## AIR COMMAND AND STAFF COLLEGE

### AIR UNIVERSITY

## ACQUISITION REFORM THROUGH SERVICE REFORM

by

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# **Table of Contents**

Disclaimer	ii
Table of Contents	iii
Introduction	1
Role of Services in Acquisition	2
Previous Attempts at Acquisition Reform	5
Defense Acquisition University as a Model for Future Initiatives	8
Conclusion	10
Endnotes	12
Bibliography	14

The United States' 2010 defense budget includes approximately \$185 billion for research, development, testing and evaluation (RDT&E) and procurement.<sup>1</sup> These two appropriation categories are generally referred to as acquisition and are used for developing, testing, and fielding weapons systems and developing upgrades to existing systems. Recent congressional battles over high value programs such as the F-22 and F-35 highlight the scrutiny DOD acquisition programs can expect to receive in the future. The Government Accountability Office (GAO) summed up the quandary faced by the DOD in 2006 testimony before the Senate by stating: "DOD is intent on transforming military operations and has its eye on multiple megasystems that are expected to be the most expensive and complex ever. These costly conditions are running head-on into the nation's unsustainable fiscal path."<sup>2</sup> As non-defense programs compete for an ever-larger share of the US government budget and high technology weapon systems increase in cost, the Department of Defense (DOD) must find ways to get maximum benefit from every acquisition dollar. One key problem area for DOD acquisitions is the individual service focus of the acquisition system that puts protecting each service's share of the budget above delivering the right capability for the national interest. For this paper, "services" will refer to the Army, Navy, Air Force, and Marine Corps, recognizing the Marine Corps' unique position as part of the Navy but still conducting separate acquisition programs through Marine Corps Systems Command.<sup>3</sup> This service-oriented mentality affects decision making from initial cost and schedule estimation throughout a program's life and may have a significant impact on the difficult decisions that must be made when a program fails to meet cost and schedule guidelines. The service before DOD attitude is too often reflected in programs that appear to be kept alive primarily to protect one service's share of the budget.

The failed 1980 Eagle Claw mission to rescue the American hostages held in Iran was a critical factor in the push for formalizing joint operations within DOD.<sup>4</sup> Eagle Claw and other flawed but successful missions forced the congress and DOD to take a hard look at how the individual services worked and fought together. In 1986, Congress passed the Goldwater-Nichols Act, which required the services to fight as a joint force.<sup>5</sup> Unfortunately, the joint mentality did not trickle down to the acquisition community. Representative Jim Cooper and his Military Legislative Assistant, Russell Rumbaugh, recently published an article, "Real Acquisition Reform", in *Joint Forces Quarterly* that examined the inherent service conflict in our current acquisition system. According to their article, "Our nation's defense suffers from a basic flaw: although we now fight jointly, we do not buy jointly."<sup>6</sup> On the surface, competition between the services can produce negative effects that hinder efficient acquisition programs. In some instances, acquisition leaders are caught between a desire to ensure their program is successful and DOD acquisition rules.

The acquisition process is designed with safeguards to prevent programs from exceeding planned cost and schedule milestones but competing interests make it difficult for Program Managers (PMs) to meet the varying demands placed on their programs. PMs are charged with ensuring their program meets cost, schedule, and performance requirements, but are also evaluated by their service and chain of command based on the success of their program in delivering capability to the warfighter. In many cases, PMs are caught between allegiance to their program and program accountability that might affect their program's funding or support. Program success to those who work the program, the sponsoring service, and DOD may not be measured in the same manner. An underlying fallacy is the notion that the individual service

interests are the same as the DOD.<sup>7</sup> This assumption ignores the fact that the services are bureaucracies, and "bureaucracies have minds of their own."<sup>8</sup> To an outsider, the DOD may appear to be a unified organization, but in reality, the services have their own interests that can and do conflict with DOD and the other services. According to Rep. Cooper and Rumbaugh, "DOD has never been a monolithic organization, the services rule."<sup>9</sup> This service-oriented philosophy creates an atmosphere where risks are sometimes ignored or downplayed. In addition, bad news is often avoided and performance measures manipulated to present a positive spin on troubled acquisition programs. Since acquisition programs are funded by year, program managers are under pressure to present a strong argument for funding that might be undermined by realistic, possibly negative, program performance reporting. According to the GAO, "Because programs are funded annually and department wide, cross-portfolio priorities have not been established, competition for funding continues over time, forcing programs to view success as the ability to secure the next funding increment rather than delivering capabilities when and as promised. As a result, there is pressure to suppress bad news about programs, which could endanger funding and support, as well as to skip testing because of its high cost."<sup>10</sup> Rep. Cooper and Rumbaugh summarize the avoidance of bad news with the following: "Revealing these overruns only hurts the sponsoring service. And since every service has such cost-overrun problems, a conspiracy of silence is the natural result."<sup>11</sup> The pressure to inflate success or downplay issues begins before a program even starts. Before any acquisition program officially begins, cost estimates are computed to ensure the program is within available funding. If the program's estimated cost is too high, the program will not be started. The need to successfully compete for funds "encourages the program's estimates to be squeezed into the funds

available.<sup>12</sup> This highlights a "fundamental deficiency in the overall acquisition- the front end of the process.<sup>13</sup>

According to Thomas Christie, who has held various high-level acquisition positions in the Air Force and the Office of the Secretary of Defense, "They (observers) have pinpointed the development and setting of requirements, both technical and operational, as sowing seeds for future problems."<sup>14</sup> It is not until later when the program is underway with funds and time already committed that the inaccuracy of the initial estimate is revealed. According to Senator Carl Levin, "DOD acquisition programs fail because the Department continues to rely on unreasonable cost and schedule estimates, establish unrealistic performance expectations, insist on the use of immature technologies, and adopt costly changes to program requirements, production quantities and funding levels in the middle of ongoing programs."<sup>15</sup> Senator Levin unrealistic performance expectations result from willing acceptance of inflated contactor claims and an unwillingness to lower expectations to reflect reality since doing so might jeopardize a program's survival.<sup>16</sup>

These same unrealistic expectations often lure decision makers into relying on immature technologies that are claimed to deliver previously unattainable levels of performance. Immature technologies also present a trap in the area of cost and schedule estimation. If an emerging technology has not been previously incorporated into military hardware, cost and schedule estimates may be very inaccurate, usually to reflect undeserved optimism. According to the GAO, "Acquisition unit costs for programs leveraging mature technologies increased by less than 1 percent, whereas programs that started development with immature technologies experienced an average acquisition unit cost increase of nearly 21 percent over the first full

estimate.<sup>17</sup> The drive for the latest technology and willingness to overlook significant program risk to justify or rationalize those technologies is a key factor in the downfall of many programs. Unfortunately, many dollars are spent pursuing cutting-edge technology that never makes it to the warfighter and those same dollars are not available to buy existing weapons and supplies that are needed by the warfighter. New technologies will always be important for giving US forces an advantage on the field of battle, but too many programs have been terminated or delayed significantly by pursuit of unproven technology.

The list of programs that have experienced one or more of these problems is long and spreads over all the services. According to Senator Levin, "Since the beginning of 2006, nearly half of DOD's largest acquisition programs have exceeded the so-called 'Nunn-McCurdy' cost growth standards established by Congress to identify seriously troubled programs."<sup>18</sup> Senator Levin emphasized the service-wide scope of the problem when he told the Senate "the list of big-ticket weapons systems that have experienced contract or program performance problems spans the services: the Air Force tanker, CSAR-X, VH-71, Osprey, Future Combat Systems, Armed Reconnaissance Helicopter, Littoral Combat Ship, Joint Strike Fighter, and so on."<sup>19</sup> While the same problems continue to plague acquisition programs of all sizes from all the services, DOD has already undertaken several attempts at acquisition reform.

According to Thomas Christie, "several high-level efforts over the past 35 years have aimed at reforming the defense acquisition process."<sup>20</sup> Unfortunately, Mr. Christie goes on to say, "While DOD's acquisition policies and directives adopted many of the most substantive findings and recommendations of these reviews, the people managing the process unfortunately too often lacked the will to carry through and implement them in program decisions."<sup>21</sup> Most of the acquisition reform initiatives focused on streamlining the acquisition process in hopes of

eliminating unnecessary cost and slow delivery of warfighting capability. According to Christie, "The common goal was to streamline the acquisition process to reduce the burgeoning costs of new weapons. In so doing, these commissions and task forces hoped to drastically cut system development and production times (and thereby costs) by reducing management layers, eliminating certain reporting requirements, using commercial off-the-shelf systems and subsystems, reducing oversight from within as well as from outside DOD, and eliminating perceived duplication of testing, among other initiatives."<sup>22</sup> Even though the intention was good, some of these reforms actually exacerbated the fundamental issues that cause the high costs and delays. According to Senator Levin, "a number of previous so-called acquisition 'reforms' have taken the system in the wrong direction by cutting out people, organizations, and processes needed to establish a sound initial foundation for major programs."<sup>23</sup> Senator Levin specifically addresses DOD's "total system performance responsibility" initiative that gave increased oversight responsibility to the prime contractor for a particular program and DOD's elimination of organizations responsible for systems engineering and oversight of developmental testing on weapons systems.<sup>24</sup> These initiatives were intended to expedite delivery of capability but in many cases, the programs encountered serious technical issues that delayed delivery and drove cost overruns beyond any savings possible through streamlined acquisition processes. The primary reason why acquisition reform initiatives attempted so far have been unsuccessful is that they do not address the core issue of enforcing the rules and regulations already in place and the incentives levied on acquisition leaders to preserve the status quo versus making the tough decisions that may be unpopular to their particular chain of command or service. Mr. Christie sums up the problem facing DOD acquisition with the following: "the fundamental shortcoming in the process has been and continues to be the failure of the acquisition community-from

program managers to senior decision-makers and their advisors-to implement and carry out the letter, not to mention the intent, of DOD's existing acquisition directives and guidelines."<sup>25</sup>

These examples illustrate the service loyalty problem of the acquisition process that too often produces decisions based on service or personal priorities. The competition between the services for dollars and influence create an environment where acquisition reform simply addresses symptoms but never attacks the real issue. In order to truly ensure the US taxpayers get the most efficient use of taxpayer dollars and the warfighter gets the best equipment in the shortest time, the DOD must take a hard look at service reform versus acquisition reform. The very basic framework of DOD should be examined to determine how the system could be changed to maintain each service's unique capabilities while creating a better team environment that always prioritizes national security over service loyalties. This will not be a simple task due to the longstanding traditional roles held by the individual services and general promotion of rivalry between the services as an impetus for continuous improvement in each of the competing services.

Dr. William Turcotte discussed some of the flaws in the current DOD structure in his article, "Service Rivalry Overshadowed." Rivalry between the services is often proposed as a positive incentive for each service to excel, but Dr. Turcotte suggested, "Instead of rivalry, one could easily substitute other terms, such as competition, conflict, and unnecessary duplication."<sup>26</sup> The roots of this rivalry run deep and begin early in enlisted and officer careers. Each service operates Basic Military Training facilities, officer training programs, and service academies, which strengthen service loyalty and instill a competitive view towards the other services. Beyond initial training, "officers continue to be strongly socialized into the beliefs and culture of one service."<sup>27</sup>

Representative Cooper and Rumbaugh relate this rivalry problem directly to potential conflicts in acquisition management. "The Services, however, control almost all of the acquisition process and naturally favor their own programs, particularly during years of rapidly increasing defense budgets. The prudence and patriotism of individual Servicemembers are no match for the needs of their own bureaucracies."<sup>28</sup> Service rivalries will always exist but steps can be taken across DOD and within the acquisition workforce specifically to minimize the negative rivalry and encourage interservice cooperation. President Eisenhower saw the value of interservice cooperation and suggested that "anyone with rank above colonel wear a uniform common to all the services."<sup>29</sup> Eisenhower's idea probably will not happen across DOD, but considering the cross-service nature of many acquisition programs, the acquisition workforce could be a reasonable test case for a unified service dedicated specifically to ensuring DOD-wide interests are prioritized. Representative Cooper and Rumbaugh suggest a joint panel of senior acquisition professionals be created within the Office of the Secretary of Defense to pursue joint acquisition without service-specific motivations.<sup>30</sup> These panels would be led by a civilian appointee without ties to any particular branch of service.<sup>31</sup> The expectation is these leaders would set aside service loyalty to pursue DOD common goals.

Even though joint acquisition panels have not been established yet, DOD has taken steps to standardize acquisition training among the services through the establishment of Defense Acquisition University (DAU), which could serve as an example for future initiatives. According to Evelyn Layton's official history of DAU, *The Defense Acquisition University: Training Professionals for the Acquisition Workforce 1992-2003*, the "problems with military procurement were hardly a new phenomenon. Inefficiency, waste, and profiteering had been major issues in virtually every war the United States had fought. In each case, Congress reacted

to the problem by increasing laws and regulations.<sup>32</sup> Military historian William Gregory lamented that "no regulation could create good management or top-notch people.<sup>33</sup> With DAU, Congress hoped to address the acquisition problem from the personnel standpoint. DAU would be responsible for the education and certification of a workforce whose training to that point was described as "decentralized, fragmented, and often of poor quality."<sup>34</sup> Prior to DAU, acquisition training was conducted by 12 separate schools each reporting through a separate chain of command.<sup>35</sup> Now, acquisition professionals from all DOD organizations have access to the same training and education. Additionally, all DOD acquisition personnel are subject to the same education requirements and fall under the same certification system. While the establishment of a central education system for all DOD acquisition personnel is a good start towards true joint acquisition, there is still a need for a change in mindset within DOD.

The change in mentality will take time and patience as fears of losing service prestige give way to a realization that, through cooperation, all will benefit. In the short term, DOD can take steps to integrate acquisition personnel across the services in addition to joint acquisition training experience at DAU. While senior level positions on joint programs are often rotated among the sponsoring services, junior acquisition officers working at the project level rarely get the opportunity to work outside their respective service. Giving younger officers the opportunity to work with sister services would yield benefits when those same officers progress in rank and responsibility. Increased joint opportunities at lower levels would also precipitate beneficial dialogue between the services and promotion of a common language among acquisition professionals. Another possibility for promoting a common language in the DOD acquisition community would be adoption of a standard nomenclature for the appropriation categories between all the services. Currently, each service uses a distinct classification system to identify

types or "colors" of money. The types of money are nearly uniform across the services, but each service uses a specific nomenclature to identify the different appropriation types. For example, funds appropriated for RDT&E are labeled 2040 by the Army, 3600 by the Air Force, and 1318 by the Navy.<sup>36</sup> The differing labels are not a major issue but do represent an opportunity to standardize among the services.

In their article, "Real Acquisition Reform", Representative Cooper and Rumbaugh sum up the need for acquisition reform in relatively simple terms: "The services should place fighting the enemy ahead of fighting each other. Only then will we get the right weapons at the right price."<sup>37</sup> The deeply ingrained service loyalties that promote a healthy rivalry among the services in most situations often create poor decisions when prestige, funding, and possibly, jobs, are on the line. The problems may arise in optimistic estimates to get a program started or hesitance to accurately report cost and schedule overruns of a program several years into a multi-year effort. Whatever the particular situation, DOD must take steps to ensure the acquisition process is followed in order to ensure every taxpayer dollar produces the most possible capability for the warfighter. While many previous acquisition reform initiatives have produced little improvement, the establishment of DAU represented a shift towards focusing on the personnel who will ultimately be responsible for managing DOD's acquisition programs. DOD can build on the success of DAU by giving more joint acquisition opportunities for junior officers and development of a joint acquisition panel at the senior leader level to evaluate programs from a joint perspective. In order to truly reform DOD acquisitions, DOD must reform the services, which will require a change in attitude from the newest recruit in DOD to the highest positions of leadership. According to Christie, "Unless someone is willing to stand up and point out that the emperor has no clothes, the U.S. military will continue to hemorrhage taxpayer dollars and

critical years while acquiring equipment that falls short of meeting the needs of troops in the field."<sup>38</sup>

## Endnotes

<sup>2</sup> United States Government Accountability Office, *DOD Acquisition Outcomes: A Case for Change*, Testimony Before the Subcommittee on Airland, Committee on Armed Services, U.S. Senate (Washington DC: Government Accountability Office, November 2005), 1.

<sup>5</sup> ibid.

<sup>7</sup> Cooper and Rumbaugh, 60.

<sup>8</sup> ibid.

<sup>9</sup> ibid.

<sup>13</sup> Thomas Christie, "Questioning Acquisition Reform." *Military.com*, 8 March 2006.

http://www.military.com/forums/0,15240,90349,00.html., 4.

<sup>14</sup> ibid.

<sup>15</sup> Senator Carl Levin, *Statement of Senator Carl Levin on Introduction of the Weapons Systems Acquisition Reform Act*, Senate Floor Statement, US Senate (Washington DC, February 2009), 1.
<sup>16</sup> Levin, 2.

<sup>17</sup> GAO, Acquisition Outcomes, November 2005, 7.

<sup>18</sup> Levin, 1.

<sup>19</sup> ibid.

- <sup>20</sup> Christie, 1.
- <sup>21</sup> ibid.
- <sup>22</sup> ibid.
- <sup>23</sup> Levin, 2.
- <sup>24</sup> ibid.

<sup>25</sup> Center for Defense Information. "The Real Problem in DOD Acquisition." *Cdi.org*, 14 march 2006. http://www.cdi.org/friendlyversion/printversion.cfm?documentID=3354, 1.

<sup>26</sup> Dr. William E. Turcotte, "Service Rivalry Overshadowed." *Airpower Journal*, Fall 1996.

http://www.airpower.au.af.mil/airchronicles/apj/apj96/fall96/turcotte.html., 1.

<sup>27</sup> Turcotte, 5.

<sup>28</sup> Cooper and Rumbaugh, 61.

<sup>30</sup> ibid.

<sup>&</sup>lt;sup>1</sup> Defence Talk: Global Defense and Military Portal, "Defense Department Budget Request Pushes Reform." *Defencetalk.com*, 11 may 2009. http://www.defencetalk.com/defensedepartment-budget-request-pushes-reform-18687/

<sup>&</sup>lt;sup>3</sup> United States Marine Corps. "Marine Corps Systems Command- About Us." http://www.marcorsyscom.usmc.mil/aboutus/

<sup>&</sup>lt;sup>4</sup> Holzworth, Maj C. E., "Operation Eagle Claw: A Catalyst for Change in the American Military." *GlobalSecurity.org*, 1997, http://www.globalsecurity.org/military/library/report/1997/Holzworth.html., 1.

<sup>&</sup>lt;sup>6</sup> Rep. Jim Cooper and Russell Rumbaugh. "Real Acquisition Reform." *Joint Forces Quarterly* 55 (4<sup>th</sup> Quarter 2009), 59.

<sup>&</sup>lt;sup>10</sup> GAO, Acquisition Outcomes, November 2005, 7.

<sup>&</sup>lt;sup>11</sup> Cooper and Rumbaugh, 61.

<sup>&</sup>lt;sup>12</sup> GAO, Acquisition Outcomes, November 2005, 8.

<sup>&</sup>lt;sup>29</sup> Cooper and Rumbaugh, 64.

<sup>31</sup> ibid.

<sup>32</sup> Evelyn Layton, "The Defense Acquisition University: Training Professionals for the Acquisition Workforce 1992-2003." (Fort Belvoir, VA: Defense Acquisition University) 2007, v. <sup>33</sup> ibid.

<sup>34</sup> Layton, vi.

- <sup>35</sup> Layton, iii.

<sup>36</sup> Quentin Redman, Andrew T. Crepea, and George Stratton. *Weapon Design Tradeoff: Using Lifecycle Costs*, 2008, http://www.ispa-cost.org/2\_casey.pdf, 13. <sup>37</sup> Cooper and Rumbaugh, 65.

- <sup>38</sup> Christie, 5.

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