NPS-AM-05-051



EXCERPT FROM THE **PROCEEDINGS**

OF THE

SECOND ANNUAL ACQUISITION RESEARCH SYMPOSIUM

A CRITICAL EXAMINATION OF THE DOD'S BUSINESS MANAGEMENT MODERNIZATION PROGRAM

Published: 1 May 2005

by

Christopher Hanks

2nd Annual Acquisition Research Symposium of the Naval Postgraduate School:

Acquisition Research: The Foundation for Innovation

May 18-19, 2005

Approved for public release, distribution unlimited.

Prepared for: Naval Postgraduate School, Monterey, California 93943



ACQUISITION RESEARCH PROGRAM Graduate School of Business & Public Policy Naval Postgraduate School The research presented at the symposium was supported by the Acquisition Chair of the Graduate School of Business & Public Policy at the Naval Postgraduate School.

To request Defense Acquisition Research or to become a research sponsor, please contact:

NPS Acquisition Research Program Attn: James B. Greene, RADM, USN, (Ret) Acquisition Chair Graduate School of Business and Public Policy Naval Postgraduate School 555 Dyer Road, Room 332 Monterey, CA 93943-5103 Tel: (831) 656-2092 Fax: (831) 656-2253 E-mail: jbgreene@nps.edu

Copies of the Acquisition Sponsored Research Reports may be printed from our website <u>www.acquisitionresearch.org</u>

Conference Website: www.researchsymposium.org



ACQUISITION RESEARCH PROGRAM Graduate School of Business & Public Policy Naval Postgraduate School

Proceedings of the Annual Acquisition Research Program

The following article is taken as an excerpt from the proceedings of the annual Acquisition Research Program. This annual event showcases the research projects funded through the Acquisition Research Program at the Graduate School of Business and Public Policy at the Naval Postgraduate School. Featuring keynote speakers, plenary panels, multiple panel sessions, a student research poster show and social events, the Annual Acquisition Research Symposium offers a candid environment where high-ranking Department of Defense (DoD) officials, industry officials, accomplished faculty and military students are encouraged to collaborate on finding applicable solutions to the challenges facing acquisition policies and processes within the DoD today. By jointly and publicly questioning the norms of industry and academia, the resulting research benefits from myriad perspectives and collaborations which can identify better solutions and practices in acquisition, contract, financial, logistics and program management.

For further information regarding the Acquisition Research Program, electronic copies of additional research, or to learn more about becoming a sponsor, please visit our program website at:

www.acquistionresearch.org

For further information on or to register for the next Acquisition Research Symposium during the third week of May, please visit our conference website at:

www.researchsymposium.org



THIS PAGE INTENTIONALLY LEFT BLANK



A Critical Examination of the DoD's Business Management Modernization Program

Presenter: Christopher Hanks

Abstract

In its efforts to improve operations in what it has designated the five "business domains" in the US Department of Defense (DoD)—acquisition, financial management, human resources management, installations & environment management, and logistics management—the DoD's Business Management Modernization Program (BMMP) is a key element of the DoD's ongoing efforts to transform itself. This paper argues that the BMMP needs to be fundamentally reoriented to meet its goals. It provides an historical overview, research evidence from other studies, and additional arguments to support that view and suggests three steps that could be taken to begin the proposed reorientation.

The BMMP is facing a very wide range of challenges. At the DoD level, the Department continues to grapple with accounting problems that almost defy belief. In May 2001, the Deputy Inspector General reported to Congress the existence of \$1.1 *trillion* in *unsupported* adjustments to the DoD's FY 2000 books, out of \$4.4 trillion in overall adjustments. This problem is so large that full audits by the DoD IG have been discontinued until DoD management is able to report that the Department's books have become sufficiently reliable to justify the expense of another attempt at a full audit, which DoD management has not yet been able to do.¹

At the service level, improvements in support-system performance promised when the Defense Business Operations Fund (DBOF) was established in 1991 have not materialized. In the Air Force, for example, the overall "not-mission-capable-supply" rate for Air Force aircraft, a measure reflecting negative performance by the supply business area, rose steadily from 8.6 percent in FY 1991 to 14.3 percent in FY 2000. This occurred even as the after-inflation costs of Air Force depot-level repairs rose by 25 percent from FY 1994 to FY 2001, and as the after-inflation prices Air Force customers had to pay for spare parts rose by 14 percent over the FY 1992 to FY 2001 period.²

At the working level, where hundreds of thousands of individual "business" transactions occur daily in the DoD, the BMMP faces structural problems that demand new thinking. Many studies have shown, for example, that the "full-cost-recovery" (FCR) pricing practices in the Department's Working Capital Fund (DWCF) activities can lead to counterproductive customer behaviors when the price signals are wrong. RAND analysis of the Army's "Integrated Sustainment Maintenance" experiment in the mid 1990s, for example, provides examples of

² Air force supply: Management actions create spare parts shortages and operational problems (1999, April) GAO/NSAID/AIMD-9-77; Statement of General George Babbitt, AFMC/CC/ to Military Readiness Subcommittee of the HASC (1999, October 7); Air Force Working Capital Fund FY 2006/FY 2007 President's Budget Submission, (AFWCF PB). (2005, February); AFWCF PBs for FYs 1995-2001; and, *Analysis of supply management activity group financial reports, prices, and cash management*, (1998, June). GAO/AIMD/NSAID-98-118.



¹ Congressional testimony on Defense Financial Management by the DoD Deputy Inspector General, May 2001, June 2002, June 2003, and July 2004. Retrieved from (http://www.dodig.osd.mil/fo/index.html).

local repair decisions that appeared to save money from the unit's perspective but did not save money for the Army overall—e.g., an M939 axle assembly that the unit paid to have repaired locally for \$3646 when the cost of repairing the axle at an Army depot would have been \$2105. Based on the FCR price of \$5991, the unit thought it was saving the Army \$2345, but because virtually all of the extra costs embedded in the FCR price of \$5991 still had to be paid by the Army anyway, the local unit's decision, in fact, caused the Army to spend \$1541 *more* than it needed to have the axle repaired.³

Finally, the demands of the DoD's contingency missions have only increased the need for the BMMP to succeed. As the GAO has noted recently, for example, problems in DoD's business domains—inaccurate supply forecasts, delays in funding, delayed acquisition, and distribution problems—have been important contributing factors to equipment shortages experienced by Army and Marine Corps forces in Iraq.⁴

Against the above backdrop, this paper argues that the BMMP needs to change if it is going to be able to successfully address the kinds of problems described above. The thesis of the paper is that the BMMP's primary objective, combined with its acceptance of the conventional thinking about what it means for DoD support activities to be "businesslike," have prevented the BMMP from making any real progress against any of the types of problems described above—and will continue to do so until the BMMP is willing to undertake a fundamental re-examination of its primary objective, its basic operational assumptions, and the nature of the critical communication role it plays in the defense-transformation effort.

Introduction

The core assumption underlying the DoD's Business Management Modernization Program (BMMP), consistent with an inherent assumption of the Chief Financial Officers (CFO) Act of 1990,⁵ is that *financial accounting*—i.e., the kind of accounting done in the private-sector to produce external financial statements (balance sheet, income, and cash flow)—can add value in government activities. That this is a core assumption for the BMMP is borne out by the fact that the program's *primary objective* is to produce auditable financial statements ("achieve CFO compliance") for government activities in the five DoD "business domains" (acquisition, financial management, human resources, installations & environment, and logistics) identified in the Department.⁶ The problem with this assumption and objective—and, indeed, with the CFO Act

⁶ The Vision and Goals section in the March 31, 2005 Update of the BMMP Business Enterprise Architecture (BEA), "Overview and Summary Information" (AV-1, p. 9), states that Goal #1 of the BMMP is to "provide timely, accurate, and reliable information for business management" in the Department. In pursuit of that goal, Objective 1.1 of the BMMP, as stated, is to: "Achieve an unqualified audit opinion (UAO) on 2007 consolidated DoD financial statements." Retrieved from <u>http://www.dod.mil/comptroller/bmmp/products/architecture/BEA_3_31_05/iwp/default.htm</u>. The January 31, 2005 BEA (p. 9) defines a "UAO" as follows: "An unqualified audit opinion is an auditor's report expressing the opinion that an organization's financial statements, taken as a whole, are presented fairly in all material respects in conformity with Generally Accepted Accounting Principles (GAAP) consistently applied and without any qualifiers." Accounting standards (GAAP) for the federal government are proposed by the Federal Accounting Standards Advisory Board (FASAB), which produces statements of Federal Financial Accounting Standards (SFFAS) and Statements of Federal Financial Accounting Concepts (SFFACs). The FASAB was created



³ Brauner, M., Bondanella, J., Bolten, J., Galway, L., Pint, E., Ondaatje, E., & Sollinger, J. (1997). ISM-X evaluation and policy implications. MR-829-A. RAND. p. 45.

⁴ Defense logistics, actions needed to improve the availability of critical items during current and future operations. (April 2005). GAO-05-275.

⁵ The Chief Financial Officers act of 1990. Retrieved from http://thomas.loc.gov/cgi-bin/query/z?c101:H.R.5687.ENR:

itself in the DoD setting—is that none of the DoD's support activities, even those that have been structured to appear the most businesslike, operate in a competitive marketplace. The result is, that whereas the requirement to regularly produce financial statements describing the financial condition of the enterprises they manage to external stakeholders does create pressure on private-sector managers to work at making their enterprises more effective and efficient, that same effect does not occur in the public-sector setting of the DoD.⁷

This paper reviews the history of the DoD's efforts to structure and operate certain of its organic support activities as if they were "businesses"—focussing on three practices in particular where the attempted parallels with the private-sector are the most explicit. This history is important for the BMMP because it helps explain where and how DoD support activities are "businesslike" and where they are not; it also explains why, as a result, audited financial statements, even if they can eventually be produced, cannot be expected to have, and will not have, the same effects on defense support activities as they do on real businesses in the private sector. The three practices the DoD has used to structure and operate certain of its support activities "like businesses" are the following:

- The longstanding use of revolving-fund financing mechanisms, which set up customerprovider/buyer-seller relationships between operating forces and support activities and require the support activities to set and charge prices for the goods and services they provide;
- The passage of the CFO Act of 1990, which levied private-sector-style financial-reporting requirements on what the Act refers to as all "commercial functions"⁸ in the government, including all revolving-fund activities in the DoD; and

⁸ Subsequent to the passage of the CFO Act in1990, the Congress passed the Federal Financial Management Act (also known as the Government Management and Results Act) in 1994. The FFMA extended the requirement for annual audited financial statements for "commercial activities," as called for in the CFO Act, to *all* activities in the DoD and government, "commercial" and otherwise. The term "CFO compliance" has come to include compliance with the 1994 FFMA extension of the 1990 CFO Act's financial-statement requirements. Subsequent to the CFO and FFMA Acts, given the difficulties the government was having complying with both of them, the Federal Financial Management Improvement Act (FFMIA) of 1996 required the heads of all the federal agencies to prepare and submit a "Remediation Plan" for bringing the agency's financial-management practices into compliance with the new federal accounting standards that, at that point, had begun to be developed and promulgated by the FASAB (see note 6 above).



in 1990 by the Secretary of the Treasury, the Director of OMB, and the U.S. Comptroller General, following the passage of the CFO Act in that same year, for the express purpose of developing "applicable accounting principles" for the newly required CFO financial statements (see http://www.fasab.gov/pdffiles/fasabfacts2.pdf). The FASAB is modeled after the Financial Accounting Standards Board (FASB) in the private sector. The FASB, operating with the imprimatur of the U.S. Securities and Exchange Commission (which has ultimate statutory responsibility for setting U.S. financial accounting standards) is a private body that develops and proposes accounting rules and standards for public and private businesses and other enterprises (e.g., investment companies, trusts, nonprofit activities, etc.) that must periodically report their financial condition to their owners, shareholders, trustees and other interested stakeholders. In October 1999, the Council of the American Institute of Certified Public Accountants (AICPA) designated the FASAB as the body that promulgates GAAP for federal entities in the United States.

⁷ In their April 2001 report (p.8), the Friedman Task Force on Transforming Financial Management (discussed later in the paper—see note 16 below) makes this point as follows:

Many of the issues uncovered in our interviews and research have been dealt with effectively in private industry, largely because of the competitive forces of the marketplace and the focus on shareholder value. No similar external push exists within the DoD.

 The creation in 1991 of the Defense Business Operations Fund (DBOF)—now called the Defense Working Capital Fund—which incorporated all of the DoD's existing revolvingfund activities into a unified-fund structure centrally controlled at the DoD level,⁹ brought additional support activities previously funded by direct appropriations under the revolving-fund umbrella, and established an important new pricing policy (that would henceforth apply to *all* revolving-fund activities in the Department) called "full-costrecovery" (FCR) pricing.

Against the backdrop of these practices, the BMMP has devoted most of its effort and resources over the last four years to attempting to assemble and hone an overarching "operational architecture" for transforming the business and financial practices of the Department.¹⁰ In doing that, the BMMP has treated the set of DBOF, WCF, CFO, and FCR practices above (henceforth referred to as the DWCF practices) as sacrosanct. That is, the BMMP has accepted without question that however the operational architecture is ultimately structured, it, and the information systems that are put in place to implement it, must support and facilitate the DWCF practices. By accepting DWCF practices as a given, the BMMP has denied itself the opportunity to even consider, much less develop, alternative operational architectures for some of the most important and expensive support activities in the Department—logistics activities being the prime examples. For instance, not only are the central supply and maintenance activities the largest and most expensive support activities the Department has,¹¹ but they are also where the revolving-fund approach has its deepest historical roots. Therefore, the DWCF practices hold the most sway over operational thinking within these activities.

Retrieved from http://www.globalsecurity.org/military/library/congress/2004_hr/04-03-31burlin.htm.

¹¹ Roughly half of the more than 180,000 DoD civilian FTEs' employed in DWCF activities work either in central maintenance or central supply, and the DWCF supply and maintenance activities account for roughly 2/3 of the total DWCF revenues. The Army and Air Force both have four-star commands (Army Materiel Command in the Army and Air Force) that oversee the DWCF supply and maintenance activities in their management portfolios, while the Navy has Naval Supply System Command for central management of Navy supply, and has distributed management oversight responsibilities for its depot maintenance activities (shipyards and air rework facilities) among its operational commands.



⁹ Although the DBOF was reconfigured in 1996 to become the fivefold Defense Working Capital Fund (DWCF) structure that exists today in the DoD (see note 33 below), ultimate control over the five separate DWCF funds still resides with the DoD Comptroller. Program Budget Decision (PBD) 426, for example, is the PBD issued every year by the Comptroller that sets all WCF activity prices and costs for the budget year. The Comptroller, through the use of the DWCF "Unit Cost Goal" (UCG) controls, also exercises final control over how much the WCF activities are allowed to obligate during execution of the budget year.

¹⁰ As reported on March 16, 2004 by the DoD Comptroller to Congress, in the FY02-04 period, the BMMP obligated \$257.8M for:

initial delivery of the (BMMP) architecture; a transition plan; change management and communications initiatives; refinement of the Enterprise Architecture through business process modeling/reengineering for Increment One; test and evaluation activities; independent verification and validation efforts; engineering support; integration of the Enterprise Architecture; salaries, facilities, supplies, and program management support contracts. The \$257.8M does not include funding to resource Domain activities (\$45.1M in FY04-05, for example). Contractor support for the FMMP and the BMMP has been provided by a consortium called Team IBM led by IBM Global Services, with participation (as of March 2004) by main subcontractors KPMG, SAIC, CSC, and AMS.

Notwithstanding the commitment the DoD has made to the DWCF approach and the belief it has expressed in its value,¹² a substantial body of defense economics research done over the last fifteen years suggests that the DWCF approach, rather than improving cost visibility and helping to promote more efficient and effective use of the Department's resources, has tended to have the opposite effect along both of those dimensions.¹³ The studies in question

While the DWCF financial structure continues to evolve, implementation also continues. Objectives are being met, and improvements are occurring on a routine basis. A working management structure is in place to provide policies and standardized procedures that will keep pace with changing requirements. This structure will also continue to incorporate new business areas as required, and evaluate existing business areas to ensure they are supporting the operating forces in an effective and efficient manner.

DWCF is here to stay.

It is incumbent upon customers and providers to continue improving DWCF processes and standards. After all, every dollar saved in support is another dollar available for the operating forces.

¹³Studies over the last fifteen years that have pointed out problems with the DWCF approach include:

- Camm, F. & Shulman, H. L. (1993). When internal transfer prices and costs differ. MR-307-AF. RAND; GAO (1994).
- Glass, D. V. (1994, June). Pricing policy and maintenance balance. [LMI Issue Paper]. Logistics Management Institute.
- Glass, D. V., Margolis, M. A. & Wallace, J. M. (1994, August). Activity-based management accounting for DoD depot maintenance. PA303R1. Logistics Management Institute.
- Rogerson, W. P. (1995, March). On the use of transfer pricing within DoD—The case of repair and maintenance of depot-level reparables by the Air Force. PA303RD1. Logistics Management Institute.
- Trunkey, R. D. & Choi, J. (1996, March). The defense business operations fund (DBOF): Problems and possible solutions. CRM 95-196. Center for Naval Analyses.
- Brauner et al. (1997) (see footnote 3).
- Baldwin, L. & Gotz, G. A. (1998). Transfer pricing for Air Force depot-level reparables. MR-8-08-AF. RAND. Glass, D. V., Dukovich, J. & Wallace, J. (1998, October). A comparison of Air Force and commercial wholesale inventory accounting practices. AF804T1. Logistics Management Institute.
- Keating, E. G. & Gates, S. M. (1999). Defense working capital fund policies—Insights from the defense finance and accounting service. MR-1066-DFAS. RAND.
- Wallace, J. M., Kem, D. A. & Nelson, C. (1999, January). Another look at transfer prices for depot-level reparables—Marginal costs: A revenue perspective. PA602T1. Logistics Management Institute.
- Brauner, M., Pint, E., Bondanella, J., Relles, D., & Steinberg, P. (2000). Dollars and sense, A process improvement approach to logistics financial management. (2000). MR-1131-A. RAND.
- Keating, E., G., Gates, S. Pace, J., Paul, C. & Alles, M. (2001). Improving the defense finance and accounting service's interaction with customers. MR-1261-DFAS. RAND.
- Pint, E. M., Brauner, M., Bondanella, J., Relles, D. & Steinberg, P. (2002). Right price fair credit— Criteria to improve financial incentives for Army logistics decisions. MR-1150-A. RAND.
- Keating, E. G., Gates, S., Paul, C., Bower, A., Brooks, L. & Pace, J. (2003). Challenges in defense working capital fund pricing—Analysis of the defense finance and accounting service. MR-1597-DFAS. RAND.
- Wallace, J. M., Le, H., Nelson, C., & Webster, C. (2000, January). The inventory-as-assets concept—Implementation for depot-level reparables. AF906R1. Logistics Management Institute.

Many of these studies place particular focus on the problems caused by the use of FCR pricing—a topic that economists both inside and outside the DoD have been thinking about for many years. Indeed, in



¹² In the DWCF Handbook, for example, (available at the DoD Comptroller website at

http://www.dod.mil/comptroller/icenter/dwcf/dhintro.htm), the final chapter concludes as follows (emphasis in original):

do not appear to have been taken into account in the BMMP, so one of the purposes of this paper is to bring that literature to the BMMP's attention. The implications of these studies for the BMMP are clear. If the use of revolving-fund financing arrangements, the pursuit of CFO compliance, and the institution of FCR pricing have, on balance, led to practices that, although well-intentioned, have been subtracting rather than adding value for the DoD, that situation should be addressed <u>before</u> the BMMP finalizes the "business enterprise architecture" it is seeking to establish for the Department.

Towards that end, the paper suggests three steps that could be taken to begin the process of fundamentally re-orienting the BMMP so that it will be able, for the first time since it began, to truly begin to add value to and support meaningful transformation in the DoD's support activities:

- The BMMP needs to shift its emphasis from external financial accounting to the establishment of accurate *management accounting*. As has been pointed out by many, including Harvard's Robert Kaplan (one of the developers of the activity-based-costing method of management accounting and, not coincidentally, also one of the developers of the Balanced Scorecard, a version of which the DoD has adopted to pursue performance-based management), financial accounting systems able to meet external reporting requirements (of the type required by the CFO Act) are "completely inadequate" for either "estimating the costs of activities and business processes" or for "providing useful feedback to improve business processes."¹⁴
- Because the CFO Act is law, and many of the most serious CFO compliance problems exist in the DoD's WCF activities, particularly in the areas of central supply and maintenance, the BMMP needs to undertake a fundamental review of basic operating policies for all the DWCF activities—particularly central supply and maintenance.¹⁵ The goal of such a review would be to determine where and how changing basic financial and operational polices for those activities would help clarify incentives and improve cost visibility, while simultaneously simplifying financial accounting. For some activities, that may involve a return to direct funding and traditional, public-fund budgetary accounting. For others, where the revolving-fund approach does provide needed management flexibility, the review may call for changes in pricing policy (e.g., shifting from FCR pricing to incremental pricing) and/or changes in what are now viewed as necessary

¹⁵ Since 1991, when the DBOF was created, no less than six DoD-level efforts (there have been others at the service level) have been mounted to examine and "improve" DBOF and DWCF processes and procedures. The two most recent were a DoD Business Initiatives Council (BIC) initiative in 2002 (resulting in a Management Initiative Decision—MID 903—see note 35 below) and a Defense Business Board (DBB) Task Group study in 2003 (http://www.dod.mil/dbb/task-fm.html). With the exception of the DBB study, all of these efforts have been either led or co-led by Comptroller personnel. If the BMMP does undertake another DWCF review as recommended in this paper, it will be important to ensure that the review is led by an individual or individuals who are independent of the DoD Comptroller's office.



their 1961 classic, *The Economics of Defense in the Nuclear Age*, Hitch and McKean, in their discussion of the emerging use of stock and industrial funds, note that "in order for both managers and customers of funded enterprises to be motivated appropriately, [...] prices of outputs must be set [...] to reflect incremental cost. [...]" (which, as explained later, the FCR approach does not do) (Hitch, C. J. & McKean, R. N. (1961)). The economics of defense in the nuclear age. Cambridge, MA: Harvard University Press). Baldwin and Gotz (1998) also provide references to the relevant academic literature on the transfer pricing problem, with Hirshleifer (1956) being the earliest such reference they provide. ¹⁴ Kaplan, R. S. & Cooper, R. (1998). Cost & effect. Harvard Business School Press. p. 14.

accounting practices because of current "business practices" (e.g., treating Depot-Level-Reparable (DLR) components as capital assets rather than as inventory held for sale, and structuring DLR transactions accordingly). These ideas and others have already been explored in the DWCF studies noted earlier, so the BMMP would have the advantage that much of the basic analysis for such a review has already been done.

• Recognizing that the Congress is likely to want an explanation as to why the Department is changing some of the most fundamental assumptions and objectives of the program, the BMMP will need to prepare a high-level report for the Congress that explains why de-emphasizing the production of external financial statements and pursuing the kinds of initiatives described above will allow the DoD, for the first time since the CFO Act was passed, to begin actively pursuing what (in all likelihood) the Congress intended and wanted the DoD to pursue when it passed the CFO Act in the first place: sensible, responsible, and honest *internal* financial management and accounting that will lead to more effective and efficient support operations within the Department.

A new governance structure has recently been put in place for the BMMP that, in tandem with the 2005 Quadrennial Defense Review, offers DoD leaders the chance to step back and re-evaluate, from first principles, what the BMMP is about.¹⁶ Under the new governance structure, a DoD-wide Defense Business Systems Management Committee

- 1. Integrate DoD business transformation.
- 2. Review and approve the DoD BEA and cross-DoD, end-to-end interoperability of business systems and processes.

The primary role and responsibility of the DBSMC is to establish strategic direction and plans for the Business Mission Area, in coordination with the Warfighting and Enterprise Information Environment Mission Areas.

The DBSMC consists of the following members:

- Deputy Secretary of Defense (Chair)
- Under Secretary of Defense for Acquisition, Technology, and Logistics (Vice Chair)
- Secretaries of the Military Departments and the Heads of the Defense Agencies
- Under Secretary of Defense (Comptroller)
- Under Secretary of Defense for Personnel and Readiness
- Vice Chairman of the Joint Chiefs of Staff
- Commander, U.S. Transportation Command
- Commander, U.S. Joint Forces Command
- Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Officer
- Director, Program Analysis and Evaluation (Advisory)

The DBSMC will oversee the modernization process, which implements interoperable business solutions for DoD business systems. Because of its governance role and the interdependency of DoD business operations and systems, the DBSMC also guides the strategic direction of transformation efforts within DoD's Business Mission Area (BMA). These efforts support the business capability improvements that the Warfighting Mission Area needs to better accomplish its missions."



¹⁶ Quoting from the BMMP website (http://www.dod.mil/comptroller/bmmp/pages/governance.html): "On February 7, 2005, the Deputy Secretary of Defense signed the charter that established the DBSMC, which will advance the development of world-class business operations in support of the warfighter. To accomplish its mission, the DBSMC will recommend policies and procedures that:

(DBSMC), chaired by the Deputy Secretary of Defense and vice-chaired by the Undersecretary of Defense for Acquisition, Technology & Logistics, has been established to provide new strategic direction for the program. Given the high levels of attention and commitment that have been invested in the BMMP, and the challenging political framework within which it is proceeding, re-orienting the BMMP along the lines suggested here will not be easy and will require, for that reason, strong leadership from the DBSMC that goes well beyond "business as usual."

The DoD's Business Management Modernization Program (BMMP)

Before assuming its current name, the BMMP was known as the DoD's Financial Management Modernization Program (FMMP). Initiated in July 2001 by the DoD Comptroller, the FMMP was the DoD's response to the recommendations in an important report, Transforming DoD Financial Management: A Strategy for Change. This document was issued in April 2001 by a task force assembled by Secretary Rumsfeld in January 2001 to examine the Department's financial management problems.¹⁷ Led by Stephen Friedman, a former chairman of Goldman, Sachs, and Co., the task force was one of several that Secretary Rumsfeld assembled early in 2001 to help develop ideas on how to go about "transforming" the Department of Defense. As the following passage from their report makes clear, the Friedman task force was asked to examine some longstanding and very difficult problems:

More than ten years ago, the U.S. Congress passed the Chief Financial Officers Act, mandating that the Federal agencies prepare annually a set of auditable financial statements detailing assets and liabilities and the result of their annual operations. Selected agencies, including parts of DoD, were included as pilots for this program. In 1994, Congress passed the Government Management and Results Act, mandating that the CFO Act applies to all agencies. For FY 2000, DoD, once again, was unable to meet the requirements of the CFO Act. Even more troublesome is the awareness that compliance with the CFO Act remains out of reach, far over the horizon.

In the current environment, DoD has a serious credibility problem in financial management. On January 11, 2001, in the confirmation hearing of the Secretary of Defense, Senator Byrd questioned the Defense Department's inability "to receive a clean audit opinion on its financial statements." He went on to say,"I seriously question an increase in the Pentagon's budget in the face of the Department's recent (Inspector General) report. How can we seriously consider a \$50 billion increase in the Department of Defense's budget when the (Department of Defense's) auditors—when the DoD's own auditors—say the Department cannot account for \$2.3 trillion in transactions."¹⁸

¹⁸ See note 17, p.3, (opening paragraphs in Section 3 entitled "Current Situation"). The comment by Senator Byrd to Mr. Rumsfeld refers to Congressional testimony given on July 20, 2000 by Robert J. Lieberman, Assistant DoD Inspector General for Auditing, on the subject of DoD Financial Management, before the Task Force on Defense and International Relations, House Committee on the Budget—see http://www.dodig.osd.mil/audit/reports/fy00/00-167.pdf. In similar testimony (a year later on the same subject), Lieberman noted that the unsupportable accounting adjustments used to assemble the DoD's FY 2000 financial statements still totaled \$1.1 trillion—see http://www.dodig.osd.mil/audit/reports/fy00/00-167.pdf.



¹⁷ Friedman, S. et al. (2001, April 13). Transforming Department of Defense financial management—A strategy for change. [Final Report]. Institute for Defense Analyses. Retrieved from http://www.defenselink.mil/news/Jul2001/d20010710finmngt.pdf.

The work of the Friedman task force is important because some of its recommendations have not received the attention and emphasis they deserve. In part, this is because the Department has been under substantial pressure from the GAO and OMB to focus on the "operational and system architecture" aspects of its financial-management problems. The GAO had already issued highly critical reports on that subject well before the FMMP and the BMMP were launched, and it has continued to issue similar reports to this day.¹⁹ For whatever reason-response to GAO's urgings, internal management decisions, advice from contractors, the Friedman task force's call to develop an architecture (which was also in their report)—the FMMP and the BMMP became totally preoccupied with the building of "architectures." That caused them to lose sight of what the task force described as "closer-in" management initiatives that they recommended be pursued, in addition to the longer-range actions they also recommended. One "closer-in" effort that the Friedman task force recommended, for example, was to set up activity-based-costing (ABC) projects in the high-value area of logistics²⁰—a recommendation that neither the FMMP nor the BMMP has acted on.²¹ For now, the important point is that the BMMP, which began life as the FMMP, can trace its origins *directly* to the passage of the CFO Act and its call for the production of external financial statements. Given that history, the fact that producing auditable financial statements has been and continues to be the primary objective of the program is an understandable, albeit unfortunate, development.²²

The FMMP-to-BMMP name change occurred in May 2003—finally expressing the fact that the FMMP organizers believed from the beginning that financial management reform and

²⁰ See note 17 above, p. iv.

²¹ At least insofar as can be determined by examining the BMMP website (<u>http://www.dod.mil/comptroller/bmmp/pages/index.html</u>), where searches for "activity-based costing" and "ABC" come up empty.

²² In July 2000 testimony before the Congress on DoD financial management, Robert Lieberman, the Assistant DoD Inspector General, clearly attempts to lodge the idea with his Congressional interlocutors that clean audit opinions on external financial statements are not necessarily the same thing as the provision of useful financial information to government managers. He returns to this theme in his testimony on the same subject a year later, when he notes:

Although the DoD has put a full decade of effort into improving its financial reporting, it seems that everyone involved—the Congress, the Office of Management and Budget, the audit community, and DoD managers—have been unable to determine or clearly articulate exactly how much progress has been made. In my view, this is at least partially caused by the emphasis on overall audit opinions for the year-end statements, as opposed to focus on the status of individual system modernization projects.

Lieberman, R. J. Assistant Inspector General for Auditing.(2000, July 20). Statement on Department of Defense financial management before the task force on Defense and International Relations, House Committee on the Budget.



¹⁹in the context of the DoD's efforts to meet the demands of the CFO Act, the GAO has been calling on the DoD to establish an "architecture" for dealing with its financial-management challenges at least since 1997, when it first identified Defense Financial Management in its "High Risk Series" of reports (see *Defense financial management*. (1997, February). GAO/HR-97-3, p. 23). The GAO's emphasis on the need for architecture was already strong when the FMMP was launched in the summer of 2001 (for example, see, *Information technology: Architecture needed to guide modernization of DoD's financial operations*. (2001, May 2001). GAO-01-525). As of the time this paper was written, the most recent GAO report criticizing the DoD's architectural efforts is *DoD's High-Risk Areas*, *Successful Business Transformation Requires Sound Strategic Planning and Sustained Leadership*. (2005, April 13). GAO-05-520T. This document is a statement of David M. Walker, Comptroller General of the United States. Retrieved from http://www.gao.gov/new.items/d05520t.pdf. For additional background on the GAO's longstanding enthusiasm for the architectures. GAO/IMTEC-92-51 and *Executive guide, Improving mission performance through strategic information management and technology: Learning from leading organizations*. (1994, May). GAO/AIMD-94-115. For the history of the OMB's efforts to promote the architectural approach, related to the passage of the Information Technology and Management Reform Act (Clinger-Cohen Act) of 1996, see http://www.whitehouse.gov/omb/egov/a-1-fea.html.

"business-process reform" are linked. As Secretary Rumsfeld himself observed in a speech he gave at the Pentagon on September 10, 2001:

Just as we must transform America's military capability to meet changing threats, we must transform the way the Department works and what it works on. [...] Our challenge is to transform not just the way we deter and defend, but the way we conduct our daily business. [...] We have committed \$100 million for financial modernization, and we're establishing a Defense Business Board to tap outside expertise as we move to improve the Department's business practices.²³

At the time of the name change, the BMMP, which (as the FMMP) had been managed by a Deputy Undersecretary for Financial Management in the DoD Comptroller's office, became a jointly sponsored program under the direction of the DoD Comptroller and the Assistant Secretary of Defense for Networks & Information Integration.

Finally, the BMMP was reorganized in the fall of 2004 and placed under a new governance structure. As described at the BMMP website,²⁴ authorization and direction for the new governance structure are contained in the National Defense Authorization Act (NDAA) for FY 2005 passed on October 28, 2004. The FY 2005 NDAA specifies (as of the time of the writing of this paper) that the chief executive body for the new BMMP governance structure will be a high-level Defense Business Systems Management Committee (DBSMC).²⁵

The DoD's Efforts to Make Its Support Activities "Businesslike"

Understanding the history of the DoD's efforts to make its support activities "businesslike" makes it easier to understand what is likely to influence managers in those activities to pursue greater efficiencies and what isn't.

The idea that it should be possible to run DoD support activities "like businesses" is almost as old as the Department itself. Following World War II, the National Security Act of 1947 established the Department of Defense, created the Office of the Secretary of Defense, and charged the new Secretary with reorganizing the military services to "eliminate duplication." Within two years, responding to recommendations of the first Hoover Commission (1947-1949) and some of its own committees,²⁶ the Congress amended the 1947 Act and authorized the Secretary of Defense to establish "revolving funds"²⁷ for industrial or commercial-type activities

²⁷ Revolving funds, or working capital funds as they are now called, are described as "revolving" because the cash they contain (which the activities they support use to pay *their* bills) is replenished on a continuing basis by the cash that comes in from customers as they pay for the goods and services they receive. Funds appropriated by the Congress, of course, are ultimately what must cover virtually all of what the DoD spends every year, so revolving-fund activities are generally expected to function on a "break-even" basis over time, neither making nor losing money.



²³ DoD Acquisition and Logistics Excellence Week Kickoff: *Bureaucracy to Battlefield*, a speech delivered by Secretary of Defense Donald H. Rumsfeld at the Pentagon, Monday, September 10, 2001. When making his remarks on the FMMP, Secretary Rumsfeld also predicted that "financial-management transformation will be difficult and will take 8 or more years to complete." His prediction is consistent with current concerns that (expressed by both GAO and the Defense Business Board) that even by 2007, the latest target date, DoD will still not have achieved CFO compliance, a full 17 years after the passage of the CFO Act. <u>http://www.defenselink.mil/speeches/2001/s20010910secdef.html</u>

²⁴ http://www.dod.mil/comptroller/bmmp/pages/governance.html

²⁵ See note 16 above.

²⁶ In 1945, for example, the Johnson Subcommittee of the House Committee on Naval Affairs, proposed the idea of using revolving funds to finance industrial-type and commercial-type activities (e.g., shipyards).

providing "common services" within the Department. The presumption was that the customerprovider/buyer-seller relationships that characterize the revolving-fund approach would lead to more "businesslike practices" in the provision of such common services, thereby helping to reduce (it was argued) the duplication of services and other inefficiencies that had grown up during World War II.²⁸

The Hoover Commission might have taken a more direct approach to recommend that the Congress and DoD simply reduce the amounts being appropriated and allocated to those activities where duplication existed or unnecessary expenditures were being made. In fact, the Congress *did* reduce real defense budget authority after the war ended:, by almost 75 percent from 1946 to 1947, by 7 percent from 1947 to 1948, and by 6.7 percent from 1948 to 1949.²⁹ By 1949 however, when the Hoover Commission was making its revolving-fund recommendations, the Congress was no longer reducing defense budget authority. Indeed, defense budget authority, most likely in response to the new Cold War threats that were beginning to emerge, had begun to increase again—by almost 13 percent from 1949 to 1950, for example. Under those circumstances, it is perhaps understandable why the Hoover Commission, given the continuing public pressure to reduce what was still widely perceived as waste in military spending, rather than calling for yet more reductions in defense spending, would opt instead to recommend the use of revolving-fund mechanisms and their buyer-seller arrangements as the way to keep the pressure on support activities to be efficient, even as defense spending once again began to rise.

In any case, based on the formal authority provided by the National Security Act of 1947 as amended in 1949,³⁰ the use of revolving-fund, buyer-seller relationships in the Department began to expand. In the 1950s, fuel and consumable repair parts became "stock-funded" supply commodities, and in 1958, airlift services became "industrially funded."³¹ Continuing the pattern, in 1968, all of the Department's aeronautical depot-maintenance activities, primarily as the result of a push from the DoD Comptroller, became industrially funded.³² In the 1980s, the Navy

The revolving funds thus "revolve" over time (ideally) as appropriated dollars flow in from customers and then out as the support activities which the funds finance pay their bills. In practice, and not surprisingly, revolving funds have always required periodic infusions of cash from the Congress (e.g., in times when they have to grow to meet expanded demand), and they have also been a source of cash that the Congress has been happy to tap on those occasions when they have accumulated excess cash (e.g., in times of DoD downsizing).

²⁸ This depiction of the post-WWII emergence of revolving-fund financing mechanisms is based on material in a study published by the Office of History of the Military Airlift Command (MAC). See True, J. L. COL & Nawyn, W. E. (1989, February). The airlift service industrial fund 1958-1988: The evolution of an effective management approach. [Special Study] Military Airlift Command (Air Mobility Command) Office of History. Scott AFB, IL: United States Air Force.

²⁹ Historical data on DoD budget authority from the "Green Book" (National Defense Budget Estimates for the FY 2005 Budget). (2004, March). OUSD(C). Table 6-10 (DoD BA by Service). p. 122.

³⁰ The relevant legislation, as amended, is contained in: *United States Code, Title 10. Armed Forces, Subtitle A. General Military Law, Part I—Service, Supply and Procurement. Sec. 2208. "Working-Capital Funds."*

³¹ See True & Nawyn (1989) note 28 above; Air Force Logistics Command (AFLC), *Revolving funds: Air Force industrial fund and stock fund* (1983); Petersen, J. W., (1966, March 18). Comments on the DoD depot maintenance report. L-5505. RAND.; and Shycoff, D. (1995). The businesses of defense. [private manuscript].

³² The industrial funding of all aeronautical depot maintenance in the DoD began in 1968, two years after a DoD Aeronautical Depot Maintenance Study called for that action. The study was led by Professor Robert Anthony of Harvard University, then serving as the DoD Comptroller. The study team included a program and budget analyst named Donald Shycoff. As he recounts in his book *The Businesses of Defense*, Shycoff (1990), having risen to become the Principal Deputy Comptroller 25 years later and the launch of the DBOF, succeeded in putting in place a system consistent with what Professor Anthony had begun to try to put in place with the industrial funding of aeronautical depot maintenance in 1968, where the idea of average-cost pricing was born.



was the first service to "stock fund" its Depot-Level-Reparable spares (DLRs), starting with ships' reparables in 1981 and aviation reparables in 1985. The Army and the Air Force followed suit with their DLRs in 1992—just as the DBOF (discussed below) was getting underway.³³

The terms "stock funded" for supply activities and "industrially funded" for service activities both refer to the use of revolving-fund financing. Historically, the industrial-fund activities recovered a larger portion of their total operating costs (e.g., all of their labor and other overhead costs) in their prices, whereas supply activities recovered only the direct costs of replenishing stocks—i.e., the incremental costs of buying the stocks themselves and not the (generally) fixed costs for the labor and overhead necessary to manage and operate the supply system. (Supply activities received direct appropriations to pay those costs.)

Then, in the late 1980s and early 1990s, partly in response to the federal deficits of the 1980s and the budget pressures DoD was beginning to feel with the end of the Cold War, senior DoD leaders, again at the urging of the DoD Comptroller, decided to broaden the use of the revolving-fund approach. They did so by merging the separate stock and industrial funds in the services into a single, unified fund—centrally managed by the Comptroller's office—called the Defense Business Operations Fund (DBOF). The DBOF began in February 1991.³⁴

The plan was to use the DBOF to finance not only all central supply activities, airlift services, and depot-level maintenance operations (shipyards and aeronautical depot maintenance activities), which were already operating under revolving-fund financing, but to finance other support activities as well, including central warehousing and second-destination distribution services, central information-system-design and data-processing services, and central finance and accounting services. (Before being brought under DBOF financing, the latter were directly funded by appropriations.) In addition to adding activities, the DBOF also introduced a new pricing policy requiring that <u>all</u> revolving-fund activities (not just the industrially

³⁴ The DBOF was officially established by a "Defense Management Report Decision" (DMRD # 971, DoD Financial Systems) issued over the signature of the Deputy Secretary of Defense (Donald Atwood) on February 2, 1991. In all, more than 80 DMRD's were issued by the Office of the Secretary of Defense (OSD) following the release of the "Defense Management Report" (DMR) from the Secretary of Defense to the President in July 1989. The DMR was the implementation vehicle for recommendations made by the President's Blue Ribbon Commission on Defense Management (the Packard Commission), which had been formed in the second term of the Reagan administration. Although the Packard Commission's report (A Quest for Excellence (June 1986)) and the DMR both offered general principles calling for increased use of "commercial-style" products and practices and the development of new approaches to improve efficiency in the "acquisition process," neither contained the specific DMRD's that were to follow. The DMRD's were written by OSD staff and issued over the signature of the Deputy Secretary with the intent of converting the general recommendations of the DMR into specific actions. All the DMRD's were issued by the Office of the Comptroller and followed formats similar to those used in the Program Budget Decisions issued each year by the Comptroller at the end of the annual Planning, Programming, Budgeting, and Execution process. The DBOF-related DMRD's, in particular, reflected the thinking of Donald Shycoff, who served as the DoD Principal Deputy Comptroller during the first Bush administration from 1989 to 1992 and Acting Comptroller in the first year of the Clinton administration from 1992 to 1993. (See Shycoff and The Businesses of Defense, note 32 above.)



³³ Defense Management Review Decision (DMRD) 904, *Stock Funding of Depot Level Reparables*, extended to the Army and Air Force what the Navy had done with its DLRs in the 1980s. On November 18, 1990, one year after DMRD 904 was issued, the Air Force distributed a memorandum, *Air Force Final Implementation Plan for the Stock Funding of Depot Level Reparables* (dated October 1990), that explained how the Air Force would respond to DMRD 904. An overview issued by the DoD Comptroller's office as part of the FY 1992 DBOF budget submission notes that the stock funds in the Army and Air Force assumed financial responsibility for the *procurement* of DLRs on October 1, 1990, and the *repair* of DLRs on July 1, 1991, and that Army and Air Force customers first began being *billed* for DLRs on April 1, 1992, i.e., midway through FY 1992. (The Army and Air Force stock funds received direct funding to cover the DLR procurement expenses they incurred in FY 1991 and procurement and repair expenses in the first half of FY 1992.)

funded activities) had to begin charging what are called "full-cost-recovery" (FCR) prices for the goods and services they provide. The intent was, as the Comptroller's office would describe later, "to focus the attention of all levels of DoD management on the total costs of carrying out certain critical DoD business operations and to manage those costs effectively."³⁵

Although the DBOF was reconfigured in 1996 to become the fivefold Working Capital Fund (WCF) structure³⁶ that exists today, all the other DBOF policies remain in force, including, in particular, FCR pricing.³⁷ Under FCR pricing, defense working capital fund (DWCF) activities, in their annual budget-build process, are required to compute and set the prices they will charge based on their expected unit costs. Each activity computes its expected unit costs by dividing the total projected cost of operations for the year (i.e., the sum of all direct, indirect, and overhead costs) by the total number of "unit outputs" that the activity expects to produce. "Unit outputs" are defined according to the nature of the activity—e.g., direct-labor hours for depot-level-maintenance activities, dollars of sales for supply activities, number of invoices processed for bookkeeping activities, etc.³⁸ Given these definitions, economists refer to FCR

³⁶ The five WCF "offspring" of the DBOF are the Army Working Capital Fund (AWCF), the Navy Working Capital Fund (NWCF), the Air Force Working Capital Fund (AFWCF), the Defense Working Capital Fund (DWCF), and the Defense Commissary Working Capital Fund (DCWCF). Financial management policy for all five WCFs is governed by DoD 7000.14-R, the Department Defense Financial Management Regulation. The Army, Navy and Air Force WCFs are used to finance support activities operating within and under the management control of those Components—e.g., the Army's Supply Management Activity (SMA), which operates within the Army Materiel Command in the Army, and the Air Force. DoD activities financed by the DWCF include the Defense Logistics Agency, the Defense Information Systems Agency, and the Defense Financial management and budgetary purposes, the TWCF is tied to the AFWCF. The TWCF is used to finance operations at the U.S. Transportation Command, a unified joint command made up of the Air Force's Air Mobility Command, the Navy's Military Sealift Command, and the Army's Military Traffic Management Command.

³⁷ DoD financial-management policy governing the WCFs is contained in several places in the DoD Financial Management Regulation (DoDR 7000.14 R). Volume 2B of the FMR contains the basic policy requiring WCF activities to charge average-cost (FCR) prices (Volume 2B, Chapter 9, Section H, p. 9-12). A DWCF Reform Task Force chartered as part of the Defense Reform Initiative in 1998, however, recommended allowing the Components to propose prototypes in which not all costs were recovered through prices. This recommendation was approved by the Deputy Secretary of Defense in January 2000. Subsequent to the Deputy Secretary's decision, a new policy statement on "alternative rate development" was placed in Volume 2B in June 2000 (Chapter 9, p. 9-18):

Alternative Rate Development.

Components may propose methods other than the traditional rate per direct labor hour for recovering the full cost of operations. Any alternative pricing methods must be fully documented and justified in the Components Budget Estimate Submission. Any new method must demonstrate that all operating costs are still recovered, provide a comparison of the current method to the method proposed, show the impact to customer funding requirements, and provide a timeline for implementation. Any change in rate structure must be approved in advance by the USD Comptroller and documented in the appropriate activity group's Program Budget Decision.

In addition to allowing the Components to propose alternative rate structures, an important precedent was set in DoD Management Initiative Decision (MID) 903 (issued on December 3, 2002) which directed that certain fixed costs, militarily unique costs, and DoD-mandated costs *not* be included in the rates charged by DLA and DFAS for certain of the goods and services they provide. MID 903 reflected recommendations made by a DWCF Task Force formed by the DoD Business Initiatives Council (BIC) in 2002 and tasked to examine ways to "improve" DWCF operations.

³⁸ A discussion of the concept of "unit outputs" and the rationale underlying the DBOF's full-cost-recovery pricing policy can be found at: <u>http://www.dod.mil/comptroller/icenter/dwcf/costvisibility.htm</u>. A cautionary note on the



³⁵ The quote in the text is from an OUSD(C) report: A Plan to Improve the Management and Performance of the Department of Defense Working Capital Funds (September 1997) prepared and issued by the DoD Comptroller in response to a demand for such a plan issued by the Congress in Section 363 of the FY97 National Defense Authorization Act.

pricing as "average-cost" pricing.³⁹ The latter avoids building any assumptions into the terminology about whether average-cost pricing is the "best" way to proceed when setting prices—an assumption that the DoD Comptroller appears to view as self-evident, at least based on the rhetoric which appears on the DoD comptroller website.⁴⁰ In the DWCF section of the website, the DoD Comptroller asserts, for example, that the DWCF approach "identifies the total or 'true' cost of DoD goods and services to Congress, military users (buyers), and those who provide goods and services (sellers), and thereby promotes more efficient and effective allocation and utilization of resources."⁴¹

The establishment of the DBOF/DWCF structure in the 1990s represents the fullest flowering to date of the DoD's efforts to make its support activities look and act "like businesses." A report on the DBOF issued by the DoD Comptroller's office in 1993, for example, states that "revolving-fund support activities provide support services to the operational forces much like any large business in the private sector" and characterizes the DBOF and its customer-provider arrangements as "the mechanism for establishing a businesslike corporate approach."⁴²

An irony that appears to have gone largely unnoticed at the time of the DBOF's creation is that the revolving-fund approach, after having been in use for forty years in the form of the stock and industrial funds, had apparently *not* been very successful in solving, or even truly in reducing, the cost-visibility and cost-control problems in the DoD's support activities. If it had been, the proponents of the DBOF would not have been able to offer those problems as reasons why the DBOF was needed. So, notwithstanding that the revolving-fund approach had

³⁹ See, for example, the RAND-Issue Paper by Edward G. Keating, a Senior Economist at RAND. (Keating, E. G., (2001). RAND research suggests changes in Department of Defense internal pricing. IP-216, RAND Issue Paper Retrieved from http://www.rand.org/publications/IP/IP216/.) "Transfer pricing" is the general term economists use to describe pricing when buyer-seller relationships have been established *within* the organization. In those circumstances, the decisions about how to structure prices depend on the incentives that managers want to create within the organization as different activities within the organization interact. Transfer prices *within* organizations do not necessarily have to be "full-cost-recovery" prices because activities can also cover some of their costs with budgets directly allocated to them within the organization.

⁴⁰ Since the establishment of the DBOF in 1991, the Comptroller's office has clearly viewed FCR pricing as the "best' way to set prices. The following statement is made, for example, under the DWCF tab in the "iCenter" area of the DoD Comptroller website, in the section on "Total Cost-Visibility": "An underlying tenet of the revolving fund system is that the prices set by DWCF Business areas should include *all* of the costs involved in providing those goods and services. Accounting for all of the various support costs provides financial managers with a clearer, 'truer' picture of what is required to carry out a particular DoD Activity." (emphasis in original); see http://www.dod.mil/comptroller/icenter/dwcf/dwcfintro.htm.

⁴¹ See *The defense working capital fund handbook*. Chapter I. Introduction. Section on "The benefits of the DWCF," p. 3. The DWCF Handbook can be accessed electronically at: http://www.dod.mil/comptroller/icenter/dwcf/background.htm.

⁴² Defense business operations fund (DBOF) milestone II implementation report. (1993, March 1) 3-5. Retrieved from http://www.defenselink.mil/nii/bpr/bprcd/vol2/302a.pdf.



description is in order, however. Although FCR pricing is described on the Comptroller website as being "activitybased costing" (ABC), it is important to understand the perspective underlying the Comptroller's use of the term "activity." In standard ABC, the goal is to understand the cost drivers *within* an enterprise so as to be able to better manage the costs *within* that enterprise. From the very high-level perspective of the DoD Comptroller, however, the DoD itself is the "enterprise," and its different support operations are the "activities"—hence, the Comptroller's statement that FCR pricing is based on "activity-based-costing." It is *within* the DoD's different support activities, however, that managers need to understand what the ABC cost drivers are, if they are going to manage their activities effectively; yet, that is information FCR, expected-average-cost approach, does not provide.

not worked very well in the past, the same approach, this time in the form of the DBOF, was being proposed yet again as the way to address those problems.⁴³ To be sure, the one new wrinkle that came with the DBOF, "full-cost-recovery" pricing, clearly reflected a belief on the part of the DBOF's proponents that the revolving-fund approach could still work if it were given one more degree of "businesslike" fine tuning: by requiring the use of FCR prices across the board. The problem is that while it is true that businesses in the private sector must charge enough to at least cover their costs—otherwise they most assuredly will, sooner or later, go <u>out</u> of business—that fact of economic life does <u>not</u> apply to the DoD's DWCF activities.

None of the organic government activities in the DoD's five "business domains" will ever be allowed to "go out of business" as government activities. This is most clearly the case for activities in the DoD's acquisition management and human resources management domains because of the inherently governmental nature of much of what they do. But for practical and political reasons, it is true as well for the logistics management, installations & environmental management, and accounting & financial management domains. Indeed, the presumption that activities in the two DWCF domains, logistics and accounting & financial management, must continue to exist as organic government activities is so strong that DWCF FCR pricing policy <u>requires</u> those activities to include a surcharge for recovery of past losses, in order to ensure the continued solvency of their underlying funds. Indeed, the Comptroller requires that prices recover losses but also that customers must pay those prices (one way or the other) by controlling customer obligations as well.⁴⁴

The clearest evidence that the DWCF activities do not operate in a marketplace (but rather under central planning like all other DoD activities) presents itself in the form of Program Budget Decision (PBD) 426, "Costs of Operations and Customer Prices for the Defense Working Capital Funds," which is issued every year by the Comptroller near the end of the annual programming and budgeting cycle. As its title suggests, PBD 426 specifies *both* the

⁴⁴ Volume Chapter 9, Section H on "Full Recovery of Costs and the Setting of Prices," p. 9-12, contains the policy requiring the inclusion of past losses into FCR prices. As described in note 37 above, MID 903 (2002) has made it possible for some DWCF activities to recover some costs by means other than prices, either by requesting and receiving direct appropriations, or by being allowed to demand and obtain direct aggregate reimbursements from customer organizations for certain costs, subject to Comptroller review. The principle remains the same, however, that all DWCF activities in the DoD will continue to be supported in one way or another by government funding and, thus, will not be allowed to "go out of business."



⁴³ In fact, the public record does show that at least one commentator, Donald Chapin, Assistant Comptroller General and Chief of the Accounting and Financial Management Division of the U.S. General Accounting Office, did try to raise questions about the advisability of proceeding with the DBOF, based on concerns having to do with past problems with the stock and industrial funds. In testimony on April 30, 1991 before the Subcommittee on Readiness of the House Armed Services Committee, Chapin stated:

Our reviews of Defense's industrial and stock fund accounting systems have disclosed serious weaknesses. Therefore, since cost data to be used by the Fund would be developed from those systems, the accuracy and reliability of that data would be questionable, at best.

⁽The Subcommittee also heard testimony from Sean O'Keefe, the DoD Comptroller, arguing for the establishment of the DBOF.) Chapin's testimony is recorded in the GAO Testimony Report, (1991, April 30). *Defense's planned implementation of the* \$77 *Billion defense business operations fund*. GAO/T-AFMD-91-5. His testimony is startlingly prescient in its predictions of the severe accounting problems and financial-management-system problems the DBOF would face, and the difficulties it would have producing auditable financial statements—problems that continue to exist to this day, 14 years later. For example, Chapin predicted that because of the very large number of intra-fund transactions that would have to be consolidated, the DBOF would have trouble in the area of intra-governmental eliminations, which the DoD IG has indeed reported, every year for the past four years, continues to be a major deficiency area for DoD financial accounting as required by the CFO Act.

prices that WCF activities will be allowed to charge in the forthcoming budget year and the costs it will have.⁴⁵ PBD 426 "controls costs" by controlling spending. Through the use of "unit-cost goals" (UCGs), PBD 426 places limits on the obligations, regulated by current sales, that the WCF activities will be allowed to make when they execute the budget year.⁴⁶ During execution itself, the Comptroller's office will entertain requests from the WCF activities to deviate from the PBD 426 UCG controls, and they will usually accede to those requests if the WCF activities can make a case that sales are increasing fast enough to justify increased investment by the WCF activities in order to maintain performance. This example still illustrates central planning and control, however. Unlike real businesses in the private sector, DWCF activities have no access to external sources of funding to support growth in advance of sales. In execution, DWCF activities are solely and completely at the mercy of the final decisions made by the DoD Comptroller's office on what they can obligate, just like all other activities in the centrally planned economy of the DoD. The unavoidable fact is that WCF activities in the DoD do not operate in freely competitive marketplaces, so they are not subject to the same forces that lead private-sector businesses (which do operate in such marketplaces) to work at becoming more effective and efficient. As the Friedman task force put it in their April 2001 report:

Many of the issues uncovered in our interviews and research have been dealt with effectively in private industry, largely because of the competitive forces of the marketplace and the focus on shareholder value. No similar external push exists within DoD. The Department needs change agents and drivers analogous to those agents and forces that have made the private sector competitive and efficient.⁴⁷

When the Friedman task force called for those agents and forces, the DWCF approach had already been in place for 10 years and had manifestly *not* produced such agents or forces; if it had, there would have been no need for the Friedman task force. Because it is focusing on facilitating the DWCF approach, and achieving CFO compliance, the BMMP has not provided, nor will it provide, any new stimuli for the production of those forces and agents—unless it changes its approach.

We will return to revolving funds, the DBOF, and the effects of FCR pricing shortly, with the evidence that they have neither improved cost visibility nor led support activities to become more effective and efficient. Part of the reason for that, however, has to do with the demands the CFO Act has placed on revolving fund activities in order to make them more "businesslike," so, a review of the CFO Act requirements as they relate to the DoD's revolving-fund activities is in order.

The Chief Financial Officers Act of 1990⁴⁸

⁴⁸ See note 5 above.



⁴⁵ The role that Program Budget Decision (PBD) 426 plays in governing the financial operations of WCF activities is described in Chapter III, "DWCF Planning, Programming, and Budgeting," of the DWCF Handbook (see notes 12 and 41 above).

⁴⁶ The theory and use of unit cost goals (UCGs) in the financial management and control or WCF activities is described in the *Unit Cost Handbook*—accessible electronically at: http://www.dod.mil/comptroller/icenter/learn/uctoc.htm.

⁴⁷ See note 7 above. This point is also made in Keating, et al. (2001) (see note 13 above), Appendix A. Businesslike behavior from defense working capital fund entities? pp. 35-37. Retrieved from http://www.rand.org/publications/MR/MR1261DFAS/.

As discussed previously, the CFO Act is important for the BMMP because achieving "CFO compliance"—i.e., achieving a state of financial accounting capability in the DoD that allows auditable financial statements to be produced—is the primary objective of the program. To better understand why achieving CFO compliance has been so important for the BMMP, we can turn to the CFO Act itself. Language in the Act itself provides insight into the Congress' assumptions and intentions, and those assumptions and intentions help explain why the BMMP has focused so strongly on achieving CFO compliance.

The following excerpts are from the opening section of the Act on "Findings and Purposes" (Section 102) and from subsequent sections on financial accounting and the requirement for audited financial statements (Sections 303 and 304). Taken together, they clearly imply that the Congress believed that requiring government activities to adopt private-sector-style financial accounting would induce those activities to reduce the occurrence of waste, fraud, and abuse. In the same way, and for the same reasons, the act required adherence to established financial accounting rules (Generally Accepted Accounting Principles—GAAP) and the required periodic submission of audited financial statements in annual reports. These serve to induce and incentivize private-sector enterprises to:

a) reduce waste and inefficiency, and

b) avoid engaging in fraud and other forms of financial abuse.49

Here is the language from the Act itself:

CFO Act. SECTION 102: Findings and Purposes.

(a) FINDINGS. The Congress finds the following:

(1) General management functions of the Office of Management and Budget need to be significantly enhanced to improve the efficiency and effectiveness of the Federal Government.

(2) Financial management functions of the Office of Management and Budget need to be significantly enhanced to provide overall direction and leadership in

⁴⁹ Owners (i.e., stockholders), investors (individual and institutional), creditors and lenders, business partners, analysts, and regulators are among the wide class of external stakeholders in the marketplace who use the information contained in financial statements to help inform their judgments about whether to commit capital to the statement issuers. The presumption is that because managers know that the financial statements they produce must be assembled in accordance with an established set of rules for classifying and recording financial-transaction information (i.e., GAAP), and because they also know that an external, independent auditor will be checking whether they have followed those rules and have "fairly presented" the financial position of their company or enterprise in accordance with those rules, managers are provided with positive incentives to avoid engaging in or allowing waste, and negative consequences if they engage in or allow fraud and abuse to occur in their enterprises-because if they do, that will be reflected in the financial statements over time (either by showing the enterprise is inefficient in comparison to its competition, or because restatements are required when mangers are discovered to have committed financial fraud or other forms of financial abuse of the firm's resources). The key incentive drivers, here, however, are not the financial statements themselves, or even the fact that they are audited, but rather that external participants in the marketplace use the information in the statements to allocate capital. Getting something similar to happen in the government is, in fact, the purpose of the Government Performance and Results Act (GPRA) (passed in 1993)—in effect representing tacit acknowledgement on the Congress' part that the CFO Act was not going to produce the incentives they thought it would.



the development of a modern Federal financial management structure and associated systems.

(3) Billions of dollars are lost each year through fraud, waste, abuse, and mismanagement among the hundreds of programs in the Federal Government.

(4) These losses could be significantly decreased by improved management, including improved central coordination of internal controls and financial accounting.

(5) The Federal Government is in great need of fundamental reform in financial management requirements and practices as financial management systems are obsolete and inefficient, and do not provide complete, consistent, reliable, and timely information.

(6) Current financial reporting practices of the Federal Government do not accurately disclose the current and probable future cost of operating and investment decisions, including the future need for cash or other resources, do not permit adequate comparison of actual costs among executive agencies, and do not provide the timely information required for efficient management of programs.

(b) PURPOSES. The purposes of this Act are the following:

(1) Bring more effective general and financial management practices to the Federal Government through statutory provisions which would establish in the Office of Management and Budget a Deputy Director for Management, establish an Office of Federal Financial Management headed by a Controller, and designate a Chief Financial Officer in each executive department and in each major executive agency in the Federal Government.

(2) Provide for improvement, in each agency of the Federal Government, of systems of accounting, financial management, and internal controls to assure the issuance of reliable financial information and to deter fraud, waste, and abuse of Government resources.

(3) Provide for the production of complete, reliable, timely, and consistent financial information for use by the executive branch of the Government and the Congress in the financing, management, and evaluation of Federal programs.

Section 303 describes the structure the financial statements required by the Act:

(CFO Act) SECTION 303. FINANCIAL STATEMENTS OF AGENCIES

(a) PREPARATION OF FINANCIAL STATEMENTS:

(1) IN GENERAL—Subchapter II of chapter 35 of title 31, United States Code, is amended by adding at the end the following:

3515. Financial statements of agencies



(a) Not later than March 31 of 1992 and each year thereafter, the head of each executive agency identified in section 901(b) of this title shall prepare and submit to the Director of the Office of Management and Budget a financial statement for the preceding fiscal year, covering—

(1) each revolving fund and trust fund of the agency; and

(2) to the extent practicable, the accounts of each office, bureau, and activity of the agency which performed substantial commercial functions during the preceding fiscal year.

(b) Each financial statement of an executive agency under this section shall reflect—

(1) the overall financial position of the revolving funds, trust funds, offices, bureaus, and activities covered by the statement, including assets and liabilities thereof;

(2) results of operations of those revolving funds, trust funds, offices, bureaus, and activities;

(3) cash flows or changes in financial position of those revolving funds, trust funds, offices, bureaus, and activities; and

(4) a reconciliation to budget reports of the executive agency for those revolving funds, trust funds, offices, bureaus, and activities.

(c) The Director of the Office of Management and Budget shall prescribe the form and content of the financial statements of executive agencies under this section, consistent with applicable accounting principles, standards, and requirements.

(d) For purposes of this section, the term: "commercial functions" includes buying and leasing of real estate, providing insurance, making loans and loan guarantees, and other credit programs and any activity involving the provision of a service or thing of value for which a fee, royalty, rent, or other charge is imposed by an agency for services and things of value it provides.

(e) Not later than March 31 of each year, the head of each executive agency designated by the President may prepare and submit to the Director of the Office of Management and Budget a financial statement for the preceding fiscal year, covering accounts of offices, bureaus, and activities of the agency in addition to those described in subsection (a).

Finally, Section 304 then describes the audit requirements of the Act:

(CFO Act) SECTION 304. FINANCIAL AUDITS OF AGENCIES

(a) IN GENERAL—Section 3521 of title 31, United States Code, is amended by adding at the end the following new subsections:



(e) Each financial statement prepared under section 3515 by an agency shall be audited in accordance with applicable generally accepted government auditing standards—

(1) in the case of an agency having an Inspector General appointed under the Inspector General Act of 1978 (5 U.S.C. App.), by the Inspector General or by an independent external auditor, as determined by the Inspector General of the agency; and

(2) in any other case, by an independent external auditor, as determined by the head of the agency.

As we have seen in the DBOF discussion above, during the Defense Management Review process in the late 1980s and early 1990s, the DoD was publicly announcing that it intended to implement a more "businesslike" approach in its support activities.⁵⁰ Its method for doing that was to establish the DBOF. Hearing those statements from the DoD, and given the high-profile "waste, fraud, and abuse" scandals that had occurred in the DoD and elsewhere in the government in the 1980s,⁵¹ that Congress would decide that revolving-fund activities (which are specially called out in the CFO Act, as the above excerpts show) should start doing the same kind of financial accounting that private-sector businesses are required to do is understandable. From the Congress' perspective, revolving-fund activities are among the most "businesslike" activities in the government. Because the requirement to do GAAP-based financial accounting⁵² is one of the mechanisms that society uses to encourage business managers to:

- a) reduce waste and inefficiency (because if they don't, the company's stock price will fall as capital moves to more efficient uses), and
- b) to avoid engaging in fraud (because if they do lie about their business' financial position, they and their business will, sooner or later, be caught and punished),

⁵² The Securities and Exchange Acts of 1933 and 1934, as amended, require all public companies in the United States to follow Generally Accepted Accounting Principles (GAAP) for their financial accounting.



⁵⁰ In 1989, in the first Bush administration (1988-1992), Secretary of Defense Dick Cheney initiated the DoD's first major business-process reform effort following the end of the Cold War-the "Defense Management Review" (DMR). The DMR was structured very much in line with recommendations that had been made earlier (in 1986) by the Packard Commission-a high-level external group led by Mr. David Packard, the retired co-founder of the Hewlett-Packard Company, whom President Reagan had asked in his second term to examine "defense management" and recommend ways to improve it. At the heart of the Packard Commission's recommendations for reforming the defense acquisition process was the idea of establishing "management centers of excellence" that would emulate practices in successful commercial organizations. Although the Commission does note in its report that, "it is not obvious that DoD, or any large bureaucratic organization, can follow successfully the management procedures used in private industry" and that "defense acquisition typically differs from (the) commercial model in almost every respect," the idea that it should be possible to run the DoD in the same way that a successful business is run still emerges very strongly from the Packard Commission report. As the Commissioners chose to put it: "Defense acquisition represents the largest and, in our judgment, the most important business enterprise in the world" (emphasis added). Thus, the DMR reflected the Packard Commission's view that the DoD needed to adopt "good business practices," a view that set the stage not only for the DMR but for all the business process reform efforts that have been launched in the DoD since, including the BMMP.

⁵¹ For an overview of the "waste, fraud, and abuse" scandals of the 1980s in the DoD (e.g., Ill Wind) and elsewhere in the government in the 1980s, see the GAO "High Risk Series" report, GAO/HR-93-7, at http://161.203.16.4/d36t11/148225.pdf.

it is understandable that Congress would assume that the same effects would occur in public-sector activities, if indeed the DoD truly was going to be run those activities "like businesses."⁵³

Of course, unlike the private sector where financial statements are important in determining the flow of capital,⁵⁴ the inability of DoD activities to get their books straight has no effect on the funding they receive every year.⁵⁵ Although the DoD has *never* been able to achieve a full set of unqualified opinions on its financial statements,⁵⁶ no DoD activity has ever been denied funding, or even had its budget reduced, <u>solely</u> because the financial statements were unreliable. The more important question, therefore, is: If the BMMP can bring DoD's support activities to the point where they all receive unqualified opinions on their statements, will those statements help managers and customers *inside* the Department make better decisions—i.e., decide to do things on either the buyer or seller side that are likely to improve effectiveness and efficiency?

As noted earlier, based on their research on the information that internal managers need to reduce costs and make their businesses more efficient, Kaplan and Cooper (1998) argue that external financial statements of the type required by the CFO Act are *"completely inadequate"* for either "estimating the costs of activities and business processes" or for "providing useful feedback to improve business processes."⁵⁷ That is, even if CFO compliance *can* eventually be achieved in the DoD, Kaplan and Cooper are telling us that reaching that goal will be pointless, because it will neither improve visibility of costs, nor will it give internal DoD managers information they can use to make their activities more effective and efficient.

Kaplan and Cooper are not unique in holding this view. In his testimony on Defense Financial Management before Congress on May 8, 2001, Robert Leiberman, Deputy DoD

⁵⁴ See note 49.

⁵⁷ See note 14 above.



⁵³ See Peters, K. M. (2004, August 20). Senior defense contracting officer, three others indicted for corruption. Retrieved from GovExec.com; Sheffield, R. (2004, August 20). 5 accused of defrauding pentagon. *Harrisburg Patriot-News*. Both illustrate the story of a former chief lawyer for the Navy Ships Parts Control Center—who was sentenced in 1985 for accepting contractor gifts and also of the Secretary for a company involved in the 1988 Operation III Wind scandal that helped set the stage for the CFO Act—who was indicted in August 2004 on charges of defrauding the U.S. government through his company (Vector Systems) on contracts held from 1998 to 2002. The first article notes that the fraud was discovered by Defense Contract Audit Agency auditors who discovered irregularities in the contracting paperwork; so, the fraud was not discovered by DoD IG financial statement auditors.

⁵⁵ See, for example, Schneider, C. (2005, January 10). *Why federal agencies fumble audits.* Retrieved from CFO.com. Schneider explains, "Since they're not penalized for poor bookkeeping, the Defense Department, NASA, and other agencies are unlikely to show much improvement, say government experts."

⁵⁶As reported by the GAO in December 2004, the DoD again failed to achieve an unqualified opinion on its CFO financial statements, marking the twelfth year in a row that the Department has failed to achieve CFO compliance. In particular, as reported by the GAO, see http://www.gao.gov/financial/04frusg.pdf), the DoD has reported to the DoD Inspector General that "its fiscal year 2004 financial statements were not completely reliable. The DoD's report cites accounting deficiencies in: (1) property, plant, and equipment; (2) inventory and operating material and supplies; (3) environmental liabilities; (4) intragovernmental eliminations and related accounting adjustments; and (5) disbursing activity. The DoDIG stopped attempting to audit all of DoD's financial statements in FY 2001, electing instead to receive a report from the DoD each year as to whether the statements have become sufficiently reliable to justify the expense of conducting an audit. The OMB's Program Assessment Rating Tool (PART) approach, rather than looking at financial statements, is attempting to make the link between activity budgets and other, more direct measures of activity performance. For information on the PART effort, see http://www.pivotal-insight/april2005/feature-domain.php.

Inspector General, noted that, "The various reports to OMB and Congress, the annual financial statement audits, and even supplementary audits cannot substitute for structured, readily accessible, meaningful and frequent internal management reporting."⁵⁸

What Kaplan, Cooper and Lieberman are saying has been borne out in RAND research as well. In a study for the Defense Finance and Accounting Service (DFAS) based on interviews they conducted in 1999 and 2000 with DFAS customers in the Army, Navy, Air Force, and Defense Agencies at headquarters, regional, command, and installation levels, Keating et al. (2001) report the following:

There appears to be a challenging disconnect between how the GAO and Congress view the CFO Act and how DFAS' customers view it.

We asked a number of DFAS customers what advantages they would receive if DoD achieved compliance with the CFO Act. The typical answer was "none." These customers see the CFO Act as a mandated compliance exercise, but nothing that will improve their decision-making. We heard skepticism from both WCF and appropriated fund customers, though appropriated fund customers were perhaps more skeptical, as a group.⁵⁹

In their report, Keating and his colleagues note that DFAS' WCF customers were interested in having answers to questions like: "What are my true costs of producing this *specific* output at my activity? (as opposed to the costs of producing *other* outputs at the activity—e.g., repairing this component versus that component, or shipping these types of items versus those, or using direct vendor delivery instead of stocking the item ourselves.)" They note that such questions are in the realm of activity-based costing (ABC), which requires an understanding of the incremental costs of production at the activity—not the average costs of production overall.

Perhaps most telling for the BMMP, however, is that the Friedman task force, in their April 2001 report on *Transforming DoD Financial Management* (which led to the FMMP and BMMP efforts) make the following observation:

Current DoD financial, accounting and feeder/operational management systems do not provide information that could be characterized as relevant, reliable, and timely. Nor is the "support of management decision-making" generally an objective for the financially based information currently developed <u>or planned for future development.</u>⁶⁰ (emphasis added)

When the Friedman task force made this statement, the DoD had already been working for 10 years to achieve CFO compliance. The task force's observation, therefore, suggests the task force did not believe the production of auditable financial statements should be the primary objective. Indeed, in the "Vision" statement that immediately follows the statement above, the Friedman task force lists five goals, the *first* of which is: "**Provide visibility to cost incurred** which is a critical underpinning of efficiency improvement" (emphasis in original). That is a call for management accounting, not financial accounting. Indeed, the vision statement associated

⁶⁰ Friedman Task Force report, see note 17 above, Executive Summary, p. i.



⁵⁸ See Lieberman (2001, May) at note 18 above, p. 10.

⁵⁹ Keating et al. (2001), p. 25. See note 13.

with achieving CFO compliance: "Ensure clean audits and routine compliance with Federal financial standards," is number four on the Friedman task force's list. And even there they note, "it is possible to reach the goal of reliable financial information and a clean audit opinion and still not have information that is relevant to managers."⁶¹

In other words, the Friedman task force recognized that achieving clean opinions on CFO financial statements and providing useful information to internal managers are two very different goals.⁶² Four years later, however, the BMMP is continuing to emphasize the former at the expense of the latter. A "pdf" search, for example, of the current "All Views" description (a 101-page document) of the BMMP Business Enterprise Architecture (BEA) reveals that none the following phrases: "management accounting," "management cost accounting," "cost accounting," "activity-based costing," or "ABC" appear anywhere that document.⁶³

Studies Have Shown that Efficiency Has Declined under the DWCF Approach

As noted above, the Friedman task force provided a number of important insights that the FMMP and the BMMP have ignored. The DoD's use of the DWCF approach has ignored these findings as well. In their discussion of the "Current Situation," on the issue of "convoluted business processes which fail to streamline excessive process steps," the Friedman task force has the following to say about the DWCF approach, "Attempts to charge the Services for overhead expenses (i.e., Working Capital Fund and reimbursables), while directionally correct, suffer from bad data and, as a result, add complexity that exceeds benefit."⁶⁴

In the spirit of that statement, this section summarizes some of the key findings from the large number of studies that have been done over the last fifteen years that suggest the DWCF approach has tended to reduce, not increase, the visibility of support costs in the Department and, in so doing, has led to less, not more, efficient use of the Department's resources.

Keating (2001) presents original findings on DFAS and notes the similarities with the findings of other DWCF research, which he summarizes as follows:⁶⁵

Research suggests an incompatibility between current WCF pricing policies and the cost structures of DoD providing organizations. Provider organizations have fixed costs, so their incremental costs tend to be less than their average costs. Simultaneously, WCF prices are set equal to their average costs, so customers sometimes make suboptimal decisions as to whether and how much workload to buy from WCF organizations. [...]

Examples of such fixed costs are computer system development, building maintenance, security, and depreciation. Government employed civilian-labor costs also have

⁶³ See note 6 above.

⁶⁵ See note 39 above, p. 3.



⁶¹ See note 60.

⁶² To be fair to the DoD managers who had the job of attempting to implement the Friedman task force recommendations, it is also the case that on page vi of their Executive Summary, in a section on "Significant Challenges," the Friedman task force lists "developing an integrated system architecture including financial, accounting, and feeder systems" as the "most difficult" challenge to be addressed. Given the GAO's view that architectures needed to be developed first, it is understandable why DoD managers proceeded as they did down the architecture road, first with the FMMP and then the BMMP.

⁶⁴ See note 17 above, p. 6.

considerable rigidity as regulations make it difficult to cut such costs rapidly, [Robbert, Gates, and Elliot, (1997)]. Wallace, Kem, and Nelson (1999) suggest that as much as 80 percent of Air Force Working Capital Fund costs are fixed with respect to the amount of DLR sales. [...]

The existence of fixed cost does not mesh well with current WCF pricing. With expected average cost pricing, revenue falls proportionately with workload, but costs almost certainly do not. Thus, WCF support organizations will almost certainly lose money when workload declines unexpectedly. Indeed, a "death spiral" of rising prices and falling revenue may occur, since current rules also stipulate that future prices must be augmented as an offset if a providing organization loses money in a year. Of course, a WCF activity will not likely die, since it is not a real business and customers often do not have the choice to seek alternative providers. However, this pricing spiral can lead to highly underutilized personnel and facilities.⁶⁶ [...]

Expected average-cost pricing rules can encourage undesirable behavior by warfighting customers. Camm and Shulman (1993), Baldwin and Gotz (1998) and Brauner et al. (2000) present similar portraits of how budget-constrained Air Force and Army warfighting customers have responded to high WCF prices. Specifically, in both services, customers have gone to considerable effort to repair as many items as possible by themselves or by using local contractors instead of buying workload from their respective WCF logistics systems. For instance, Brauner et al. (2000) note how the U.S. Army's Forces Command (FORSCOM) set up an intra-command redistribution and repair system to reduce the amount of work load it sent to the Army's already underutilized depot repair system. FORSCOM customers save O&M funds for other uses by not buying as many services from the Army WCF (activities), but these are not necessarily savings from an Army-wide perspective because of the discrepancy between WCF prices and actual variable costs. [...]

Camm and Shulman (1993) note how working capital fund policies give Air Force installations excessive incentive to screen items themselves before sending them to the depot repair system. Also, Baldwin and Gotz (1998) and Wallace, Kem and Nelson (1999) report cases of customers consolidating broken parts on single carcasses sent into the Air Force logistics system. Such consolidation reduces a customer's WCF expenditures but almost certainly does not save the Air Force money. First, customers make inefficient use of their time by consolidating broken parts and, second, the degraded carcasses are harder for depots to repair, raising average repair costs and thus future prices. [...]

As these reports note, the warfighting customer's rational response to WCF pricing is likely not optimal for the DoD as a whole. Specifically, the military services have considerable unutilized capacity in parts of their depot/WCF systems. Some of this excess capacity stems from required wartime or replenishment capacity. Other excess capacity is due to the failure of DoD infrastructure cuts to keep pace with falling demand. [...]

⁶⁶ An example of the DWCF death spiral phenomena is documented for Army arsenals and ammunition plants in Hix, W. M., Pint, E., Bondanella, J., Held, B., Hynes, M., Johnson, D., Pregler, A., Stollenwerk, M. & Sollinger, J. (2003). Rethinking governance of the Army's arsenals and ammunition plants. MR-1651-A. RAND.



Excess capacity mixes perniciously with expected average cost pricing. Specifically, excess capacity drives up WCF prices, which, in turn further encourages budget-constrained warfighting customers to draw more work away from the depot system; this results in even higher depot prices. (Such spirals can result for other reasons as well. For example, if aging equipment unexpectedly drives up depot system costs, the depots will lose money, and future prices will increase, even if there is no excess capacity in the depot system.

If the issue were simply one of pricing, perhaps the BMMP could handle it without fundamentally changing its approach to an overall operational architecture. Even there, however, it would be necessary to place greater emphasis on developing financial information systems that distinguished between incremental costs and fixed costs. But the "bad data" problems referred to above go beyond the pricing issues; they involve CFO financial accounting as well. The bad data in WCF systems that the Friedman task force refers to are discussed in a 2002 DoD Management Initiative Decision (MID 903) on the Working Capital Fund. This text states:

In the supply business areas, accumulated operating results (AORs) are not accurate. The WCF Task Force will review the financial policies for accounting for the gain and disposal of inventory to determine why the operating results are so inaccurate.⁶⁷

This statement refers to severe data-quality problems that are present in the "Cost of Goods Sold" (COGS) expense lines in the Revenue and Expense Statements (i.e., the Statement of Operations—1307 Accounting Reports⁶⁸), which are one of the CFO Act's financial statements. As documented by Glass, Dukovich, and Wallace (1998) and Wallace, Le, Nelson, and Webster (2000), the inventory-accounting problems that MID 903 refers to, which are causing the AOR values for DWCF supply activities to be so unreliable, are a consequence of the accounting treatment required under the CFO Act's financial accounting rules for "inventory held for sale."69 The latter, of course, relates directly to what supply activities now "do" under current DWCF operating rules: they "hold" inventory and "sell" it. As the two studies above explain, if supply activities were to change their basic operating approaches, treating DLR components as capital assets ("non-current operating assets") rather than "inventory held for sale." the need for the COGS entry in the expense statements would be eliminated, which would significantly simplify financial accounting for the DWCF supply activities. More importantly, this elimination would allow the DWCF supply activities to begin applying "capability-based budgeting" methods to DLRs, which could make it easier to provide needed DLR support to the operating forces when demand is rising and stock levels need to be increased. The current DWCF operating approach does not handle that very well, as a recent GAO report on materiel shortages in Iraq describes.⁷⁰ The point of this example for the BMMP is

⁷⁰ See Defense Logistics, Actions Needed to Improve the Availability of Critical Items during Current and Future Operations (2005, April). GAO-05-275. This document describes funding delays in the Army's AWCF-Supply



⁶⁷ DoD Management Initiative Decision (MID) 903, *Working Capital Fund*, approved by the Undersecretary of Defense (Comptroller) on December 3, 2002, p. 11. As described in the background section of MID 903, a WCF Task Force was established by the DoD Business Initiative Council (BIC) in the summer of 2002 to review financial practices and policies within the Defense Working Capital Fund (DWCF). As stated in MID 903, "The purpose of the review was to determine if certain polices or practices of the Fund could be more like the private sector, thereby improving financial management."

⁶⁸ See DoD FMR 7000.14R, Volume 11B, p. DWCF Accounting Report 1307 "Statement of Operations," p. 70-35. (This is the "Results of Operations" financial statement required by the CFO Act.)

⁶⁹ Glass, Dukovich, & Wallace (1998); Wallace, Le, Nelson, & Webster (2000)

that the changes above would represent a very different operational architecture for DoD supply activities than what the current DWCF operational architecture for financial information systems calls for, with DLR stocks treated as inventory-held-for-sale.

The CFO-style expense statements for the DWCF supply activities represent the "visibility of cost" that the DWCF approach provides for the DoD's central supply activities. As MID 903 acknowledges, that visibility is very poor. Under FCR pricing in the DWCF approach, however, the AOR values in supply become key factors affecting the prices set for spares and repair parts. Because the AOR values for DWCF supply activities are unreliable, so are the prices. The prices that are supposed to reflect the "true cost" of supply support, therefore, do not do that—and incorrect price signals are being sent to customers as a result.

The cost visibility problems caused by the DWCF approach are not just at the level of individual transactions in the field, however. This section concludes with two examples showing how the DWCF approach is reducing cost visibility at the highest levels in the DoD as well, creating the dangerous possibility of misinformed decisions and funding delays at the highest levels in the Department.

The most conspicuous, possibly the most dangerous, and certainly the largest example of how the visibility of DoD support costs has been reduced (rather than increased) under the DWCF regime can be found at the DoD Comptroller website—in the "OSD Comptroller iCenter" section under the DWCF tab at http://www.dod.mil/comptroller/icenter/dwcf/dwcfintro.htm. Drilling down from the "Why DWCF?" section to "The Issue of Incentives" discussion, a "Fast Fact" box is displayed that asserts the following: "About 25% (\$98.7 billion) of DoD direct appropriations is financially managed through the Defense Working Capital Fund."⁷¹

Casual readers of this statement will generally (and understandably) take it to mean that of the roughly \$400 billion in appropriations that DoD was receiving and spending in the year the statement was posted, approximately 25 percent of that amount was the cost of operating all the WCF activities in the DoD in that year. The problem with the \$98.7 billion figure, however, is that it <u>overstates</u> the cost of the WCF activities by a very substantial amount—probably by somewhere between 30 and 100 percent. In other words, the actual cost to the taxpayers of all the WCF activities in the year in question was probably somewhere between \$49 billion and \$76 billion—not \$98.7 billion.

The reason this is the case is because the \$98.7 billion was obtained by simply summing the revenues (either actual or projected—which specifically is not made clear) that each of the individual WCFs reported (as either actual for a completed year, or as projected for the budget year) in their President's Budget submissions. The figure fails therefore, to take into account the very substantial amount of "intra-WCF" trade that goes on among the WCF activities (both within and across the service WCF boundaries) in addition to the trade they engage in with appropriated customers. The effect of failing to take the intra-WCF trade into account is that

Management Activity to obtain spares and repair parts to support Operation Iraqi Freedom. "Capability-based budgeting" is now authorized in the DoD FMR for DWCF capital investments and is being encouraged for use in situations where uncertainty exists about the precise nature of the requirement. Uncertainty is a feature of future spares requirements—particularly in periods of highly volatile demand as can occur in extended contingencies. Volume 2B of the DoD Financial Management Regulation now authorizes the use of "capability based budgeting" for DWCF capital programs. See Chapter 9, p. 9-9 at http://www.dod.mil/comptroller/fmr/02b/Chapter09.pdf.

⁷¹ Although there are five WCFs in the DoD, the DoD Comptroller's office sometimes uses the term "Defense Working Capital Fund" (DWCF) to refer to all of them, as is the case here.



many dollars get counted multiple times when the separate WCF revenue amounts are simply added. As an example of the intra-WCF trade, consider the fact that the WCF supply activities in the Army, Navy, and Air Force all have to pay the WCF depot maintenance activities for the repaired DLRs that the depots repair and provide to the supply activities (which then make those DLRs available for sale to outside customers). At the same time, the WCF depot maintenance activities are also buying the lower-indenture repair parts they use in those repairs from the WCF supply activities.

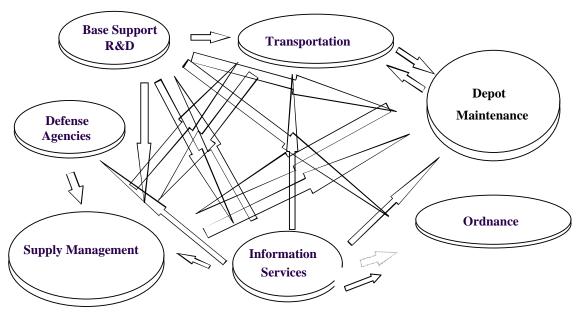


Figure 1 below illustrates the complexities of intra-WCF trade.

Figure 1. Inter- and Intra-fund Sales Complicate Accounting and "Visibility" of Costs

The estimate that the correct cost figure for the WCF support activities lies between \$49 billion and \$76 billion is based on "Source of Revenue" reports included in the President's budget submissions which the WCF activities prepare every year. Although they provide enough information on who pays who for what in intra-WCF trade to make the rough estimates above, the Source of Revenue reports are too highly aggregated in many areas to be able to determine exact values.72

To be able to determine precisely how much the WCF activities cost (under the proprietary financial accounting rules that the WCF activities are required to follow under the CFO Act's financial accounting approach) producing what accountants call a "consolidated revenue and expense statement" for the DWCF (viewed as a single financial entity) is necessary. All of the necessary "eliminating entries" have to be correctly made (so all the double/multiple counting of revenues and expenses has been eliminated) in order to make it possible to see what the true financial position of the DWCF is-as if it were a single, corporatelike business entity (just as the DBOF/DWCF approach says it is). The inability of DoD's

⁷² "Source of Revenue" reports are included in the President's Budget submissions of each WCF activity. They are sometimes identified as "Fund 11" Exhibits.



accounting systems to be able to produce such a consolidated statement, however, is one of most important reasons why the DoD has not been able to achieve CFO compliance.⁷³

Of course, a much simpler and more direct way to obtain good visibility of what all the DWCF activities cost would be to convert them all back into appropriated activities and simply add their budgets. For that to work, of course, the DoD would need to have good, reliable systems for public-fund budgetary accounting—but achieving that kind of CFO compliance would be much less demanding for the BMMP, from both a conceptual and systems perspective, than preparing the consolidated proprietary statements. Yet, the latter is what the BMMP is currently trying to build an architecture to do. Indeed, this idea is not that far from what the Friedman task force hinted at when it said the DWCF arrangements were more trouble than they were worth, and, that as a way to achieve needed "interim successes," it would make sense to focus first on the Statement of Budgetary Resources (a financial statement produced under public-fund accounting) and simply work on getting clean opinions on those statements alone.⁷⁴

Finally, the gross inaccuracy of the \$98.7 billion figure for the DWCF activities is dangerous because senior leaders may believe it represents an accurate statement of what the DWCF activities cost; this misunderstanding may lead them to conclude that the DWCF activities cost "too much" and need to be reformed with a major, high-profile and expensive effort—like the BMMP.⁷⁵

Financial management executives in the DoD Comptroller's office undoubtedly understand that the \$98.7 billion figure significantly overstates the cost of the DWCF activities. It is puzzling, therefore, why they are willing to leave such a grossly inaccurate figure posted in a setting where, on the next web page, the DWCF is described as "a financial management strategy that makes sense because it provides for total cost visibility and improved cost awareness."⁷⁶

Since the establishment of the DBOF 14 years ago, the DoD has been functioning as the de facto financial manager of the DWCF activities, notwithstanding the subsidiary roles played by the service Comptrollers in the WCFs. Now, the U.S. Comptroller General is calling for the establishment of a Deputy Secretary of Management position in the DoD to provide "the strong and sustained executive leadership needed if (business and financial management) reform efforts are to succeed."⁷⁷ The USD (AT&L), however, has stated publicly that such an idea "would just add an additional layer of management, which is the last thing we need."⁷⁸ This paper has argued the BMMP needs to change its focus towards providing useful cost

⁷⁸ See GovExec.com, Daily Briefing (from Congressional Daily). (2005, April 14). *GAO, Pentagon at odds over management*. Retrieved from (http://www.govexec.com/dailyfed/0405/041405cdam2.htm)



⁷³ See "intragovernmental eliminations," note 56 above.

⁷⁴ See note 17 above, p.13.

⁷⁵ On February 1, 2005, the DoD IG announced the letting of a multiple–award contract with a large group of privatesector accounting firms (including the "Big 4" firms: Ernst & Young, KPMG, Deloitte & Touche, and PricewaterhouseCoopers) to assist the DoD in improving the reliability of its financial statements. The contract is an indefinite-delivery/indefinite-quantity contract that will expend \$977,500,000 over three years, from February 2005 to February 2008.

⁷⁶ DoD Comptroller website <u>http://www.dod.mil/comptroller/icenter/dwcf/commonsense.htm</u>.

⁷⁷ See GAO-05-520T at note 19 above, p. 2.

information to managers *in* the DoD's support activities, not non-useful information (like the \$98.7 billion figure above) to managers at the DoD level who are very far *above* those activities. The USD (AT&L) is correct to express concerns about the call for establishing a Deputy Secretary for Management.

As a second and final example illustrating how high-level cost visibility has eroded (rather than improved) under the DWCF regime, it is instructive to read the exchange that took place between Secretary Rumsfeld and Senator Robert Byrd during Secretary Rumsfeld's testimony on June 21, 2001 before the Senate Armed Services Committee on the subject of the Defense Strategy Review.⁷⁹ Senator Byrd opened his questioning of the Secretary as follows:

SEN. ROBERT C. BYRD (D-WV): I thank you, Mr. Chairman, for your courtesy. And I thank you, Secretary Rumsfeld, for your statement, and I thank you, General Shelton, for appearing here today.

The General Accounting Office—let me say parenthetically once again that I favor the strategic review. I, of course, don't what the results will be, nor do any of the others of us. The General Accounting Office released a report on Monday, June 11, on the Pentagon's use of \$1.1 billion that was earmarked in the FY 1999 Supplemental Appropriations Act to address the critical shortage of spare parts for the military. The GAO found that 8 percent of that money, or \$88 million, was used by the Navy to purchase spare parts. The remaining 92 percent of the appropriations was transferred to the Operations and Maintenance accounts of the military services and thus became indistinguishable from other Operations and Maintenance funds used for activities that include mobilization and training and administration.

While funds in the Operations and Maintenance accounts can be used to purchase spare parts, the GAO report states that the military services, quote, "could not readily provide information to show how these funds were used," close quote, therefore confounding the GAO's attempt to verify that the funds were actually used to purchase the spare parts that were urgently needed.

Now Mr. Secretary, the reason I can't come back here today is because I'm chairing the markup of the Appropriations Committee on the 2001 Supplemental Appropriations Bill. So this question comes at a very important time. I find it shocking that the Pentagon requested funds to meet an urgent need and then is unable to show Congress that it used those funds to address the problem.

Now, while you're not responsible for the department's use of appropriations before you assumed your current position, the FY 2001 Supplemental Appropriations Bill that was submitted to Congress contains \$2.9 billion that will go to the same Operations and Maintenance accounts that lost track of the \$1 billion that was appropriated two years ago.

Now, how can Congress, how can my Appropriations Committee, how can this committee here have any confidence that these funds that are being requested in the Supplemental Appropriations Bill which we're making up today will be used as Congress intends them to be?

⁷⁹ See the exchange between Senator Byrd and Secretary Rumsfeld beginning on p. 10 of <u>http://www.defenselink.mil/speeches/2001/s20010621-secdef2.html</u>.



SEC. RUMSFELD: Senator Byrd, you know better than most anybody that the financial reporting systems of the Department of Defense are in disarray; that is to say, they are perfectly capable of reporting certain things, but they're not capable of providing the kinds of financial management information that any large organization would normally have.

At your suggestion in my confirmation hearing, we have asked—we had a team of people take a look at the financial reporting systems. They've reported to the new comptroller general, Dr. Dov Zakheim. He has begun the process of finding ways to see that the ability to track transactions is improved.

The team Secretary Rumsfeld refers to, of course, was the Friedman task force. The point to be made about the above exchange with regard to cost and spending visibility is that the reason 92 percent of the \$1.1 billion of the FY 1999 Supplemental that was earmarked for spare parts went into the O&M accounts is because that is the way things *had* to be done under the current DWCF "operational architecture" for spare parts. Under the DWCF approach, central supply activities are required to recover all of their costs from revenues collected from customers, so it was necessary for the supplemental funds to be given to those O&M customers, who would then order new spares from the central-supply providers, who are the ones whose job it is to actually bring new spares into the logistics system.⁸⁰ The reason the GAO had difficulty tracking whether the funds were actually used to buy spare parts is that it: first, would have been necessary to show the O&M customers obligated their newly received O&M supplemental dollars to the supply activities, and second, would have been necessary to show that the supply activities then went out and spent the funds to buy more spare parts.

Later in the exchange, General Shelton, the Chairman of the Joint Chiefs, attempted to explain the foregoing to Senator Byrd, but Senator Byrd would have none of it; he insisted that when the Congress earmarks funds be spent for a particular purpose (the way the regular appropriated budgets work), that's how the money should be spent and accounted for. That becomes much more complicated to do when the DWCF approach—involving the use of revolving-fund financing, CFO Act financial accounting, and FCR pricing—is being used to run logistics support activities "like businesses."

Conclusion

This basic conclusion of this paper is that the BMMP needs to be fundamentally reoriented if it is to succeed at accomplishing its *fundamental* goal, which is to establish a framework for collecting and reporting financial information in the DoD that will give managers *inside* DoD support activities the cost information *they* need to do their jobs. That information is different from the non-value adding (for the DoD) financial-statement and "full-cost-visibility" information that managers *above* those activities have been pursuing for the last 15 years. Towards that end, the three steps below should be considered by the Defense Business Systems Management Council as a way to begin the reorientation of the BMMP:

⁸⁰ Ever since revolving fund activities have existed, they have regularly had to ask the Congress for "cash infusions" when the cash corpus of the underlying fund has experienced losses and thus has gotten too low to be certain of being able to meet it obligations. This was probably not done in this case, because of rules regarding how supplemental appropriations can be spent. Had the Department wanted to ask for a cash infusion of \$1.1 billion for the supply activities in the WCFs to buy spare parts, however, they would probably have had to have done it during the regular budget cycle, which might have taken too long if the spare parts shortages were severe.



- The BMMP needs to shift its emphasis from external financial accounting to the establishment of accurate *management accounting*. As has been pointed out by many, including Harvard's Robert Kaplan (one of the developers of the activity-based-costing method of management accounting and, not coincidentally, also one of the developers of the Balanced Scorecard, a version of which DoD has adopted to pursue performancebased management), financial accounting systems able to meet external reporting requirements (of the type required by the CFO Act) are "completely inadequate" for either "estimating the costs of activities and business processes" or for "providing useful feedback to improve business processes."
- Because the CFO Act is law, and many of the most serious CFO compliance problems exist in the DoD's WCF activities, particularly in the areas of central supply and maintenance, the BMMP needs to undertake a fundamental review of basic operating policies for the DWCF activities—particularly in central supply and maintenance. The goal of such a review would be to determine where and how changes in basic financial and operational polices for those activities would help to clarify incentives and improve cost visibility, while simultaneously simplifying financial accounting challenges. For some activities, that may involve a return to direct funding and traditional, public-fund budgetary accounting. For others, where the revolving-fund approach does provide some needed management flexibility, it may call for changes in pricing policy (e.g., shifting from FCR pricing to an incremental pricing approach) and/or changes in what are now viewed as necessary accounting practices because of current "business practices," (e.g., treating Depot-Level-Reparable (DLR) components as capital assets rather than as inventory held for sale, and structuring DLR transactions accordingly). These ideas and others have already been explored in the DWCF studies noted earlier, so the BMMP would have the advantage that much of the basic analysis for such a review has already been done.⁸¹
- Recognizing that the Congress is likely to want an explanation as to why the Department is changing some of the most fundamental assumptions and objectives of the program, the BMMP will need to prepare a high-level report for the Congress that explains why de-emphasizing the production of external financial statements and pursuing the kinds of initiatives described above will allow the DoD, for the first time since the CFO Act was passed, to begin actively pursuing what in all likelihood the Congress intended and wanted the DoD to pursue when it passed the CFO Act in the first place: sensible, responsible, and honest *internal* financial management and accounting that will lead to more effective and efficient support operations within the Department.

⁸¹ For additional suggestions for alternative possible DWCF operating approaches in logistics, see HQ USAF, Deputy Chief of Staff Installations & Logistics, Directorate of Innovation and Transformation (HQ USAF/ILI). (2003, October). *Future financials: Creating the path forward to enable our re-engineered logistics business processes.* [A United States Air Force White Paper].



THIS PAGE INTENTIONALLY LEFT BLANK



ACQUISITION RESEARCH: THE FOUNDATION FOR INNOVATION

2003 - 2006 Sponsored Acquisition Research Topics

Acquisition Management

- Software Requirements for OA
- Managing Services Supply Chain
- Acquiring Combat Capability via Public-Private Partnerships (PPPs)
- Knowledge Value Added (KVA) + Real Options (RO) Applied to Shipyard Planning Processes
- Portfolio Optimization via KVA + RO
- MOSA Contracting Implications
- Strategy for Defense Acquisition Research
- Spiral Development
- BCA: Contractor vs. Organic Growth

Contract Management

- USAF IT Commodity Council
- Contractors in 21st Century Combat Zone
- Joint Contingency Contracting
- Navy Contract Writing Guide
- Commodity Sourcing Strategies
- Past Performance in Source Selection
- USMC Contingency Contracting
- Transforming DoD Contract Closeout
- Model for Optimizing Contingency Contracting Planning and Execution

Financial Management

- PPPs and Government Financing
- Energy Saving Contracts/DoD Mobile Assets
- Capital Budgeting for DoD
- Financing DoD Budget via PPPs
- ROI of Information Warfare Systems
- Acquisitions via leasing: MPS case
- Special Termination Liability in MDAPs

Logistics Management

R-TOC Aegis Microwave Power Tubes



- Privatization-NOSL/NAWCI
- Army LOG MOD
- PBL (4)
- Contractors Supporting Military Operations
- RFID (4)
- Strategic Sourcing
- ASDS Product Support Analysis
- Analysis of LAV Depot Maintenance
- Diffusion/Variability on Vendor Performance Evaluation
- Optimizing CIWS Life Cycle Support (LCS)

Program Management

- Building Collaborative Capacity
- Knowledge, Responsibilities and Decision Rights in MDAPs
- KVA Applied to Aegis and SSDS
- Business Process Reengineering (BPR) for LCS Mission Module Acquisition
- Terminating Your Own Program
- Collaborative IT Tools Leveraging Competence

A complete listing and electronic copies of published research within the Acquisition Research Program are available on our website: <u>www.acquisitionresearch.org</u>





ACQUISITION RESEARCH PROGRAM GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY NAVAL POSTGRADUATE SCHOOL 555 DYER ROAD, INGERSOLL HALL MONTEREY, CALIFORNIA 93943

www.acquisitionresearch.org