user friendly."

"My DASF clerk used it the most, it was pretty easy to use once we figured the system out. The gear was in great serviceable condition. I wish we would have used this earlier as it's a great way to get gear free and not having to worry about going over our unit's budget. We ordered around 500 or so packs and they were all in really good condition. If more units used this we wouldn't have a big issue of wasted gear in the military."

"DRMO has done a good job in marketing serviceable excess. We have been pleased with every aspect of the requisition process. Equipment has been shipped expediently and arrived in the condition stated. It is an often underutilized capability for acquisition. More photos would make it easier to know what you're getting though."

"This is a great resource for units to take advantage of. My unit saved tens of thousands of dollars by utilizing DRMO."

"I feel that every BN CMDR, XO, and BN STAFF commodities should be given a brief covering the cost savings benefit of utilizing DRMO. The CVC helmets I requisitioned saved the BN well over 500K. That is a great deal of money that can be utilized for something else to accommodate training and unit readiness, like SL-3 deficiencies. Most

⁵Respondents used the legacy term "DRMO" in place of "DDS."


people have to overcome the thought that everything at DRMO is junk, in most cases it is not. The material just happens to be excess from another unit. Most of the time other services, like the US Army and US Air Force, dispose of perfectly good items because their budget is so large they can afford to purchase shinny new stuff all the time. As a Corps we should capitalize on their wastefulness and use the funding we save to better develop our Corps."

"I have found it is the best place to get repair parts for Base-X tents. Most units will DRMO them without ever attempting to fix them. The tents are not cheap, so we work closely with HDT (the makers of Base-X) and use spare parts to fix our own tents and build new ones."

"DRMO usually has gear in pretty good condition that can be used, saving the requesting unit money. I will continue to use DRMO in the future."

"It is a free source of supply, no brainer."

Unsatisfied Users

"DRMO would be awesome if the gear was classified appropriately. In other words gear shouldn't be labeled as "functional" and then come in and barely do its job. If you wouldn't requisition it normally (even at a discounted price), then why advertise it as such? We requisitioned furniture that was "functional" and it barely stood up. The legs were broken/cracked and didn't support any weight but, because it stood up, DRMO labeled it as functional. On the flip side, we requisitioned tents that the air force was DRMO'ing because they were replacing them with a newer model. Since the air force doesn't go to the field, these tents were still in the wrapping. Great bargain there..."

"DRMO as a whole did not seem very customer friendly at all. Could not put my finger on one specific thing, but just in general."



"I found, on a few occasions, that I thought I had ordered items that had been ordered by the Army before me. The system was slow to display that the items were not available for requisition any longer."

"The DRMO here is very disorganized and inefficient. They're requirements or procedures change from month to month and it takes weeks to get a DRMO appointment. With the number of issues trying to get rid of our junk, we don't bother trying to requisition gear. We have used GSA-Xcess in the past. Not sure if that's DLA related or not."

"The process for disposing gear via DRMO is time-consuming and requires constant follow-up by my Marines. Although this is separate from the requisition process, it nevertheless reflects poorly on DRMO's reliability, and it influences our decision not to requisition supplies from them."

<u>Skeptical</u>

"Usually, I only look to DRMO as a last resort. OpTempo dictates that we just have to get the requisition in quickly. If it's a hot item, I look in Asset Visibility (sometimes points to DRMO with an on hand) or use Priority Materials Office to expedite. DRMO only used as an exception."

"DRMO can be a gold mine if thorough research and time is allotted. Due to time frames and operational tempo of current units, it was too much of a risk with little gains. Going through the purchasing channels to obtain new items, whether COTS or not, was more reliable and took less time. There are also mechanisms within the purchasing channels to correct problems that occur with purchasing the incorrect item, or a malfunctioning item."

"As to FMF, we never used DRMO as they couldn't provide the class IX that we required nor did we have the time to check for every single requisition. Maybe if the SMU



sourced/screened to DRMO, that would make it more efficient and would really validate DRMO or not. Recommend that DRMO be built in the system so it isn't one more step that a using unit has to take."

Uninformed

"I would like it to be easier. One website for all the gear across the branches. I know the Air Force DRMO's gym equipment that Marines would love to have."

"I believe it comes down to being uneducated of the services they provide and the stock they have. If their stock was an easy access report and was pushed to Division, it would be more of a source we'd look at."

"Receiving items from DRMO is like going to good will-- if times are tough and you have no other options then maybe you'll go there first to see if the items will meet your needs. Since this hasn't really been the case, people requesting items would certainly not be satisfied with a used item from DRMO when they could just purchase something new."

<u>Other</u>

"I feel DRMO is not utilized enough. Especially for SL-3 items."

"It's a source that is underutilized"

"DRMO/DLA should put some kind of check or balance in place to make sure nonsupply types don't have requisition access. Even though it's "free" and doesn't affect fiscal systems, which is what SuppOs usually get fired up about when others do things that could obligate funds, I had a maintenance chief at my last unit requisition SAC 3 items from DRMO without my knowledge. In a classic case of good initiative, bad judgment he ordered these huge container handlers, which showed up completely unserviceable, to the



wrong site, and as mentioned were SAC 3 TAM items. Since they were broken and we didn't rate them, I had to turn around and re-DRMO them as a huge cost in time and taxpayer dollars (shipping). In [previous unit name redacted], the DLA rep, [name redacted], would send spreadsheets periodically that had a unit's open DLA-managed requisitions. One of the tabs would show requisitions that could be filled from DRMO stock. This was especially helpful on independent duty (with a smaller budget and no MCB to support), but would be helpful to all units and would save taxpayer money if units were shown what was in DRMO before keypunching 4 cards or whatever. Lot of work for the DLA rep, but it was very helpful to be shown which of our outstanding requisitions could be filled for free by DRMO."

"It'd be nice if the DRMO stock tracking system somehow talked to GCSS/SASSY so that requisitions that could be filled by DRMO would automatically be sent their way."

"Supply Officers must screen on regular basis, as DRMO items moves through an availability cycle, which becomes available to more agency until acquired or destroyed."

"It is not widely advertised. It is thought more of as a way to get rid of unserviceable items."

"I think it is highly underutilized and unadvertised."

"There is a plethora of gear available; however the system itself does not emphasize the re-use of those items. With spending frenzy of the past half-decade, Marines and specifically supply Marines are not conditioned to using these resources."

"I think the reason that we never utilized DRMO was because of our operations tempo. We conducted back-to-back deployments where we only spent about 5 months (within those 5 months we also went to Mojave Viper) in CONUS before we rotated back to combat operations. If we would have spent more time in country I have no doubt that we would have taken advantage of the opportunities that DRMO officers."



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LIST OF REFERENCES

- Brletich, M. (2010). DLA overview for the joint logistics course [PowerPoint slides]. Retrieved from https://www.chadalong.com/Joint%20Logistics/DAY%2081%20DLA%20Overvi ew.ppt
- Defense Logistics Agency (DLA). (2005, October). DRMS form 2027: Condition code work card. Retrieved from http://dla.mil/drms
- Defense Logistics Agency (DLA). (2011). DLA at a glance. Retrieved from http://www.dla.mil/Pages/ataglance.aspx
- The Defense Reutilization and Marketing Service (DRMS) program. (2011). Retrieved from DAU Acquisition Community Connection website: https://acc.dau.mil/GetAttachment.aspx?id=210297&pname-file
- Del Mar, D. S. (2010, Summer). Responding to Secretary Gates' challenge to eliminate waste: The time for a true government/industry 'team effort' is now! *The Journal of the American Society of Military Comptrollers*. Retrieved from http://www.omagdigital.com/publication/?i=48693&p=5
- Department of Defense (DoD). (1997, August). *Defense materiel disposition manual* (DoD 4160.21-M). Retrieved from http://www.dispositionservices.dla.mil/publications/index.shtml
- Department of Defense Inspector General (DoDIG). (2011). *Changes are needed to the Army contract with Sikorsky to use existing DoD inventory and control costs at the Corpus Christi Army Depot* (DODIG-2012-004). Washington, DC: Author.
- Doane, D. R., & Spencer, S. D. (1997). *Cultural analysis case study: Implementing acquisition reform within the Department of Defense* (Master's thesis). Retrieved from Massachusetts Institute of Technology website: http://lean.mit.edu/downloads/1997-theses/view-category/Page-1.html
- DoD excess property: Hearing before the Subcommittee on National Security, Emerging Threats, and International Relations of the Committee on Government Reform, 109th Cong. 2nd Sess. (2006, July 25) (testimony of Gregory Kutz). Retrieved from http://ftp.resource.org/gpo.gov/hearings/109h/35341.txt
- General Accounting Office (GAO). (2000). Inventory management: Better controls needed to prevent misuse of excess DoD property (GAO-00-147). Retrieved from http://www.gao.gov/new.items/o400147.pdf
- Government Accountability Office (GAO). (2005a). DoD excess property: Management control breakdowns result in substantial waste and inefficiency (GAO-05-277). Washington, DC: Author.
- Government Accountability Office (GAO). (2005b). DoD excess property: Management control breakdowns result in substantial waste and inefficiency (GAO-05-729T). Washington, DC: Author.



- Government Accountability Office (GAO). (2011). Subject: Defense business transformation: DoD needs to take additional actions to further define key management roles, develop measurable goals, and align planning efforts (GAO-11-181R). Washington, DC: Author.
- Grasso, V. B. (2010, October). *Defense surplus equipment disposal: Background information* (CRS Report No. RS20549). Retrieved from Federation of American Scientists website: http://www.fas.org/sgp/crs/weapons/RS20549.pdf
- Kelly, P. J. (2009). *United States Marine Corps performance pricing model* (Master's thesis). Naval Postgraduate School, Monterey, CA.
- Logistics, D. C. (2009, October 7). Messages. Retrieved from http://www.marines.mil/news/messages/Pages/MARADMIN0602-09.aspx
- Operations and maintenance funds. (2009, March 30) In *ACQuipedia: Your online acquisition encyclopedia*. Retrieved from Defense Acquisition University website: https://acc.dau.mil/CommunityBrowser.aspx?id=28980
- United States Marine Corps Order (MCO). (June, 1999). *Consumer-level Supply Policy Manual* (MCO P4400.150E). Retrieved from http://marines.mil/news/publications/Documents/MCO%20P4400.150E%20W%2 0ERRATUM%20AND%20CH1-2.pdf
- United States Marine Corps Order (MCO). (May, 1992). *Garrison Property Policy Manual* (MCO P10150.1). Retrieved from http://www.marines.mil/news/publications/Documents/MCO%20P10150.1.pdf



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