AU/ACSC/KROLIKOWSKI/AY09

AIR COMMAND AND STAFF COLLEGE

AIR UNIVERSITY

UNITED STATES ACQUISITION COMMAND

by

Jennifer M. Krolikowski, Maj, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

Advisor: Lt Col Brian C. Tichenor

Maxwell Air Force Base, Alabama

April 2009

1. REPORT DATE **APR 2009**	2. REPORT TYPE		3. DATES COVERED **00-00-2009 to 00-00-2009**
4. TITLE AND SUBTITLE **United States Acquisition Command**			5a. CONTRACT NUMBER
			5b. GRANT NUMBER
			5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)			5d. PROJECT NUMBER
			5e. TASK NUMBER
			5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Air University,Air Command and Staff College,225 Chennault Circle,Maxwell AFB ,AL,36112**			8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY STATEMENT **Approved for public release; distribution unlimited**			
13. SUPPLEMENTARY NOTES			
14. ABSTRACT **see report**			
15. SUBJECT TERMS			

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**43**	

Disclaimer

The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the US government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

Contents

Illustrations

Preface

Throughout my career I have heard statements like acquisition is broken – things cost too much and the warfighter never gets what they want or in a timely manner. I've seen a number of acquisition reform initiatives like quality, AFSO21, and revamping of the 5000 series. For all of the articles and times acquisition reform has been the #1 priority, we still haven't gotten things quite right.

I initially began thinking of alternatives when I was teaching space acquisition at the National Security Space Institute. Most students were frustrated with the process – and let me know about it – and kept asking if there was a better way to do business. At the time I could not answer them, but internally accepted the challenge to come up with a solution. When I was selected to attend ACSC, I knew that I wanted to further develop those ideas for my research paper.

I'd like to thank my husband, Sean, for his insistence on my going to school - even though it meant us being apart for 10 months. In addition, his support and encouragement were instrumental to keeping my sanity as I juggled school and the twins. Thanks also go to my mom for coming to visit nearly every month and taking care of the boys so I could write this paper as well as giving me an adult to talk to on the weekends. Finally I want to thank Lt Col Tichenor for being as enthusiastic about this topic as I am and letting me pursue this paper.

Abstract

Over the last 20 years there have been numerous reports on how the acquisition process is broken. The Government Accountability Office recently published a report stating that the "total acquisition cost of DOD's 2007 portfolio of major programs under development or in production has grown by nearly $300 billion over initial estimates. Current programs are also experiencing, on average, a 21-month delay in delivering initial capabilities to the warfighter."[1] This is a phenomenon that is affecting the entire DoD, not just one particular Service or Agency. The result has been a loss of faith by Congress and OSD on the Services' ability to acquire capabilities. Focus has resided in fixing the unwieldy cost overruns, schedule slips, and performance deficits and several solutions have been offered to resolve those problems. While great suggestions all, they tend to be a point solution that does not truly address the root cause behind the issue. Through analyzing numerous publications, five root causes come to the foreground as contributing to acquisition failures: requirements discipline, funding uncertainty, optimistic assumptions, frequent management rotation, and industrial base issues.

The DoD can no longer afford to do business as usual – the way systems are acquired must be transformed. By establishing a functional combatant command (FCC) for acquisitions – United States Acquisition Command – the acquisition process will finally be revolutionized in a way that gives acquirers the best possible chance for successful programs. This paper proposes a notional organization and processes for such a command. Additionally, it will provide an argument on how this FCC would resolve many of the current acquisition issues.

---

[1] *DEFENSE ACQUISITIONS: Fundamental Changes Are Needed to Improve Weapon Program Outcomes,* Government Accounting Office, Washington, DC, Sept 25, 2008, Intro.

Introduction

During his introduction of the Defense Acquisition Reform Act of 2007, Senator John

McCain aptly stated, "the acquisition process continues to be dysfunctional."[2] In numerous

reports the GAO has said that "DoD management of its major weapon system acquisitions… has

been on the GAO high risk list since 1990."[3] There is a general consensus that acquisition is

broken and has been for a long time. Initial acquisition reform can be traced back to the 1990s

where various leaders over the next 20 years tried to improve pieces of the acquisition processes.

Forming Integrated Product Teams (IPTs), rewriting the DoD Directive 5000.1 and DoD

Instruction 5000.2 (at one point the 5000 series was even canceled), and implementing the

Earned Value Management System (EVMS) were all attempts at fixing acquisition.[4] However,

these were band-aids to minor parts of the problem and did not address the real issue as a whole.

Today, the entire DoD continues to be plagued by issues in nearly all of its Major

Defense Acquisition Programs (MDAP). From the Navy's Littoral Combat Systems (LCS), the

Air Force's Combat Search and Rescue Vehicle Replacement Program (CSAR-X), the Air

Force's Space Based Infrared System (SBIRS), and the Army's Land Warrior, acquisition

problems can be found in each Service and within any domain. As a result, Congress and OSD

have lost faith in the Services' ability to acquire capabilities. The consequence has been

immense budget cuts by Congress and rescinding the delegation of milestone decision authority

(MDA) for several programs by OSD.

There have been a plethora of suggestions for rectifying this situation. Proposed

solutions include better education of the acquisition force, cost estimating, contract negotiation,

and government requirements discipline.[5] While great suggestions all, either they are a point

solution to a specific area (which does not address big picture processes) or the DoD does not

enforce implementation. Program managers are left to do their best for their procurement rather than admitting an overhaul of DoD acquisitions, with an accompanying culture change, is needed.

The DoD can no longer afford to do business as usual – the way systems are acquired must be transformed. By establishing a functional combatant command (FCC) for acquisitions – United States Acquisition Command – the acquisition process will finally be revolutionized in a way that gives acquirers the best possible chance for successful programs. This paper proposes a notional organization and processes for such a command. Additionally, it will provide an argument on how this FCC would resolve many of the current acquisition issues.

Current Acquisition Process

In order to understand the challenges the acquisition community faces, it is necessary to examine the processes used to procure systems. This section will provide a high level review of the Joint Capabilities Integration and Development System (JCIDS); the Planning, Programming, Budgeting and Execution Process (PPBE); and the Defense Acquisition System (DAS). A more detailed look can be found in Appendix A: JCIDS, Appendix B: PPBE, and Appendix C: DAS. Essentially, JCIDS establishes the requirement, PPBE funds it, and DAS acquires it. It is essential these three processes are in synch for a program to be successful. First, looking at the guidance for equipping forces, which is the reason for purchasing systems, is prudent.

Per the US Code Title 10 "it [the Service] shall be organized, trained, and equipped primarily for prompt and sustained offensive and defensive air operations."[6] While this direction is within the section regarding the Air Force, similar language is present in the Chapters on each of the other Services. Each of the Services has interpreted the Code to mean that it had to

procure the items it needed on its own. However, a different interpretation of the Code is that another organization could acquire the items the Service needs in order to be equipped. A prime example of this interpretation is US Special Operations Command (USSOCOM). USSOCOM is able to obtain its items outside of the traditional Service procurement process. Therefore, this distinction does not lawfully exclude the possibility of establishing a US Acquisition Command.

The Joint Capabilities Integration and Development System (JCIDS) is used to ascertain whether a capability gap exists and subsequently if a materiel solution is warranted. Based on strategic guidance, the Geographical Combatant Commanders (GCCs) determine if national objectives can be accomplished with existing assets. If not, a capability gap has been identified. The GCC then submits the gap to the Joint Requirements Oversight Council (JROC).

> The JROC will assign an appropriate sponsor to perform the necessary FSAs [Functional Solution Analysis] and develop the requisite DCRs [DOTMLPF change recommendation] to initiate non-materiel changes or ICDs [Initial Capabilities Document] to initiate the development of solutions to the gaps identified by the FCB [Functional Capabilities Board].[7]

If a materiel solution is required, the sponsor completes an Analysis of Alternatives thereby honing in on the system to be procured. Throughout this process, keeping a joint mindset is encouraged so that whatever is acquired is born joint and interoperable. Figure 1 depicts the JCIDS process flow.
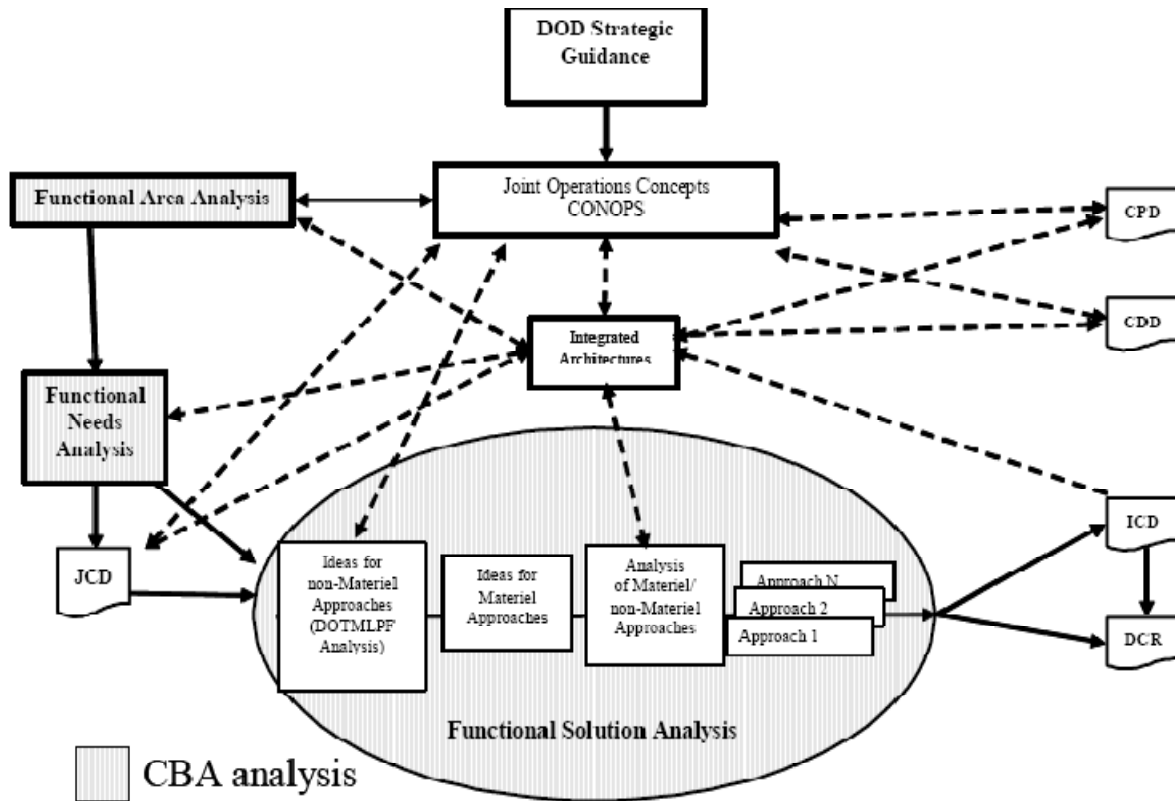
Figure 1: Joint Capabilities Integration and Development System [8]

The Planning, Programming, Budgeting and Execution Process (PPBE) is the process used to obtain resources within the DoD. First, the Service prioritizes and plans which items to acquire based on identified needs. Then, the Service submits a Program Objective Memorandum (POM) that requests funding for their programs to OSD. A Congress-approved budget is subsequently provided to the Service to execute its system acquisition. The POM is submitted every two years and reflects the money requested for a six year time frame, or fiscal year defense program (FYDP). In other words, the FY10 POM will request funds for FY10-FY16.

Once the user's requirements have been established and the funding allocated, the program progresses through the Defense Acquisition System (DAS). When a program manager concludes all of the required activities and tasks have been completed in a phase, the program is

presented to the Milestone Decision Authority (MDA) to receive permission to proceed to the

next phase. The MDA can allow the program proceed, remain in the current phase, or cancel the

program. Figure 2 depicts the DAS.
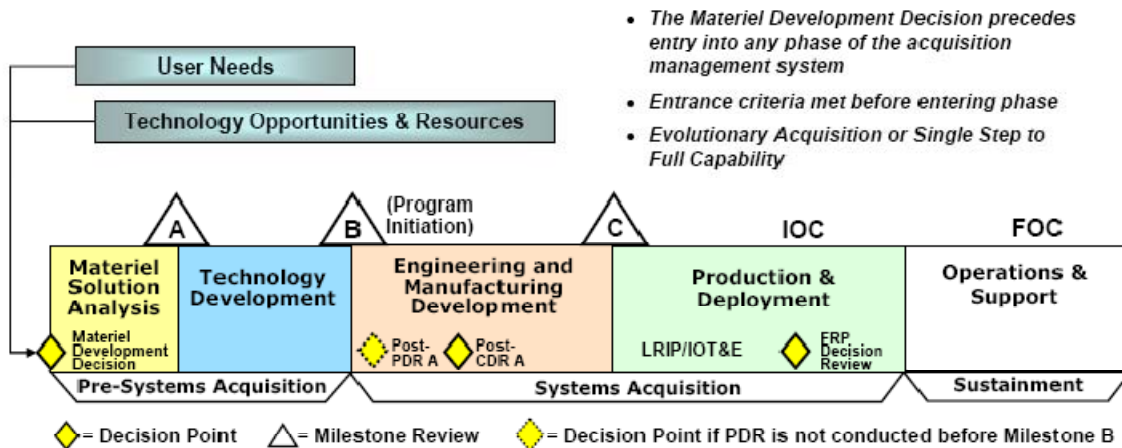
Figure 2: Defense Acquisition System [9]

Acquisition Issues

Within the current acquisition process, most programs have cost overruns, schedule slips,

and technical deficiencies. The Government Accountability Office recently published a report

stating the

> total acquisition cost of DOD's 2007 portfolio of major programs under
> development or in production has grown by nearly $300 billion over initial
> estimates. Current programs are also experiencing, on average, a 21-month delay
> in delivering initial capabilities to the warfighter.[10]

Given these growths, there is a "tendency to drop requirements that the warfighter has said they

need"[11] in order to get the cost and schedule back on track. In the acquisition community, cost

and schedule has been shown to have a definite priority over performance. This obviously

increases the risk to the warfighter when they do not have the requested capabilities when put in

harm's way.

Unfortunately, the tendency has been to cite the cost overruns, schedule slips, and performance shortfalls as the reasons why acquisition is broken. The explanation behind why these things are occurring and how it should be fixed is typically not addressed. If it is addressed, the answer presented is a point solution and not something that will universally save Acquisitions. Therefore, identifying the true underlying root causes is prudent.

Root Causes

In nearly every recent report on defense acquisition, the GAO has stated, "at the strategic level, DoD's processes for identifying warfighter needs, allocating resources, and developing and procuring weapon systems… are fragmented and broken."[12] Based on their assessment, no one single, overall factor causes programs to be unsuccessful. Through analyzing numerous publications, five root causes come to the foreground as contributing to acquisition failures: requirements discipline, funding uncertainty, optimistic assumptions, frequent management rotation, and industrial base issues.

There are two sides to requirements discipline. First is the ability to establish the requirement set, the second is the ability to avoid requirements creep. "From 1992 to 2007, the estimated acquisition costs needed to complete the major acquisition programs in DoD's portfolio increased almost 120 percent, while the funding provided for these programs only increased 57 percent."[13] This is a clear sign that the DoD is overextending itself and not distinguishing clear programmatic priorities. It is not establishing an unequivocal purchase list of only those things that fit within the given resources. As a result "too many programs [are] chasing too few dollars."[14] USD(AT&L) Ken Krieg has recognized that "strategic decision-making is one of the real challenges to acquisition performance."[15] Essentially, the success of

acquisitions depends upon making the tough decisions about the best one or two items to procure completely versus trying to procure a little bit of everything.

Avoiding requirements creep is thought of most when an acquirer is told to maintain requirements discipline. Introducing new requirements into a program can have devastating effects. Through their statistical analysis of several major Army programs, Lucas and Rhoades found "significant changes in systems requirements will adversely impact program outcomes, particularly schedule and/or cost."[16] Additionally, "the negative impact on the average rates of success was greatest when changes had occurred in mid-development (typically after the Critical Design Review)."[17] Requirements might change for a variety of reasons. It can range from a change in threat to the users forgetting something they needed to poor translation of what is needed by the user to the acquirer and then to the contractor. Because the program manager wants to be accommodating and relevant (i.e. keep funding), the additional requirements are accepted. Since cost, schedule, and performance are inextricably tied together, it is no wonder if the requirements go up, so does the cost and schedule.

Funding uncertainty can play a huge role in program success. In their study, Lucas and Rhoades also analyzed funding impacts on programs. "Where potential or actual funding changes were encountered, it appears to have had significant consequences."[18] Typically, if funding is cut, the schedule is stretched out as tasks are shifted into years already programmed with money. If maintaining schedule is critical, capabilities are cut in order to stay within the new funding line. The cycle becomes vicious as program managers scramble to re-plan and begin executing before any further cuts occur. Besides the programmatic woes, it was found that "funding uncertainties had directly contributed to poor team performance due to team turnover and inadequate staffing."[19] Essentially, once a program is in financial jeopardy, members of the

"A" team leave to find more stable programs. Expertise is lost. The new team has a high learning curve and runs the risk of having potentially less capable performers. This leads the program further down the instability spiral. Thus, having a secure funding profile can go a long way towards having a successful procurement.

Probably one of the most significant root causes of acquisition failure today is the presence of overly optimistic assumptions. The GAO has maintained that "managers rely on assumptions that are consistently too optimistic, exposing programs to significant and unnecessary risks and ultimately cost growth and schedule delays."[20] This can be traced to several reasons. First, "the knowledge needed to develop realistic cost estimates was often lacking"[21] leading managers to believe they could accomplish an acquisition within their funding profile. As the program progressed, inevitable cost overruns ensued from the poor estimates. "Total acquisition costs for the fiscal year 2007 portfolio of major defense acquisition programs increased 26 percent and development costs increased by 40 percent from first estimates."[22] If the cost estimate had been more accurate, the appropriate resources could have been obtained and a perceived cost overrun would not have ensued.

Secondly, USD(AT&L) "Young said the other services have underfunded programs, offered 'poorly built budgets' and underestimated requirements costs as a way to seek a cash infusion by OSD-provided funds."[23] The GAO has expressed its frustration by asserting "DoD investment decisions cannot continue to be dictated by the military services who propose programs that overpromise capabilities and underestimate costs to capture the funding needed to start and sustain development programs."[24] With defense budgets so tight, it is not surprising that the Services have tried to make their proposed programs look more attractive by offering "low-cost" funding requests and then resorting to asking for more money once the program is

started. Despite the Services' best intentions, their optimistic presentation to leadership about their procurements is contributing to acquisition's overall problem.

Finally, "programs and projects fail because they are not executed well. And they are not executed well because decision makers are not informed with timely, accurate, and helpful information."[25] As stated earlier, the DAS requires that certain reviews are held and milestones are met before a program can pass to the next phase. Based on the information they are presented, the program manager/MDA only have to deem the program as "sufficiently ready" to proceed to the next review/phase. It is not uncommon for program managers to oversell the success of their program in order to convince the MDA the program is sufficiently ready to enter the next phase thereby maintaining schedule. While a program can be stalled indefinitely waiting for all the information, getting the right and realistic information is key.

Another root cause is frequent management rotation. "Average term for managers on 39 major acquisition programs started since March 2001 was about 17 months – less than half the length of the average system development cycle time of 37 months."[26] Subsequently, "new personnel may not feel that their predecessors had correctly defined the threat's implications on requirements, or having not been a party to earlier discussions, been more willing to pursue changes suggested by new knowledge and events."[27] Often with a change in leadership comes a change in vision and program execution. This adds to the instability of the program as the baseline shifts to accommodate the new strategies.

The final root cause deals with the industrial base. The "defense sector saw a raft of mergers and acquisitions during the 1990s."[28] Consequently there may be limited options if a contractor is performing poorly, driving up costs, and slipping schedules. It becomes extremely hard to incentivize contractors to do well if the contractor is aware that government cannot

procure the item elsewhere. Furthermore, the contractors also may fall into the overly optimistic trap. "Boeing had originally touted Wedgetail as a 'low risk and high performance' aircraft program. The company has conceded that it is an 'extremely complex program' with 'hardware and software challenges.'"[29] In order to secure a contract, a company may make its proposal look better than it is, knowing it can ask for more money later. And, since the government has lost the expertise to counter a lot of the contractor's assertions, the risk to program success increases.

As important as resolving the root causes is synchronizing the different acquisition processes. During an interview USD(AT&L) Krieg said, "one of the key things I saw as a problem [about acquisition programs was]… their birthing process was not beautiful. Requirements, acquisition, [and] resources weren't aligned. We didn't hold configuration discipline on any of them as we went along."[30] Senator McCain agreed when he maintained that "requirements, acquisition policy and resources never get in synch."[31] As mentioned before, cost, schedule and performance are inextricably linked. If one is changed, the other two are inevitably affected. Even if all the items that are wrong with acquisition are fixed, if these three pieces are not in line, there will still be issues.

Previously Offered Solutions and Why These are Not Sufficient

Many solutions have been offered to reform acquisitions. Among them are: better government requirements discipline; larger defense budget; better cost estimates; better contract discipline regarding contractor bidding, proposal evaluation, and protesting; implementation of lessons learned; better education for the acquisition core; higher level of program oversight. However, in each case, one "answer" is given as the remedy that will solve all acquisition

problems. For example, one author has advocated that "Congress should increase the modernization budget, which will help reduce unit costs for expensive systems and boost competition among defense contractors."[32] This was his solution to fixing all acquisition problems. Unfortunately giving the DoD more money will not solve its requirements discipline issues.

Likewise, when Acting SecAF Donley was asked where acquisition reform fits into his priorities, he said "it's a very important priority for me… I supported the secretary's decision to move the next steps in [the tanker] source selection over from the Air Force to the Office of the Secretary of Defense."[33] Just because program oversight moves from the Service to OSD, does not automatically mean the program will be successful. OSD will still have to contend with optimistic assumptions and poor cost estimates.

Senator McCain attempted to address a number of issues in his Acquisition Reform Act of 2007.

> Elements of this legislative proposal that provide for "integrated processes" include (1) having the Service Chiefs help oversee acquisition management decisions; (2) standing-up a "tri-chair committee" (so-called because it will be headed by the primary players in the acquisition, resources, and requirements communities) that can help make enterprise-wide investment decisions more powerfully and with greater agility than any other procurement-related organization currently within the Pentagon; (3) increasing the membership of the Pentagon's main requirements-setting body to include leadership from all three spheres; and (4) setting out guidelines that, when coupled with certain provisions currently under law, can help the Pentagon better manage unexpected cost growth.[34]

While among the more comprehensive solutions provided, Senator McCain's proposal primarily adds layers to the bureaucracy and does not resolve the problems in the overall processes themselves.

Ironically most reform proposals try to resolve a single issue within a given process rather than questioning if the process is appropriate. There are many issues within the acquisition processes that need to be addressed. For instance, the JCIDS process is by and large a great idea and fixing requirement discipline is a must. However, from the start, JCIDS excludes possible solution sets which could be cheaper and easier to procure. Since the JROC determines which Service will conduct the FSA, the solution will be driven by that Service's culture – the Navy will say the answer looks like a ship, the Army a tank, the Air Force an aircraft. A true Analysis of Alternatives (AoA) comes too late in the process and is already Service specific.

Additionally, the JROC oversight is only for MDAP programs. Small programs that have huge impacts on the DoD can be overlooked. A prime example is Blue Force Tracking (BFT). Each Service knew it needed to procure user equipment and did so on its own. Because the dollar amount did not push the equipment into the MDAP category, each Service procured its items without considering what another Service was doing. Therefore, each terminal has different functionality, cannot interface with another Service's terminal, and often cannot see the other Services' tracks – which defeats the purpose of BFT. Only after all the systems were deployed and the interoperability issues identified has the JROC intervened and named the Army to take the lead and fix the problems.

Finally, during the FSA, the DOTMPLF (doctrine, organization, training, materiel, personnel, leadership and education, and facilities) analysis does not typically take into account current capabilities that could be adapted to a new mission – like the B-52 being used for close air support. Additionally the FSA does not lend itself to determining if one Service has a

capability another Service could use, such as a SATCOM radio the Army has that the Navy could use too.

PPBE is far from perfect as well. As discussed before, the POM requests resources for a six-year period. This does not reflect the total money needed for an acquisition program since many major systems take longer to procure than they are budgeted for. This leads to funding uncertainty in the out years of the program. In addition PPBE is not responsive. If there is a new widget invented today and is deemed needed now, the program must wait two years before it can get into the funding process cycle. Otherwise, the new program must try to steal money from an existing program, leading to the second program's instability.

Lastly, within DAS, the program manager can have two bosses – the MDA and the MAJCOM that requests their funding. Since both the MDA and the MAJCOM can cancel a program (without consent from the other), it puts the program manager in a very precarious position of trying to keep both needs satisfied, especially when the leadership conflicts.

To conclude, while the ideas behind acquisition reform have been valid in and of themselves, they are not sufficient to solve all the issues at hand. Additionally, none of the solutions rectify many of the fundamental issues in the processes themselves. The remainder of this paper will offer an all encompassing solution and present why that solution will work.

United States Acquisition Command

The basic premise of United States Acquisition Command (USACQCOM) is to establish a single office that is responsible for all aspects of acquisition for the entire DoD. This section will describe the processes USACQCOM would use, the organization needed to accomplish the mission, and why USACQCOM is the answer to acquisition reform.

New Acquisition Processes

The process begins with the Global Combatant Commanders (GCCs) and DoD Agencies taking the strategic guidance and determining if there is a capability gap. This is no different than the current JCIDS process. However, if a need is identified, the GCCs and Agencies notify USACQCOM. Oftentimes great ideas come from other places than the GCCs. Frequently the best ideas can come from those who use the equipment on a daily basis. However, many warfighters have said they did not know where to go to voice their ideas. They did not realize that the X-5 (X being either the G, A, or N for Army, Air Force or Navy, respectively) in their MAJCOM or Staff could collect those ideas. With one centralized place for acquisitions, there should be no doubt as to where procurement or modification ideas should go. In addition, "Army Brig Gen Thomas Mayville told reporters… that a 'bottom-up' approach to acquisition – with deployed troops identifying what they need – makes the process faster and more responsive."[35]

The first step that USACQCOM has when it receives a capability gap is to review the DoD Inventory Database (DID) to determine if an existing asset could be used as a stop-gap until a better solution is developed. This allows something to get to the field quickly. It also fosters creativity to use assets in ways never originally intended, thereby saving resources. Currently the DID does not exist. There is no comprehensive list of every item the DoD owns and operates whether it is beans and bullets to major platforms. This is one reason why there are so many Service-specific items and interoperability issues. No one really knows what is all in the field. By establishing a database that lists each item, what it does, where and how it operates, and then using it as a resource to solve capability gaps, it will become apparent where the Services can

save resources by using something that already exists. Using the DID for spectrum de-

confliction or to establish interoperability requirements is an added benefit.

If nothing in the DID can be used, or if an item is not sufficient in completely solving the

gap, USACQCOM will conduct an Analysis of Alternatives (AoA). This differs from the current

JCIDS process where the AoA does not begin until after a Service has been given the lead and a

Functional Solution Analysis (FSA) is completed. By doing the AoA up front, leadership can

better decide which Domain (i.e. land, sea, air, space or cyberspace) should pursue the solution.

For example, a GCC deems it necessary to precisely navigate indoors in order to be able to

conduct urban warfare. Because of its weak signal, GPS cannot be used inside, therefore a

capability gap is identified. In the current JCIDS process, the Air Force would automatically be

designated the lead Service and chartered to conduct the FSA, since it currently owns and

operates the system. They would find a materiel solution is needed and then conduct an AoA to

ascertain possible solution sets. More than likely, the results would be highly technical or

involve changes to the satellite, such as boosting the output power. This would require large

amounts of resources and time to accomplish. However, if an analysis was conducted with each

Domain trying to determine how it would solve the gap, a less resource-intensive, faster

acquisition solution could develop. In the previous example, the Land Domain may conclude

GPS-equipped cell phones or signal amplifying antennas placed throughout the city is adequate

to resolve the capability gap. The two solutions, and their subsequent acquisitions, are very

different, but the end result is the same. Although this example followed a materiel solution, as

part of the AoA, each domain would need to consider all aspects of DOTMLPF.

Once it has been decided which Domain's alternative should be acquired, the

requirements documents are generated. Each Domain Office would have a requirements shop

with members from each Service to ensure each Service's needs are incorporated and interoperability issues are addressed. To illustrate, a gap is identified in MEDEVAC capability. Through the AoA, it is decided the Air Domain presents the best solution and more aircraft are needed. However, in this case, the Air Force is not the primary user – the Army is. Therefore, the requirements documents must reflect all Service needs, not just what the Air Force desires. The Air Domain Office writes all air requirements because they are most familiar with speaking in aircraft language, not because the acquisition was given to a specific Service. So, regardless of which Service is the end user of the system, if it is an aircraft, the Air Domain Office generates the requirements.

After the Domain Office has created the Initial Capability Document (ICD), it is given to a Service's acquisition center to begin the DAS process. An acquisition center remains under the purview of its Service – Space and Missile Systems Center (SMC) would stay under the Air Force. Similar to how USTRANSCOM taps a Service to accomplish a mission, so would USACQCOM tap a Center for a procurement. However, just as the requirements are generated by the domain regardless of who is using it, so is the acquisition. Therefore, if a ship is needed by the Army, the Navy's acquisition center is responsible for the procurement. In theory, the Navy is the best ship builder so who better to build ships for the DoD than the Navy. As an added bonus, this also gives the acquisition officers more opportunities for joint assignments. The DoD Acquisition Corps could work in any Service's acquisition programs since the Service is procuring for the DoD, not for their Service. An Army acquisition officer could just as easily work in an Army center buying Land Warrior as an Air Force or Navy acquisition center buying helicopters or boats, respectively. Because of this, current acquisition corps manning issues lessen and joint-mindedness remains in the foreground.

While the requirements are being generated, the USACQCOM Commander, with input from the GCCs, will begin to prioritize which capabilities are needed most across the entire DoD. Therefore, an air procurement could be racked and stacked against a ship or tank purchase. It would no longer only compete against other air acquisitions. This approach shifts the focus from what should be bought for each Service to what should be bought for the military. The priority list is reviewed each time the strategic guidance changes and a subsequent capability gap analysis is produced. This prioritization will come into play later during resource allocation.

As mentioned earlier, synchronizing requirements, resources, and the acquisition processes can be challenging. USD(AT&L) Krieg has maintained that "the pricing methodology and risk methodology ought to be aligned."[36] To ensure this, the way the PPBE is executed must be modified. First, the DoD budget should be determined by how much of the GDP senior leaders allocate to defense – a top down versus bottom up approach. Second, the Secretary of Defense would establish which percentage of the budget goes towards research and development (R&D), procurement, military construction (MILCON), military pay, and operations and maintenance (O&M). Once that is accomplished, all R&D and procurement funds and appropriate levels of military pay and O&M funds are allocated to USACQCOM. The rest of the military pay, O&M, and MILCON are allocated to the Services/GCCs/FCCs. Finally, USACQCOM allocates funding to the established prioritized list of programs – until the money runs out. Therefore, if there are ten programs to fund and there is only enough funding for the first three, the last seven programs are not procured until more funding becomes available. The DoD will have to accept the risk associated with the remaining capability gaps and develop mitigation plans until the gap can be resolved materially.

Too often unnecessary purchases are made at the end of the fiscal year. Or, a Service is reluctant to give back money it has not spent because it is afraid of not getting enough money the next year. The promise of a secure funding profile will incentivize program managers to develop appropriate cost estimates and not underestimate just to get funding. They will also have a greater flexibility to reduce risk if they are assured they will have the funds to buy it down.

In this process, funding becomes more responsive. If a needed capability vaults in priority or newly enters the list, that program could get money immediately versus the current process where the program may have to wait several years before funding becomes available.

Under this Command, funds would be seen as DoD money vice Service money. Currently, most joint programs get money from multiple Services. The upside is that if the lead Service does not have enough money to procure a system on its own, the lead Service can still acquire the program by using other Services' funds. The downside comes if the second Service pulls its money for whatever reason. The program becomes un-executable. By taking the Service allocation out of the equation and providing one funding source, program stability is increased dramatically.

Now that the program manager has the requirement set and resources allocated, the acquisition process can begin. The current DAS process is actually fairly robust and does not require much change. The only piece to modify is how program oversight is conducted. Having the program manager report to a single boss alleviates trying to keep two masters' needs satisfied, especially if the leadership conflicts. Therefore, either the USACQCOM Commander, Deputy, or Senior Civilian will be the MDA depending how they distribute the programs among each other. The MDA is ultimately responsible for keeping the program manager accountable with how the acquisition is executed. If at all possible the program manager should remain in his

position for an entire phase of the acquisition. This will help relieve learning curve issues and arbitrary change to a program when a new leader comes in. However, if the program manager consistently makes poor decisions and wastes money, the MDA should not hesitate to remove him from office. The MDA should be used to settle requirements interpretation issues as well. The MDA is also the interface between USACQCOM and the SecDef on the progress of the procurements.

Contracts would be used that incentivize the Contractor to excellence. Many current contracts pay out award fees regardless of the Contractor's level of performance. Establishing more cost plus incentive fee contracts will resolve some Contractor's tendencies to low-ball a bid in order to secure the work. If the award fee gives the Contractor a portion of the procurement savings – without affecting schedule or trading off requirements – the government will begin to receive better proposals from Contractors. This has worked in the past. In 1994 when the Northridge earthquake hit Los Angeles, it was estimated it would take a year to repair the highway damage. In order to alleviate the ensuing traffic burden and minimize lost revenue, Caltrans established a contract where the Contractor received a bonus for every day the project was accomplished early. Of the five major construction efforts, four were finished between 8 and 74 days early. The last was completed on time.[37]

It should be noted that these processes will work for any DoD procurement regardless of acquisition category (ACAT). And, because USACQCOM would procure all ACAT programs, systems that are critical to the DoD – like BFT – will not slip through the cracks because it does not have the dollar amount to bump it up to JROC oversight. Modifications will also be presented to USACQCOM in order to maintain configuration control and interoperability among the users.

Organization

As a Function Combatant Command, USACQCOM will have a modified J-staff construct. Figure 3 presents a notional organizational chart.
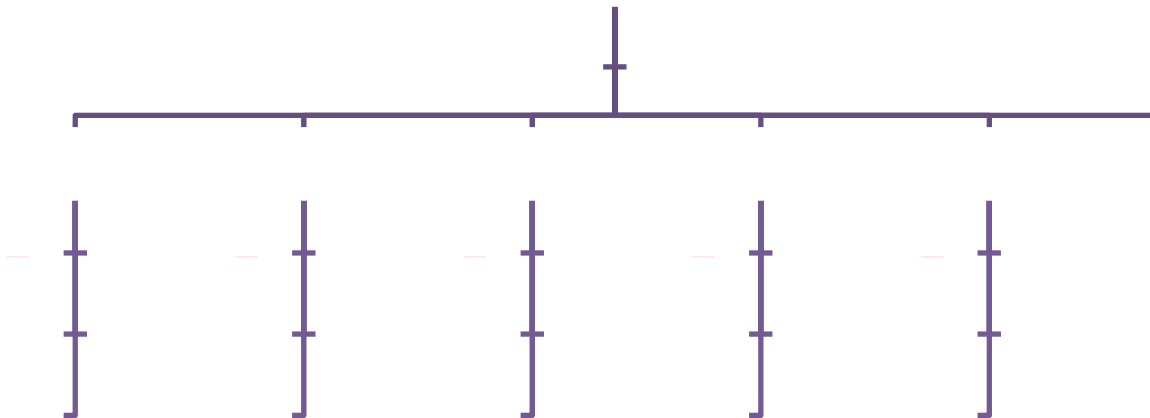

Figure 3: Notional USACQCOM Staff Organizational Chart

The Commander and Deputy positions would rotate among the Services. The Senior Civilian provides continuity as a new Commander and Deputy come in. Each position will be responsible as the MDA for its programs. This divides the workload among the three entities and allows the leadership to supervise programs within their area of expertise.

The next tier down is the Domain Offices and Inventory Analysis. Each of the Domain Offices contains an AoA, Requirements, Finance, Contracting, Cost Estimate Division to accomplish the processes described above. Inventory Analysis is responsible for maintaining, accessing, and determining if the DID has a capability that can be used until a better solution is developed. Staffs have a mix of users and acquirers. However, program office experience is required for all career fields prior to working at USACQCOM so everyone has a common understanding of acquisitions. Since USACQCOM is focused on procuring for the DoD and not

one particular Service, an acquisition officer can work in any of the Domain Offices. This fosters a feeling of jointness and transfer of best practices as they move to another assignment.

Obviously staffing a new FCC can be difficult. However, the billets can be filled with current staffs. Since the requirements process will be done at USACQCOM, the Service's X-5 at the MAJCOMs are no longer needed and can be used. Likewise, many of the X-8 billets can be transferred since the Services would not be dealing directly with most of the DoD budget as in the past. Current Service and OSD acquisition staff can also be reassigned.

Justification

Establishing an FCC for acquisition can be seen as a drastic measure and a daunting task, but one that must be considered. USD(AT&L) "Young said he favors creation of a "purple," or joint, office within the Office of the Secretary of Defense to manage the military's orbital assets and make such spending and programmatic calls."[38] Surely if this step is taken, incorporating this methodology in all aspects of DoD acquisition is not out of the question.

As can be seen, USACQCOM and its revised processes lead to an unbiased Analysis of Alternatives (AoA) toward the best possible platform, a better balance of DoD priorities, an erasure of Service bias, and a reduction, possibly even elimination, of duplication of capabilities/systems across the DoD. It also resolves interoperability/joint issues, rectifies funding issues, cultivates acquisition expertise, and synchronizes requirements, resource, and acquisition processes while promoting adherence to these processes. Each of the five root causes contributed to acquisition issues - requirements discipline, funding uncertainty, optimistic assumptions, frequent management rotation, and industrial base issues - are addressed and resolved using this approach.

Another advantage to adopting USACQCOM is the reduction of the overwhelming bureaucracy that often plagues procurements today. By eliminating the staffs at the Service MAJCOMs and Headquarters, reporting and direction are streamlined and focus can return to acquiring the system. Program managers will still be held fully accountable for their procurement by the MDA. However, they will be able to spend more time addressing issues within their procurement instead of devoting precious time and manpower briefing at least six different organizations to reach a decision as is done today. And, as the Department of Defense moves towards accomplishing missions using the Whole of Government approach, other agencies will have a single procurement point of contact that can assist that agency in furthering the entire US Government interoperability.

A final benefit to implementing USACQCOM is that no laws would have to be changed to implement these recommendations. The language in Title 10 is vague enough that any entity can equip the Services; therefore, the law would not have to be rewritten. The proposed changes to JCIDS, PPBE & DAS are within the purview of the Secretary of Defense and only need his approval to be realized. While there are additional changes to PPBE that would even further facilitate acquisition success, such as eliminating money's tie to a fiscal year or allowing current year money to pay for future work if the funds are available, those would require Congressional approval and may be action leadership would not be willing to take. Regardless, establishing USACQCOM and its new practices can be readily executed without an extensive approval process outside of the Department of Defense.

The downside to creating a centralized USACQCOM is the perceived loss of power and prestige that comes with the control of money and resources. The Services may resist migrating to a consolidated acquisition arm because of this loss. However, it must be emphasized that the

money was never owned by the Service, but rather by the DoD who distributed it to the Service. Changing the Service's mindset is crucial and must be accomplished in order to really achieve a successful acquisition reform.

Summary

Attempts at reforming acquisition have been made over the last 20 years to little avail. Programs continuously experience cost overrun, schedule slips, and performance deficits. Many of the acquisition woes can be traced to five root causes: requirements discipline, funding uncertainty, optimistic assumptions, frequent management rotation, and industrial base issues. USACQCOM, and its associated processes, addresses each of these causes and truly sets up programs for acquisition success.

Setting up a single acquisition entity is not unprecedented. Centralized acquisition has been successfully implemented by other organizations such as Canada's Materiel Group, France's DGA, and USSOCOM. In fact, the Canadian Materiel Group touts that it

> serves the Department of National Defense and the Canadian Forces as a central provider and authority for all defense materiel and equipment programs. The Group manages equipment through its entire life cycle, beginning with initial concept, moving through procurement, maintenance, and support and ending with disposal."[39]

If a USACQCOM is pursued, these would be excellent sources to obtain lessons learned as the DoD transitions to an improved acquisition format.

It is a given that more analysis is needed to implement USACQCOM and several details will have to be fleshed out. However, the construct presented here is a solid start with clear indications why establishing a new FCC – US Acquisition Command – will be an acquisition reform that will succeed.

[2] The Free Library, McCain introduces, 1
[3] GAO, Defense Acquisitions: Fundamental Changes, 1
[4] Birmingham, Ten-year review, 4, 6, 9
[5] http://www.washingtonpost.com/wp-dyn/content/article/2008/03/31/AR2008033102789_2.html
[6] USG, USC Title 10, Subtitle D, Part 1, Chapter 807, para 8062
[7] CJCSM 3170.01C, A-7
[8] CJCSM 3170.01C, A-3
[9] USD(AT&L), DODI 5000.02, 12
[10] GAO, Defense Acquisition: Fundamental Changes, Intro.
[11] The Free Library, McCain introduces, 2
[12] GAO, Defense Acquisitions: Fundamental Changes, Intro
[13] GAO, Defense Acquisitions: Better Weapon, 3
[14] Hedgpeth, GAO blasts, 2
[15] Krieg, DoD News Briefing, 6
[16] Lucas and Rhodes, Lessons from the development, 122
[17] Lucas and Rhodes, Lessons from the development, 122
[18] Lucas and Rhodes, Lessons from the development, 118
[19] Lucas and Rhodes, Lessons from the development, 119
[20] GAO, Defense Acquisitions: Fundamental Changes, Intro
[21] GAO, Defense Acquisitions: Fundamental Changes, 8
[22] GAO, Defense Acquisitions: Fundamental Changes, 2
[23] Bennett, DoD Acquisitions chief, 1
[24] GAO, Defense Acquisitions: Fundamental Changes, Intro
[25] Miller, Independent Program Oversight, 66
[26] GAO, Defense Acquisitions: Better Weapon, 9
[27] Lucas and Rhodes, Lessons from the development, 126
[28] Spring, Congress Needs to Focus, 1
[29] Charette, Weapons Acquisition Problems, 1
[30] Krieg, DoD News Briefing, 5
[31] The Free Library, McCain introduces, 2
[32] Spring, Congress Needs to Focus, 1
[33] Donley, DoD New Briefing, 1
[34] The Free Library, McCain introduces, 2
[35] Miles, Warfighters Drive, 1
[36] Krieg, DoD News Briefing, 6
[37] USDOT, Effects of Catastrophic Events, all
[38] Bennett, DoD Acquisitions chief, 1
[39] Canada Materiel Group, Home, 1

Appendix A: JCIDS

The Joint Capabilities Integration and Development System (JCIDS) is a joint-concepts-centric capabilities identification process that allows joint forces to meet future military challenges. The Joint Capabilities Integration and Development System process assesses existing and proposed capabilities in light of their contribution to future joint concepts. Joint Capabilities Integration and Development System, supported by robust analytic processes, identifies capability gaps and potential solutions. While Joint Capabilities Integration and Development System considers the full range of doctrine, organization, training, materiel, leadership and education, personnel and facilities (DOTMLPF) solutions, for purposes of this Guidebook, the focus remains on the pursuit of "materiel" solutions.

Joint Capabilities Integration and Development System acknowledges the need to project and sustain joint forces and to conduct flexible, distributed, and highly-networked operations. Joint Capabilities Integration and Development System is consistent with the DoD Directive 5000.1 charge for early and continuous collaboration throughout the Department of Defense. Joint Capabilities Integration and Development System implements a capabilities-based approach that leverages the expertise of government agencies, industry, and academia. Joint Capabilities Integration and Development System encourages collaboration between operators and materiel providers early in the process, and enhances the ability of organizations to influence proposed solutions to capability shortfalls. Joint Capabilities Integration and Development System defines interoperable, joint capabilities that will best meet the future needs. The broader DoD acquisition community must then deliver these technologically sound, sustainable, and affordable increments of militarily useful capability to the warfighters.

The revolutionary transformation to Joint Capabilities Integration and Development System, coupled with the evolutionary emergence of a more flexible, responsive, and innovative acquisition process should produce better integrated and more supportable military solutions; a better prioritized and logically-sequenced delivery of capability to the warfighters, despite multiple sponsors and materiel developers; and an improved Science and Technology-community focus on future warfighting capability needs.

Joint Capabilities Integration and Development System informs the acquisition process by identifying, assessing, and prioritizing joint military capability needs; these identified capability needs then serve as the basis for the development and production of acquisition programs. Joint Capabilities Integration and Development System is fully described in an instruction (CJCS Instruction 3170.01) signed by the Chairman of the Joint Chiefs of Staff. This instruction establishes the policies for Joint Capabilities Integration and Development System, and provides a top-level description of the process. A supplementary manual (CJCS Manual 3170.01) provides the details necessary for the day-to-day work in identifying, describing, and justifying joint warfighting capabilities. The manual also includes the formats that describe the content required for each Joint Capabilities Integration and Development System document.

For major defense acquisition programs or major automated information systems subject to OSD oversight, the products of the Joint Capabilities Integration and Development System process directly support the Defense Acquisition Board and Information Technology Acquisition Board in advising the Milestone Decision Authority for major milestone decisions… Joint Capabilities Integration and Development System provides similar support to other acquisition programs, regardless of the milestone decision authority. Where appropriate, the Joint

AU/ACSC/KROLIKOWSKI/AY09

Capabilities Integration and Development System process and its products may be tailored when applied to automated information systems.

Figure 1.3.1. Joint Capabilities Integration and Development System and Defense Acquisition

There are several key points portrayed in Figure 1.3.1.. First, Joint Capabilities Integration and Development System is based on a series of top-down analyses ultimately derived from formal strategic-level guidance, including the National Security Strategy, National Military Strategy, Joint Vision 2020, and the report of the Quadrennial Defense Review. Second, these analyses assess existing and proposed capabilities in terms of their contribution to emerging joint warfighting concepts. Moreover, rather than focusing on the capabilities of individual weapon systems in isolation, the analyses assess capabilities in the context of integrated architectures of multiple interoperable systems. Third, from these overarching concepts, the Joint Capabilities Integration and Development System analysis process identifies capability gaps or shortcomings, and assesses the risks associated with these gaps. These gaps may be addressed by a combination of materiel and/or non-materiel solutions (non-materiel solutions would be changes to doctrine, organization, training, leadership and education, personnel, and facilities). Fourth, recommended materiel solutions, once approved, lead to acquisition programs. For such programs, at each acquisition milestone, Joint Capabilities Integration and Development System documents are provided that will guide the subsequent development, production and testing of the program. Further information on the Joint

Capabilities Integration and Development System analysis process, as well as the nature and role of each of the Joint Capabilities Integration and Development System documents, can be found in CJCS Instruction 3170.01, Enclosure A.

For Acquisition Category I and IA programs, and other programs designated as high-interest, the Joint Requirements Oversight Council (JROC) reviews and validates all Joint Capabilities Integration and Development System documents under its purview. For Acquisition Category ID and IAM programs, the JROC makes recommendations to the Defense Acquisition Board or Information Technology Acquisition Board, based on such reviews. JROC responsibilities are established by law (10 U.S.C. 181). The JROC is chaired by the Vice Chairman of the Joint Chiefs of Staff, who importantly also serves as the co-chair of the Defense Acquisition Board. The other JROC members are the Vice Chiefs of each military service. – *taken from Defense Acquisition Guidebook*[40]

Appendix B: PPBE

The purpose of the PPBE process is to allocate resources within the Department of Defense. It is important for program managers and their staffs to be aware of the nature and timing of each of the events in the PPBE process, since they may be called upon to provide critical information that could be important to program funding and success.

In the PPBE process, the Secretary of Defense establishes policies, strategy, and prioritized goals for the Department, which are subsequently used to guide resource allocation decisions that balance the guidance with fiscal constraints. The PPBE process consists of four distinct but overlapping phases:

Planning. The planning phase of PPBE, which is a collaborative effort by the Office of the Secretary of Defense and the Joint Staff, begins with a resource informed articulation of national defense policies and military strategy known as the Strategic Planning Guidance. The Strategic Planning Guidance is used to lead the planning process, now known as the Enhanced Planning Process. This process results in fiscally constrained guidance and priorities - for military forces, modernization, readiness and sustainability, and supporting business processes and infrastructure activities - for program development in a document known as the Joint Programming Guidance. The Joint Programming Guidance is the link between planning and programming, and it provides guidance to the DoD Components (military departments and defense agencies) for the development of their program proposal, known as the Program Objective Memorandum (POM).

Programming. The programming phase begins with the development of a POM by each DoD Component. This development seeks to construct a balanced set of programs that respond to the guidance and priorities of the Joint Programming Guidance within fiscal constraints. When completed, the POM provides a fairly detailed and comprehensive description of the proposed programs, including a time-phased allocation of resources (forces, funding, and manpower) by program projected six years into the future. In addition, the DoD Component may describe important programs not fully funded (or not funded at all) in the POM, and assess the risks associated with the shortfalls. The senior leadership in OSD and the Joint Staff review each POM to help integrate the DoD Component POMs into an overall coherent defense program. In addition, the OSD staff and the Joint Staff can raise issues with selected portions of any POM, or any funding shortfalls in the POM, and propose alternatives with marginal adjustments to resources. Issues not resolved at lower levels are forwarded to the Secretary for decision, and the resulting decisions are documented in the Program Decision Memorandum.

Budgeting. The budgeting phase of PPBE occurs concurrently with the programming phase; each DoD Component submits its proposed budget estimate simultaneously with its POM. The budget converts the programmatic view into the format of the Congressional appropriation structure, along with associated budget justification documents. The budget projects resources only two years into the future, but with considerably more financial details than the POM. Upon submission, each budget estimate is reviewed by analysts from the office of the Under Secretary of Defense (Comptroller) and the Office of Management and Budget (OMB). The purpose of their review is to ensure that programs are funded in accordance with current financial policies, and are properly and reasonably priced. The review also ensures that the budget documentation is adequate to justify the programs presented to the Congress. Typically, the analysts provide the DoD Components with written questions in advance of formal hearings where the analysts

review and discuss the budget details. After the hearings, each analyst prepares a decision document (known as a Program Budget Decision, or PBD) for the programs and/or appropriations under his or her area of responsibility. The PBD proposes financial adjustments to address any issues or problems identified during the associated budget hearing. The PBDs are staffed for comment and forwarded to the Deputy Secretary of Defense for decisions. These decisions are then reflected in an updated budget submission provided to the OMB. After that, the overall DoD budget is provided as part of the President's Budget request to the Congress.

Execution. The execution review occurs simultaneously with the program and budget reviews. The purpose of the execution review is to provide feedback to the senior leadership concerning the effectiveness of current and prior resource allocations. Over time, metrics are being developed to support the execution review that will measure actual output versus planned performance for defense programs. To the extent performance goals of an existing program are not being met, the execution review may lead to recommendations to adjust resources and/or restructure programs to achieve desired performance goals.

PPBE Biennial Cycles. In 2003, the Department adjusted its planning, programming and budgeting procedures to support a two-year cycle that results in two-year budgets. The revised process is described in Management Initiative Decision (MID) 913, dated May 22, 2003. The concept in MID 913 is consistent with submission of a biennial DoD budget that is part of the President's Budget request to Congress for even-numbered fiscal years (FY) (e.g., the FY 2004 President's Budget, submitted to Congress in March 2003, contained justification material for both FY 2004 and FY 2005). In this cycle, the even-numbered years are called on-years, while the odd-numbered years are called off-years. Figure 1. 2.1 displays a nominal timeline for the PPBE phases in an on-year.
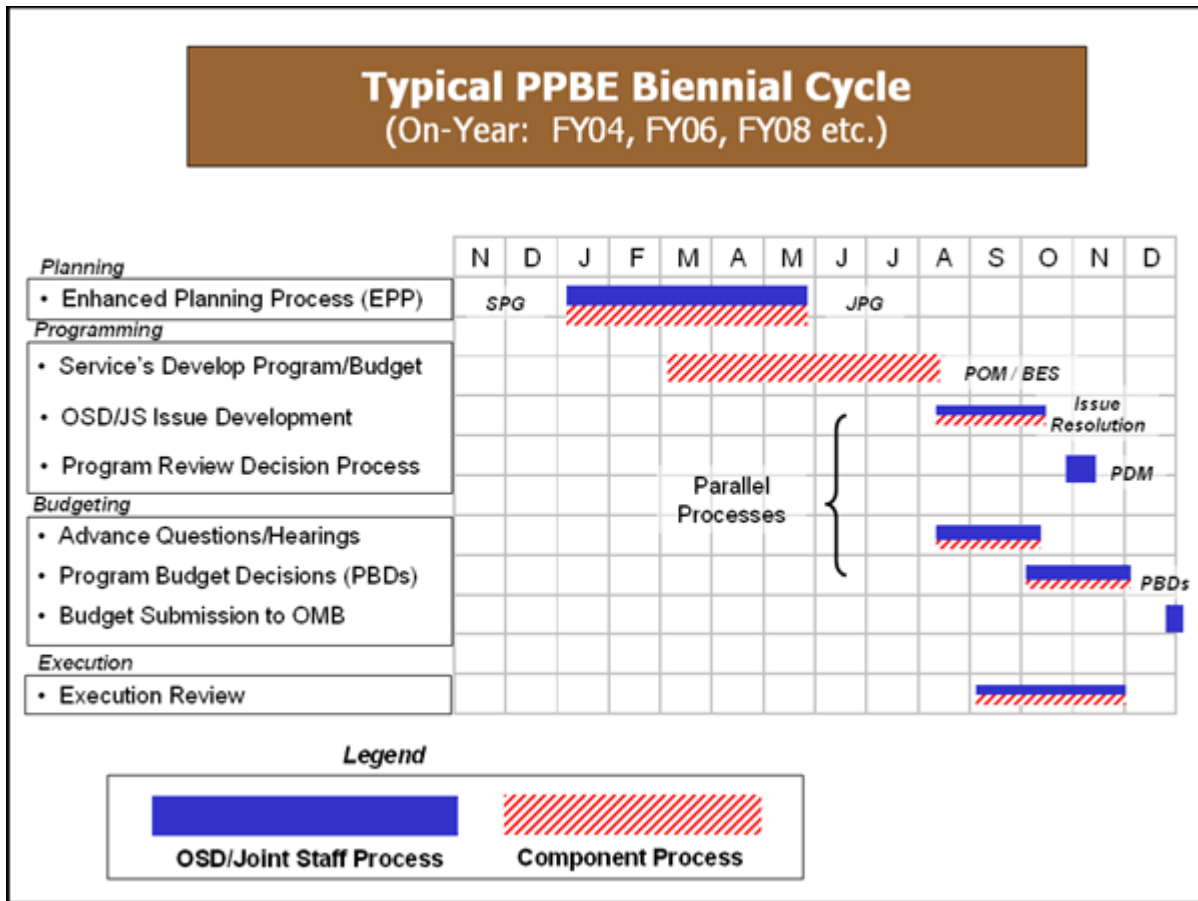
Figure 1.2.1. Typical PPBE Biennial Cycle, "On-Year"

In practice, Congress does not actually provide the Department with biennial appropriations. An amended budget justification must be submitted for the second year of the original biennial request so that Congress will appropriate funds for that second year. The Department uses a restricted process in the off-year to develop an amended budget that allows for only modest program or budget adjustments. Figure 1.2.2. displays a nominal timeline for the limited off-year process.
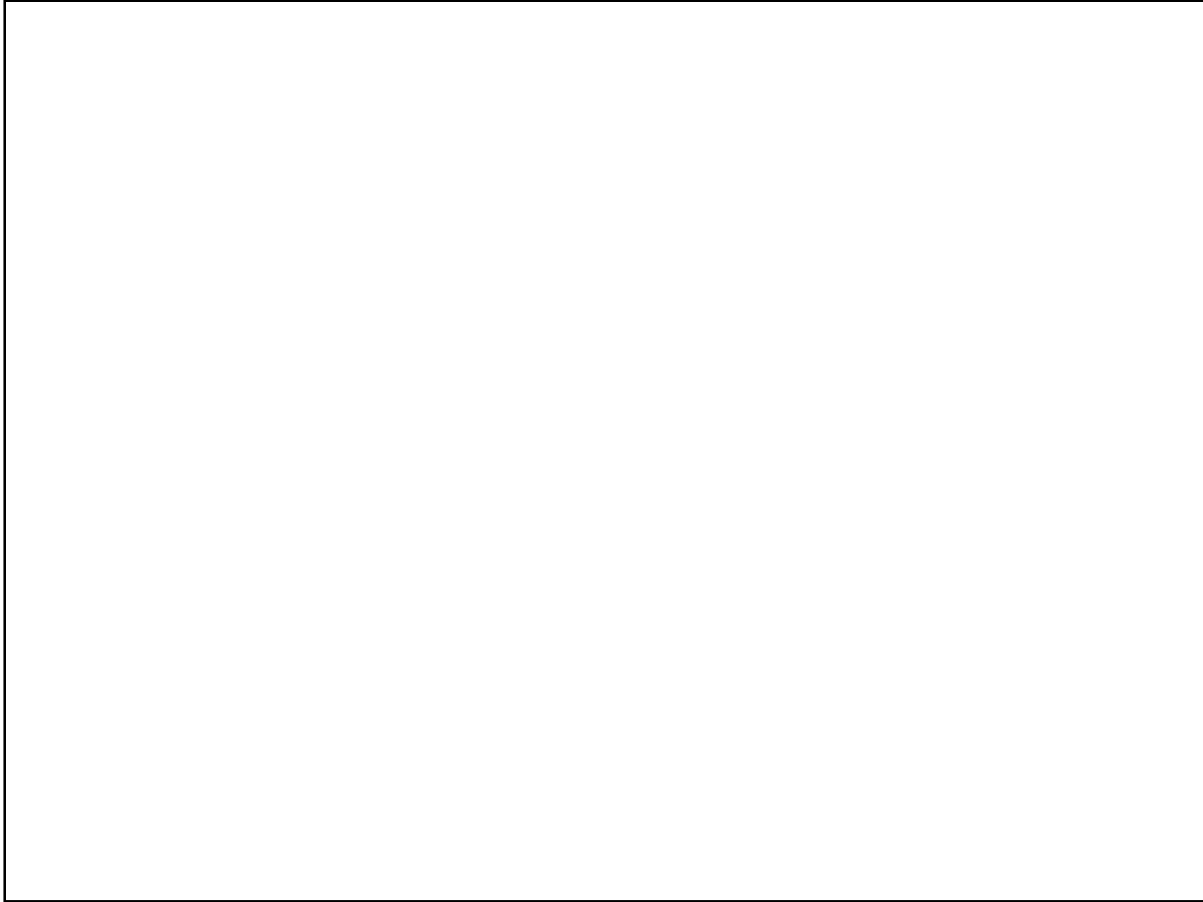
Figure 1.2.2. Typical PPBE Biennial Cycle, "Off-Year"

In the off-year, there are no significant changes to policy, strategy, or fiscal guidance. In fact, there may be no issuance of revised Joint Programming Guidance. If revised Joint Programming Guidance is provided, it would only contain minor revisions (although it could direct studies to support major decisions on strategy or program choices for the following Strategic Planning Guidance or Joint Programming Guidance). In addition, in the off-year, the DoD Components do not provide revised POMs or budget estimates. Instead, the DoD Components are allowed to submit Program Change Proposals (PCPs) and/or Budget Change Proposals (BCPs) to account for fact-of-life changes (e.g., program cost increases or schedule delays). BCPs and PCPs are limited to a single issue and must identify resource reductions to offset any program or budget cost growth. PCPs address issues over a multi-year period, whereas BCPs address issues focused on the upcoming budget year. PCPs are reviewed in a manner similar to on-year program issues, and BCPs are resolved through the issuance and staffing of PBDs.

From a larger perspective, the biennial PPBE cycle is designed to support and implement policy and strategy initiatives for each new four-year Presidential administration. Figure 1.2.3. depicts alignment of the biennial PPBE cycle over a four-year term.
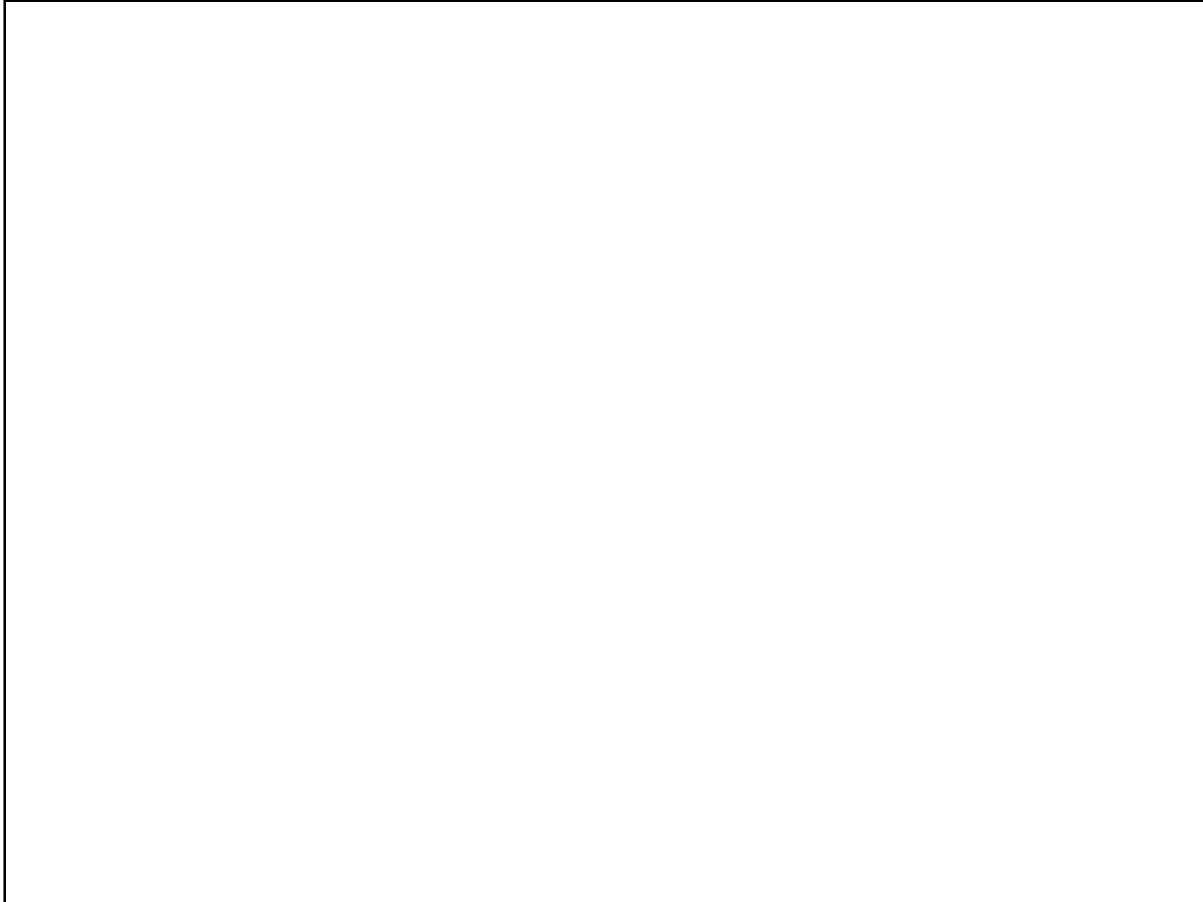
Figure 1.2.3. . PPBE Two-Year Cycles Corresponding to Four-Year Presidential Terms

In the first year of the administration, the President approves a new National Security Strategy, which establishes (1) the worldwide interests, goals, and objectives that are vital to the national security, and (2) the foreign policy, worldwide commitments, and national defense capabilities necessary to implement the national security goals and objectives. Once the new administration's National Security Strategy is established, the Secretary of Defense, in consultation with the Chairman of the Joint Chiefs of Staff, leads the Quadrennial Defense Review (QDR). The QDR is a comprehensive review of all elements of defense policy and strategy needed to support the national security strategy. The defense strategy is then used to establish the plans for military force structure, force modernization, business processes and supporting infrastructure, and required resources (funding and manpower). The QDR final report is provided to Congress in the second year of the administration. In the PPBE process, the QDR final report serves as the foundation document for defense strategy and business policy. Since this document is not available until the second year, the first year of the administration is treated as an off-year, using the President's Budget inherited from the previous administration as a baseline. In the second year, which is treated as an on-year, the Strategic Planning Guidance and Joint Programming Guidance are rewritten to implement the QDR of the new administration. – *taken from Defense Acquisition Guidebook*[41]

Appendix C: DAS

There are 3 activities in the Acquisition Management System: Pre-systems Acquisition, Systems Acquisition, and Sustainment. These activities are divided into five phases. The five phases of the Acquisition Management System are: Materiel Solution Analysis, Technology Development, Engineering & Manufacturing Development & Demonstration, Production and Deployment, and Operations and Support. Each Phase is preceded by a milestone or decision point.

There are 6 milestones or decision points: They are Material Development Decision (MDD), Milestone A, Milestone B, Post Critical Design Review Assessment, Milestone C and Full-rate Production Decision. User needs and Technology Opportunities determine where a program will enter the acquisition process (phase). This decision is made at the MDD. The MDD may approve entry into the Concept Refinement Phase; or Milestone A the Technology Development Phase; or at Milestone B the Engineering and Manufacturing Development and Demonstration Phase. During EMDD there are two efforts, Integrated System Design and System Capability and Manufacturing Process Demonstration.

The Post CDR Assessment approves entry into the Demonstration effort. Milestone C approves entry into Production and Deployment Phase. There are two efforts in Production and Development Phase, Low Rate Initial Production and Full-Rate Production and Deployment. The Full-Rate Production Decision Review is conducted after Low Rate Initial Production and authorizes Full Rate Production. Initial Operational Capability (IOC) is achieved during Production and Deployment.

The last Phase of the Acquisition Management System is Operations and Support which consists of two efforts: Sustainment and Disposal. Full Operational Capability is achieved when fielding is complete. The final effort of the Acquisition Management System is Disposal. From Material Development Decision until MS B the requirements document is a Capability Development Document and at MS C the requirements document is the Capability Production Document. – *taken from DAU's Acquisition 101* [42]

The Defense Acquisition System is the management process that guides all DoD acquisition programs. DoD Directive 5000.1, *The Defense Acquisition System*, provides the policies and principles that govern the defense acquisition system. DoD Instruction 5000.2, *Operation of the Defense Acquisition System*, in turn establishes the management framework that implements these policies and principles. The Defense Acquisition Management Framework provides an event-based process where acquisition programs proceed through a series of milestones associated with significant program phases. Details on the milestones and program phases are found in section 3 of the instruction. The instruction also identifies the specific statutory and regulatory reports and other information requirements for each milestone and decision point.

One key principle of the defense acquisition system is the use of acquisition program categories, where programs of increasing dollar value and management interest are subject to more stringent oversight. Specific dollar and other thresholds for these acquisition categories are contained in DoD Instruction 5000.2, Enclosure 2. The most expensive programs are known as Major Defense Acquisition Programs (MDAPs) or as Major Automated Information Systems

(MAISs). These major programs have the most extensive statutory and regulatory reporting requirements. In addition, some elements of the defense acquisition system are applicable only to weapon systems, some are applicable only to automated information systems, and some are applicable to both. Specific details are found in DoD Instruction 5000.2, Enclosure 3.

An MDAP or a MAIS is subject to review by specific senior officials in the Office of the Secretary of Defense, unless delegated to a lower level of review (usually the DoD Component Head or Acquisition Executive). For the programs reviewed at the OSD level, MDAPs are denoted as Acquisition Category ID and are subject to review by the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)); MAISs are denoted as Acquisition Category IAM and are subject to review by the Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Officer (ASD(NII)/DoD CIO). These individuals are each the Milestone Decision Authority for their respective programs. Both individuals are supported by a senior advisory group, either the Defense Acquisition Board for MDAPs, or the Information Technology Acquisition Board for MAISs. Senior officials from the Joint Staff, the Military Departments, and staff offices within OSD comprise these boards.

Both Boards are further supported by a subordinate group in OSD known as an Overarching Integrated Product Team (OIPT). Each OIPT facilitates communication and vets issues before the Defense Acquisition Board or Information Technology Acquisition Board meets. In this facilitator's role, the OIPT charters Working-level Integrated Product Teams for each review and manages their activities. At the Milestone Decision Point, the OIPT leader provides the Defense Acquisition Board or Information Technology Acquisition Board members with an integrated assessment of program issues gathered through the Integrated Product Team process as well as various independent assessments. – *take from Defense Acquisition Guidebook*[43]

---

[40] Defense Acquisition Guidebook, JCIDS process, Ch. 1.3
[41] Defense Acquisition Guidebook, PPBE process, Ch. 1.2
[42] DAU, Acquisition 101, Lesson 3, slide 7
[43] Defense Acquisition Guidebook, Defense Acquisition System, Ch. 1.4

Bibliography

Bennett, John T., "DoD acquisitions chief rips AF 2010 budget." *Air Force Times,* 3 November 2008. http://www.airforcetimes.com/news/2008/10/airforce_young_103008/.

Birmingham, Robert P., "A ten-year review of the vision for transforming the defense acquisition system." *The Free Library,* 1 January 2004, http://www.thefreelibrary.com/A+ten-year+review+of+the+vision+for+transforming+the+defense...-a0138946833.

Broadus, Will, Duane Mallicoat, Pam Schuyler, Pat Wills, Jane O'Dea, with Maj. Gen. William J. Troy, USA, "Obtaining the Right Solution for a Capability Gap." *Defense AT&L,* November-December 2008, 39-43.

Canada Materiel Group Official Website. "Home." http://www.forces.gc.ca/admmat/site/about_us_e.asp (accessed 10 November 2008).

Chairman of the Joint Chief of Staff Memorandum (CJCSM) 3170.01C, *Operation of the Joint Capabilities Integration and Development System*, 1 May 2007.

Charette, Robert N., "Weapons Acquisition Problems Span the Globe." *IEEE Spectrum Online*, November 2008. http://www.spectrum.ieee.org/nov08/6935.

Defense Acquisition University, "Acquisition 101, Lesson 3." https://learn.dau.mil/html/clc/Clc.jsp?BrowseCertCourses (accessed 24 March 2009).

Defense Acquisition University. "Acquisition Center of Excellence for Services." https://acc.dau.mil/ace (accessed 10 November 2008).

Defense Acquisition University, "Defense Acquisition Guidebook", https://akss.dau.mil/dag/DoD5000.asp?view=document (accessed 24 March 2009).

Delegation Generale pour l'Armement Official Website. "Home." http://www.defense.gouv.fr/dga/ (accessed 10 November 2008)

Department of Defense (DoD) Instruction 5000.02. *Operation of the Defense Acquisition System,* 8 December 2008.

Dillard, John T.. "Toward centralized control of defense acquisition programs." *The Free Library,* 1 August 2005. http://www.thefreelibrary.com/Toward+centralized+control+of+defense+acquisition+programs.-a0139304393

Donley, Michael and Norton Schwartz, "DoD News Briefing with Acting Secretary of the Air Force Donley and Chief of Staff Gen. Schwartz from the Pentagon." *DefenseLink News*, 12 August 2008. http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4274.

The Free Library. "McCain introduces the defense acquisition Reform Act of 2007." 22 May 2008.
http://www.thefreelibrary.com/McCain+introduces+the+defense+acquistion+Reform+Act+of+2007.-a0169871082.

General Accounting Office. *Defense Weapons Systems Acquisition.* Washington DC, December 1992.

Government Accountability Office. *Defense Acquisitions: Assessments of Selected Major Weapon Programs*. Washington, DC, March 2006.

Government Accountability Office. *Defense Acquisitions: Better Weapon Program Outcomes Require Discipline, Accountability, and Fundamental Changes in the Acquisition Environment.* Washington DC, 3 June 2008.

Government Accounting Office. *Defense Acquisitions: Fundamental Changes Are Needed to Improve Weapon Program Outcomes.* Washington, DC, 25 September 2008.

Government Accountability Office. *Defense Acquisition: Improved Program Outcomes Are Possible.* Washington, DC, March 1998.

Government Accountability Office. *Defense Acquisitions: Results of Annual Assessment of DoD Weapon Programs.* Washington, DC, 29 April 2008.

Government Accountability Office. *Defense Acquisitions: Status and Challenges of Joint Forces Command's Limited Acquisition Authority.* Washington, DC, April 2007.

Government Accountability Office. *DoD Acquisition Outcomes: A Case for Change.* Washington DC, 15 November 2006.

Government Accountability Office. *Federal Acquisition: Oversight Plan Needed to Help Implement Acquisition Advisory Panel's Recommendations.* Washington, DC, 27 February 2008.

Government Accountability Office. *Space Acquisitions: Actions Needed to Expand and Sustain Use of Best Practices.* Washington, DC, 19 April 2007.

Hantos, Peter, "Defense Acquisition Performance Assessment – The Life-Cycle Perspective of Selected Recommendations." *CrossTalk*, May 2007.
http://www.stsc.hill.af.mil/crosstalk/2007/05/0705Hantos.html.

Hedgpeth, Dana, "GAO Blasts Weapons Budget Cost Overruns Hit $295 Billion." *Washington Post.com*, 1 April 2008. http://www.washingtonpost.com/wp-dyn/content/article/2008/03/31/AR2008033102789.html.

Horn, John, "Critical Thinking in Defense Acquisition." *Defense AT&L,* September-October 2008, 42-45.

Krieg, Ken, "DoD News Briefing With Undersecretary Of Defense For Acquisition, Technology And Logistics Mr. Ken Krieg From the Pentagon." *DefenseLink News,* 15 March 2007. http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=3905.

Lucas, William A., and Richard G. Rhoades, "Lessons from the Development of Army Systems." *Defense Acquisition Review Journal*, July 2008, 114-131.

McCain, John, "Defense Acquisition Reform Act of 2007," http://www.govtrack.us/congress/billtext.xpd?bill=s110-32 (accessed 10 November 2008)

Miles, Donna. "Warfighters Drive Acquisition from 'Bottom Up.'" *DefenseLink News*, 27 Oct 2008. http://www.defenselink.mil/news/newsarticle.aspx?id=51680.

Miller, Emory. "Independent Program Oversight: An Answer for Major Weapons System's Success?" *Defense Acquisition Review Journal*, April 2008, 64-73.

Spring, Baker. "Congress Needs To Focus on the Big Picture in Defense Acquisition Reform." *Heritage Foundation Leadership for America,* 2 February 2006. http://www.heritage.org/research/nationalsecurity/wm984.cfm.

Staff Writers. "Britain Ready To Overhaul Defense Acquisition In Major Shake Up." *Spacewar.com*, 4 July 2006. http://spacewar.com.

Starks, Glenn L., "The Future of DoD Acquisition Reform Acquisition Centers of Excellence." *Defense AT&L*, July-August 2008, 28-32.

United States Code. "Title 10." http://www.gpoaccess.gov/uscode/browse.html (accessed 10 November 2008)

US Department of Defense. *Strategic Goals Implementation Plan V3.0.* Washington DC: Office of the Undersecretary of Defense (Acquisition, Technology and Logistics), 2009.

US Department of Transportation. "Effects of Catastrophic Events on Transportation System Management and Operations." http://www.itsdocs.fhwa.dot.gov/jpodocs/repts_te/13775.html#_Toc25646702 (accessed 11 February 2009)