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# WHAT EVER HAPPENED TO CERTIFICATION?

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If the Department of Defense (DoD) is to *win the war for talent*, it must be concerned about the professionalism and competence of its acquisition workforce. To that end, the training, education, and experience requirements of the Defense Acquisition Workforce Improvement Act (DAWIA) were signed into law in November 1990. This research investigates how well the DoD is implementing DAWIA. A historical analogy is presented first, followed by the course of workforce certification, tracing its inception in the DAWIA through today's Human Capital Strategic Plan. Recent best practices in acquisition workforce development are also highlighted. Finally, current thinking in academia and the private sector is discussed to shed light on how to better motivate the acquisition workforce toward certification.



**T**he primary purpose of this research was to investigate how well the training, education, and experience requirements of the *Defense Acquisition Workforce Improvement Act (DAWIA)* have been implemented by the Department of Defense (DoD). If the DoD is to *win the war for talent*, it must be concerned about the professionalism and competence of its *acquisition workforce*. First, a historical analogy was considered. Next, the course of workforce certification was traced from its inception in the DAWIA through today. Recent *best practices* in acquisition *workforce development* were also studied. Finally, current thinking in academia and the private sector was sampled to shed light on how to better motivate the acquisition workforce toward certification.

## A HISTORICAL ANALOGY—TALENT WARS DURING THE CIVIL WAR

In 1861, on the eve of the American Civil War, the active officer corps of the Regular army numbered 1,080. When Confederate President Jefferson Davis (West Point class of 1828 and a veteran of the Mexican War) called for a 100,000-man volunteer force, 286 of these officers entered the Confederate army. Of the 824 West Point graduates on the active rolls at the time, 184 went with the Confederacy, including the likes of Generals Robert E. Lee and Thomas “Stonewall” Jackson. In addition,

the pre-war South had an established military tradition and several military institutions that produced two dozen general officers and even more talented regimental and staff officers (Matloff, 1996, p. 188).

On the federal side, President Abraham Lincoln (whose military experience consisted of three months with the Illinois militia during the Black Hawk War) was initially left with two types of officers (Millet and Maslowski, 1984, p. 173). The first type preferred to exaggerate their difficulties and not fight battles. Even though he was a West Point graduate, General George B. McClellan epitomized this type of general officer as he failed to commit his reserve during the battle of Antietam (1862). Lincoln also selected some of his generals from among leading politicians in order to generate broader support for the war. The Union Army also had to live within an existing military department structure that promoted officers based upon their years of service (seniority) over their abilities. On the Confederate side, Davis promoted based upon ability and rarely let politics dictate the selection of military commanders. Thus, in the first two years of the war, the Confederate officers generally out-performed their federal counterparts.

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The other type of officer found in the Union army could be characterized by General Ulysses S. Grant. After rising to General in Chief of the Union army in March 1864, Grant was relentless in his attacks on Lee's army of Northern Virginia. And, by April 1865, as Grant pursued Lee to Appomatox, a new generation of Union officer—officers who would take the fight to the enemy—had advanced through the ranks and replaced the politician-generals. By then, however, the South was exhausted and the Civil War was rapidly coming to an end.

From the many lessons that can be gleaned from this historical analogy, three are particularly applicable to today's war for talent. First, the sudden nature of the coming Civil War gave little time for recruitment, training, development, and testing of officers on either side of the Mason-Dixon line. Unprepared as either side was for the conflict, the initial advantage went to the South based not solely on the number of West Point-trained and experienced officers, but on other pools of talent—the Southern military institutions. Today, defense acquisition stands on the brink of entering the war for talent. Experienced acquisition workforce employees from the baby boomer (born 1946–1964) and veteran (born before 1946) generations are poised to retire in great numbers and today represent 76 percent of the civilian acquisition workforce. The generations in training and development, those behind the boomers and veterans, represent only 24 percent of the civilian workforce and cannot replace them on a one-for-one basis (USD[AT&L] *Human Capital Strategic Plan*, 2007). Defense acquisition leaders must seek other pools of talent as quickly as possible.

Second, the selection procedures and military experience of President Davis quickly elevated his most capable officers to key leadership positions. As a result, the Confederate army had a decided advantage over the Union army in the first two years of the war. And so it is today. Methods of developing and promoting the acquisition workforce should recognize capability. Recruiters need to clearly articulate defense acquisition workforce education, training, and experience requirements so as not to mislead potential workers. And, development policies and procedures must be reviewed to ensure that they do not inadvertently cause the most capable and experienced acquisition workers to depart for greener pastures.

Third, out of necessity, the army of the Potomac rid itself of the incompetent and political general officers, replacing them with younger men who were trained to take the fight to the enemy. At war's end (April 1865), these general officers were only in their mid-twenties, meaning that their training and experience had come on the fields of battle (Woodhead, 1991, p. 19). Not to insinuate that the baby boomer and veteran generation workers are incompetent or political, but it may only be four to five years before those that will replace them have to perform on the defense acquisition *field of battle*. Now is the time to get the next generation certified. Now is the time to let them participate as team players in key acquisition and contract actions. Now is the time to mentor and coach them in the finer points of defense acquisition and let them try their hand at managing the most challenging programs.

### CERTIFICATION—A GOOD IDEA YET TO BE FULLY IMPLEMENTED

The DAWIA was born out of 40 years of frustration (1949-1989) with programs that failed to meet cost, schedule, and performance goals. In June of 1990, legislation was introduced by Congressman Mavroules (D-MA) to require that all acquisition workforce members meet education, training, and experience requirements appropriate to their position. For the taxpayer, a competent workforce would mean fewer cost overruns, schedule slips, and weapon systems that worked. With an overwhelming vote of 413 to 1 in the House, DAWIA (H.R. 5211; P.L. 101-510; and now, 10 U.S.C., Chapter 87) was enacted on November 5, 1990. DAWIA was a mandate to the Pentagon to get the acquisition workforce certified (Edgar, 2001). So, how did defense acquisition leaders comply with this certification mandate over the next 18 years?

Unfortunately, the Department of Defense was left to come up with the certification standards and reporting requirements. First, the DoD established four acquisition corps—one in each military department and one for the defense agencies (also termed the *4th Estate*). Each of the components was to maintain their own certification records and report management information on a regular basis to the Defense Manpower Data Center (see DoD Instruction 5000.55, 1991, *Reporting Management Information on DoD Military and Civilian Acquisition Personnel and Positions*). Membership in the four acquisition corps was based on holding a critical acquisition position (CAP). It was assumed that the person holding the CAP would meet certification requirements.

Second, after forming numerous acquisition career field committees, the training, education, and experience standards were announced in January 1993 (see DoD 5000.58-R, 1993, *Acquisition Career Management Program*)—over 2 years after

DAWIA was enacted. However, there was one fatal flaw to the implementing regulation: no time limit was given for compliance with the certification standards. In fact, members of the acquisition workforce could encumber a CAP for up to 18 months without meeting the education, training, and experience requirements for the position. Components reported their total number of CAPs by career field, and it was assumed that the incumbents in those positions were certified, whether or not they really were (e.g., see Defense Acquisition Workforce Improvement Reports in the 1995–1999 *Annual Reports to the President and Congress*). So, not only was the recording of certifications decentralized, but no goals were established for attainment of certifications by the acquisition workforce.

Seeking to harvest the *peace dividend* after the fall of the Berlin Wall and the demise of the Soviet Union, Congress began legislating reduction to the size of the acquisition workforce. From 1993 to 1998, the quality of the workforce seemed to take a back seat to reductions in workforce size and associated cost savings. Some Services and components were tracking progress toward certification of the

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workforce, others were not. No one at the Office of the Secretary of Defense was collecting or reviewing certification data. As the adage goes, “you can’t improve what you don’t measure.” And, when asked why certification was not complete, the components could always point to a lack of classroom seats and student throughput at DoD’s corporate university, Defense Acquisition University.

Also during this time, defense leaders became concerned about the retirement of the baby boomer generation (born 1946–1964). By 1998, the first boomers were just 10 years from retirement eligibility (age 62 in the year 2008). There was fear that boomers would exit the acquisition workforce in great numbers, taking with them years of experience and knowledge. This “brain-drain” had to be stopped. Internships, succession planning, and mentoring were just a few of the many programs established to ease the impending loss of talent. The private sector was also concerned about the loss of boomers and the effect that would have on the pool of knowledge workers for the emerging information-based economy. First introduced in 1997, McKinsey and Company coined the term *the war for talent* based on their research into how the best companies attract, develop, and retain the people needed to build a strong managerial talent pool (Michaels, Handfield-Jones & Axelrod, 2001).

The new millennium brought new emphasis on the acquisition workforce. This time, the issue was performance, and *pay for performance* seemed to be the answer. Under an acquisition workforce demonstration project, the army led the way in show-

ing that the general schedule for civilians could be replaced by pay bands, thereby rewarding the “high performers” for their performance. Perhaps this incentive would be the answer to persistent problems with the acquisition system. However, lost in the all of the revelry of the time was the enforcement of certification standards. Any emphasis on compliance with the intent of DAWIA had been lost.

No wonder the Congress had to step in again in 2003 with DAWIA II (Public Law 108-106) to attempt to put some teeth into the certification process. The law required that the four acquisition corps be rolled into a single defense acquisition corps. Whereas the previous acquisition corps had been defined by position (i.e., military O-4 and above; civilian GS-14 and above), DoD now required that prospective members of the defense acquisition corps first meet Level II education, training, and experience requirements in an acquisition career field. Now, critical acquisition positions could only be filled by acquisition corps members. In addition, there were to be no waivers of certification requirements to join the acquisition corps. Moreover, a management structure was put in place to provide oversight and to hold the components responsible for certification results.

Unfortunately, DoD implementation of DAWIA II extended the timeframe for compliance with certification from 18 to 24 months, and members who can not achieve certification can obtain a waiver. In addition, it introduced a new management category—*Key Leadership Positions* (KLPs)—to be targeted for intensive management (DoD Directive 5000.52, 2005). In the past, management attention was directed toward CAPs. By 2004, there were about 21,000 CAPs. Defense acquisition leaders felt that this number was too large, so they invented the term *Key Leadership Position* to help focus their management attention. The objective was to hold the number of KLPs to 1,500 positions so that acquisition leaders could provide better management of these positions, enhancing program stability and accountability (DoDI 5000.66, 2005).

By 2005, concern over “brain-drain” from the retiring baby boomers, pending experience gaps, and emerging shortages of labor pools in the technical, engineering, and scientist skill areas led defense acquisition leaders to embrace human capital strategic planning. Supported by an analysis of acquisition workforce trends (RAND, 2008), the Acquisition, Technology, and Logistics Human Capital Strategic Plan was first issued in 2006 (and updated in June 2007). Unfortunately, by 2006 only 50 percent of acquisition workers met or exceeded the education, training, and experience required for their positions. That number rose to 56 percent in 2007. To address the certification problem, the plan identified two tasks. First, the components were to develop and implement strategies to meet target certification levels (even though these targets were not defined in the plan); and second, the oversight process was to ensure workforce competency (USD[AT&L] Human Capital Strategic Plan, 2007, Tasks 1.4.1 and 6.2.2.).

Since 2004, defense acquisition leaders have also encouraged the components in workforce competency through an annual workforce development awards program. The components submit best practices in workforce development that are judged by a panel of experts. All best practices, including those that did not win the top awards, are included in the awards brochure. A review of these best practices over the past 5

years reveals that 59 of 319 best practices (18.5 percent) were in the areas of certification management and innovations for achieving the education, training, and experience standards required by DAWIA.<sup>1</sup> The review also noted that 11 best practices were from acquisition commands that had established acquisition training operations of their own. Eight of these operations used the term *academy* or *university* in naming their new training organization. In all cases, these new organizations appear to have supplemented the required DAWIA training courses in various career fields to more fully enable their acquisition workforces (USD[AT&L] Workforce Development Award, 2004–2008).

It has now been about 10 years since McKinsey and Company performed their study that led them to proclaim that a war for talent had broken out. Back in 1997, they identified five imperatives that companies needed to be successful in this war: 1) embrace a talent mindset; 2) craft a winning employee value proposition; 3) rebuild your recruiting strategy; 4) weave development into your organization; and, 5) differentiate and affirm your people. While the first four imperatives are relatively easy to understand, the fifth needs a bit more explanation. Essentially, McKinsey and Company proposed that employees be identified as A, B, or C players based upon rigorous talent reviews. Once differentiated, the A players should be affirmed differently from the B and C players through such tools as fast-track development opportunities and significantly higher compensation (Michaels, 2001).

As a management and human resources advisor, McKinsey and Company helped turn Enron into the ultimate talent company. Talented employees were “differentiated and affirmed” through a performance review process called “rank and yank” (Gladwell, 2002). Rising stars were promoted without regard for experience. Seemingly “smart” people were paid much more than they were worth. Some accelerated employees moved up so quickly that there was not time for performance evaluations—yet, they kept rising based upon their ability to take risks. Even if these rising stars failed, they were promoted. That kind of aggressive, risk-taking behavior was thought to be the most important engine driving Enron’s performance. The failure of Enron was that it believed in stars more than it believed in systems. While it had plenty of stars, it had ignored the checks and balances that only an organization and systems can provide. Gladwell (2002, p. 33) concludes that Enron was “looking for people who had the talent to think outside the box. It never occurred to them that, if everyone had to think outside the box, maybe it was the box that needed fixing.”

Today, McKinsey and Company are singing a different tune. They are advising managers to not focus solely on the top performers, but to target talent at all levels, regardless of gender, age, nationality, or academic achievements (Guthridge, 2008) (see also Guarino, 2007, in *Smart is not enough!* for the importance of recruiting and developing ambitious academic underachievers). Perhaps this shift away from imperative No. 5—“differentiate and affirm”—was a lesson learned in the Enron scandal.

Has defense acquisition fallen into the same trap? Have defense acquisition leaders opted for the latest out-of-the-box thinking like pay for performance, rising star development programs, and human capital management plans without regard for developing and certifying talent at all levels? Or, have acquisition leaders simply

not followed up on, or enforced the requirement for workforce certification? Is the acquisition workforce certification box broken and in need of repairs? Can academia or the private sector offer any advice or best practices?

## CURRENT CONCEPTS—THE WAR FOR TALENT REVISITED

A review of recent literature indicates that the way in which talent has been managed in the past will not be sufficient in the future. In 1997, the McKinsey and Company research identified three forces fueling the war for talent: 1) an irreversible shift from the Industrial Age to the Information Age; 2) an intensifying demand for high-caliber managerial talent; and, 3) a growing propensity to switch companies (Michaels, Handfield-Jones, & Axelrod, 2001). These three forces can be used to categorize current thinking on talent management.

## IRREVERSIBLE SHIFT FROM INDUSTRIAL AGE TO INFORMATION AGE

In their book, *The Minding Organization*, Moshe Rubinstein and Iris Firstenberg reframe the organizational paradigm. In the industrial age, organizations operated like railroads on fixed rails, with fixed plans and rigid time schedules. Back then, a customer needing transportation from point A to point B had to get to the station in time to catch the scheduled train. Today, enabled by ubiquitous information, the organizational metaphor has changed to one of a taxicab service, moving freely about the city streets, with only partial plans for the day that can be changed in order to meet customer needs as the future unfolds. The customers get better service because decisions on where and when to travel are made at the time needs arise. However, this way of doing business requires that the organization be able to deal with change and uncertainty because it is operating in a very chaotic environment (Rubenstein & Firstenberg, 1999, p. 19).

To thrive in chaos, companies must be able to reframe their thinking and bring the future to the present. They do this by creating chaos up front (deliberate chaos) and framing their processes to manage this chaos early, rather than at the end when failure and loss of customer confidence would be fatal. They set the conditions for the success of their employees. They empower their employees by embracing concepts such as self-organization to spark creativity. They also create an environment that permits honest mistakes and errors so the organization can learn from them. Finally, the leadership brings the future to the present by envisioning the desired end result or end state for their employees. Leadership describes what the future looks like but lets the employees take them there (Rubenstein & Firstenberg, 1999).

Futurist Jim Carroll in the forward to *The Rise of the Project Workforce: Managing People and Projects in a Flat World* declares that members of today's "snowboard generation" are "fiercely collaborative and extremely competitive" making them uniquely suited to project management (Melik, 2007, preface). Carroll posits that generational changes in the workforce necessitate a change of attitudes toward work, organizational structure, and careers. Specifically, there is an entire generation of talent (e.g., snowboarders) that would prefer short-term, project-oriented assignments rather than long-term career paths. The majority of engineering students today believe

that a full-time career is about 2 to 5 years long. So, the baby boomer generation idea of long-term project teams needs to change to fit the snowboarder mentality. Baby boomers are also the last generation to define themselves by their careers.

### INTENSIFYING DEMAND FOR HIGH-CALIBER MANAGERIAL TALENT

Human capital plans must target talent at all levels. With a workforce composed of multiple generations (i.e., veteran, baby boomer, X/Y, and millennium generations), talent management models must address value propositions appropriate to the generation (Guthridge, 2008). For example, baby boomers are attracted to employers who value experience and who tell them that they will have the chance to change things for the better. On the other hand, generation X (born 1965 to 1976) wants to know that they will have a life outside of work and that their talent, not their experience, is most important (Ahlrichs, 2007; SkillSoft, 2006).

Human capital plans must address both the uncertainty of supply of talent and the risk in estimating demand for talent. On the supply side, Cappelli (2008) says that employers need to move away from the “organization-man” philosophy where the firm decided when the employee was ready for advancement and defined the next position. Today, employees want to take control of their own career development and should be empowered to do so. Internal job boards can promote job change within the company rather than outside the company, thereby preserving the investment made in employee development.

On the demand side, Cappelli (2008) says that employers should assess the trade-offs between “making” and “buying” talented employees. By shortening the time horizon for talent forecasts, just-in-time training and coaching of selected employees might close the talent gaps (Hargrove, 2007). Kram and Higgins (2008) say that the world has gotten too complicated for one-on-one mentoring. A better approach is to create a developmental network of people, both inside and outside the organization, that possesses a variety of skills and can identify all the opportunities needed to prepare for the future.

In a study of the performance portability of National Football League punters and wide receivers, Groyberg (2008) found that punters are easily imported to a new football team because their performance is almost completely dependent on their own strength and skills. However, when traded to another team, the performance of wide receivers initially dropped and recovered only after they adjusted to, and built cohesion with, their new teammates. These results suggest that managers who hire rising stars from the outside for positions that require teamwork should expect that it will take them some time to connect with their new team before achieving top performance.

### GROWING PROPENSITY TO SWITCH COMPANIES

Employee mobility is a fact of life in the war for talent. Typically, employers take defensive actions like increasing salaries and benefits or changing the work environment when employees threaten to quit. Then, when employees with a non-compete clause actually jump ship to work for a competitor, lawsuits are filed as a retaliatory

measure. Both of these approaches are costly and embrace a win-or-lose attitude toward employee turnover. Somaya and Williamson (2008) propose that employers consider the social capital of their relationship with departing employees.

When positive relationships are maintained and nurtured, there is potential for access to new talent pools and future “boomerang” hires (i.e., hiring a former employee). Such was recently the case at the Defense Acquisition University, which maintains relationships with some of its former students and faculty via an alumni association. When one of the university’s deans sought to fill several new faculty positions, he sent e-mails to members of the alumni association. In so doing, he leveraged the positive relationship that these alumni had with the university to garner candidates for the job openings. More importantly, he understood the skills of this talent pool and knew they could be brought on board quickly, saving time and money.

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Managing social capital does one other thing; it goes a long way in telling people that they are valued—that people are the greatest asset of the employer. People-centered employers understand this and, taking the concept one step further, they win talent wars because their “employer brand” delivers as advertised. In other words, employers that claim to be innovative do in fact listen to their employees and take action on their creative ideas. Employers that claim to be socially responsible do in fact demonstrate socially responsible behaviors in the marketplace. People-centered employers build enduring relationships that serve to retain current employees and attract new ones (Thorne & Pellant, 2007; Ahlrichs, 2000). They advocate, like Covey (1991) in *Principle-Centered Leadership*, that people-centered employers “walk the talk” thereby unleashing the creativity, talent, and energy inherent in their employees.

Research has shown that effective coaching and mentoring pays off not only in performance, but also increases job satisfaction and decreases turnover. Leaders who understand and use their “emotional intelligence” to sense how to give effective feedback demonstrate empathy, which is key to the retention of knowledge workers in today’s information economy (Goleman, 1998). Moreover, smart people are more often motivated by awards rather than money. Employers that recognize the accomplishment of employees in front of their peers make it harder for them to leave and keep them much more engaged in their work. In addition, key talent who are allowed to self-organize to solve problems, working both inside and outside the management hierarchy, more often feel that they are contributing (Fryer, 2001).

## CONCLUSION

The American Civil War Battle of Gettysburg (July, 1863) is considered the “high water mark of the Confederacy.” It was during this historic battle that momentum shifted from the Confederate army to the Union army. This shift was due, at least in part, to the attitudes of the Union general officers who moved from the defense to the offense, taking the battle to the enemy, just as the Confederate army had done from the beginning of the war. In every sense, the Union army got back to the basics of Napoleonic warfare—the operations and tactics that the Union’s West Point graduates had learned so well but had been slow to implement.

Like the general officers of the Union army, this research has shown that defense acquisition leaders of this era have been slow to implement DAWIA certification. In 2007, only 56 percent of acquisition workers met or exceeded the education, training, and experience required for their positions. Undoubtedly, this lack of professionalism and competency has affected the execution of defense acquisition programs. Just read the selected acquisition reports sent to Congress. In 1997, 7 years after DAWIA was enacted, 38 percent of the Major Defense Acquisition Programs (MDAPs) breached established cost, schedule, and performance goals. Last year, 36 percent of the MDAPs breached these goals.<sup>2</sup>

In a politely worded indictment of the defense acquisition workforce, Section 852 of the Fiscal Year 2008 National Defense Authorization Act called for the Secretary of Defense to establish a fund to be known as the *Department of Defense Acquisition Workforce Fund* to provide funds, in addition to funds already available, for the recruitment, training, and retention of defense acquisition personnel. In addition to providing incentives for attracting new workers to defense acquisition and for retaining experienced workers, *funds are to be used to make changes to the types of skills needed in the future workforce*. The question that begs an answer is this: Why, after 17 years since DAWIA mandated education, training, and experience standards, is defense acquisition in the predicament that future workforce skills remain undefined?

Acquisition leaders and the acquisition workforce need to get serious about certification standards. Current thinking from the private sector and academia reveals that acquisition leaders must describe the future and motivate the workforce to achieve that future. To motivate acquisition workers to achieve education, training, and experience standards, leaders have to understand motivational differences between the different generations of the workforce.

Human capital plans must include defined strategies as to how the acquisition workforce will become certified and then remain current in their respective career paths. These plans must target all levels of the workforce. “Rank and yank” methods of identifying and promoting rising stars without the requisite experience should be questioned. All workers should be empowered to manage their own careers and reach their maximum potential. And, because of the importance of teamwork and trust, leaders should be careful when bringing in outsiders to work in the defense acquisition environment.

Finally, the defense acquisition workforce will be mobile. Workers will move freely in and out of defense acquisition positions, and that fact must be taken into ac-

count when developing workforce certification programs. However, winning the war for talent will not be a challenge if the acquisition workforce is seen, both inside and outside of government, as a model of professionalism and competence based upon full compliance with clearly stated education, training, and experience requirements.

**Keywords:**

Acquisition Workforce, Best Practices, Defense Acquisition Workforce Improvement Act (DAWIA), Human Capital Strategic Plan (HCSP), Workforce Development



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## ENDNOTES

1. The 2004 through 2008 USD(AT&L) Workforce Development Awards yielded a total of 120 acquisition organizational submissions. All best practices were placed into one or more of these six categories: 1) DAWIA education enhancement; 2) DAWIA training enhancement; 3) DAWIA experience enhancement; 4) recruitment practices (including co-op hiring, intern programs, and student career exchange program); 5) development practices (including leader development, team development, executive coaching, mentoring, human capital planning, and succession planning); and 6) retention practices (including award programs, telework, and student loan repayment). A best practice pertaining to two or more categories was credited to each of those categories. The 59 best practices cited are the sum of the best practices categorized in the DAWIA education, training, and experience enhancement categories.
2. Data for these statistics were derived from two sources. A query of Defense Acquisition Information Retrieval (DAMIR) provided the number of calculated breaches by major defense acquisition program as reported in Selected Acquisition Reports to the Congress in 1997 and 2007. Included were cost, schedule, and performance breaches of the acquisition program baseline, and both current and original breaches of program acquisition unit cost and average procurement unit cost, per Nunn-McCurdy. The number of major defense acquisition programs was taken from December 1997 and December 2007 Selected Acquisition Reports summary tables retrieved from <http://www.acq.osd.mil/ara/am/sar/index.html>. Percentages were determined by dividing the number of breaches in the year by the number of major defense acquisition programs in the year. Programs with multiple breaches in a particular year were only counted as having one breach in that year.

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