



Special Edition March-April 2011

A PUBLICATION OF THE DEFENSE ACQUISITION UNIVERSITY

STRATEGIC CHOICE: **Pressing On to Strengthen** **the Acquisition Workforce**



Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE MAR 2011		2. REPORT TYPE		3. DATES COVERED 00-00-2011 to 00-00-2011	
4. TITLE AND SUBTITLE Defense AT&L. Special Edition March-April 2011				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) Defense Acquisition University, Defense AT&L, 9820 Belvoir Road, Fort Belvoir, VA, 22060-5565				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					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 60	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

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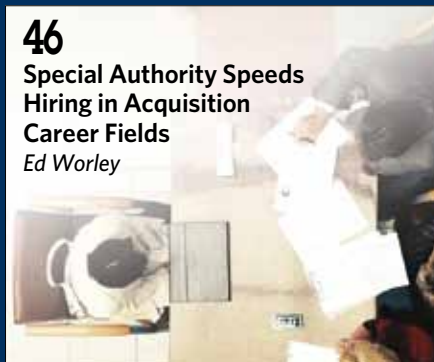
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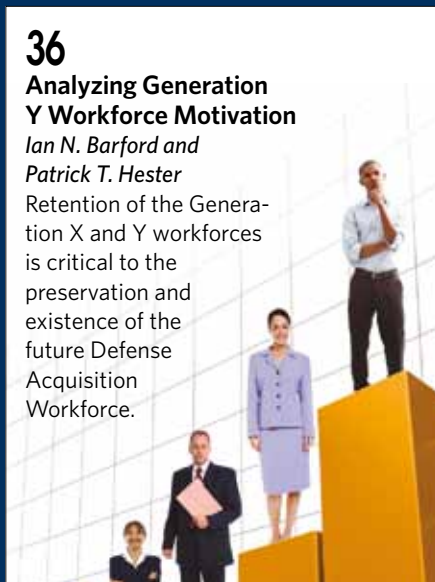
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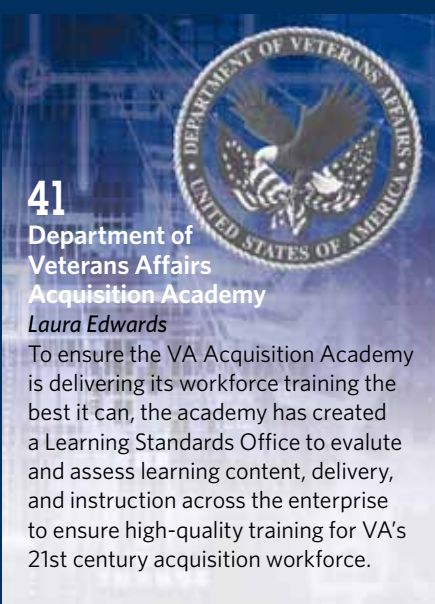
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Defense AT&L

Vol XLI
No. 2, DAU 219

Published by the
DEFENSE ACQUISITION UNIVERSITY

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Article preparation/submission guidelines are located on the inside back cover of each issue or may be



downloaded from our website at www.dau.mil/pubs/damtoc.asp. Inquiries concerning proposed articles can be made by e-mail to [datl\(at\)dau\(dot\)mil](mailto:datl(at)dau(dot)mil) or by phone to 703-805-2892 or DSN 655-2892.

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Defense AT&L (ISSN 1547-5476) is published bimonthly by the DAU Press and is free to all U.S. and foreign national subscribers. Periodical postage is paid at the U.S. Postal Facility, Fort Belvoir, Va., and additional U.S. postal facilities. **POSTMASTER, send address changes to:**

DEFENSE AT&L
DEFENSE ACQUISITION UNIVERSITY
ATTN DAU PRESS STE 3
9820 BELVOIR ROAD
FT BELVOIR VA 22060-5565

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STRATEGIC CHOICE: Pressing On to Strengthen the Acquisition Workforce

*A Message from the Acting Director,
Human Capital Initiatives*

This edition is dedicated to the Defense Acquisition Workforce. We highlight the Defense Acquisition Workforce 2010 team and individual award winners along with examples across the Department of Defense (DoD) of local achievements to recruit, hire, and strengthen the workforce. The importance of a right-sized, high-quality, high-performing Defense Acquisition Workforce cannot be overstated. On March 4, 2009, President Obama signed a memorandum, "Government Contracting," with a mandate for the federal government to have sufficient capacity to manage and oversee its contracting process. On April 6, 2009, Secretary of Defense Robert Gates announced his intent to restore the acquisition workforce by 2015. Under Secretary of Defense for Acquisition, Technology and Logistics (USD[AT&L]) Dr. Ashton B. Carter, AT&L, and senior acquisition leaders are on track to hire about 10,000 new acquisition civilians by 2015, and have added 3,000 more to ensure government employees are performing inherently governmental, critical need, and other functions demonstrating cost savings if performed by federal employees. Workforce growth includes strengthening acquisition's technical workforce and rebuilding the contracting, pricing, contract management (Defense Contract Management Agency), and audit (Defense Contract Audit Agency) workforce. To date, the department has achieved over 7,400 hires as part of its human capital plan.¹ The President's FY 2012 budget request would allow DoD to continue its workforce growth initiative. A capable, qualified, and appropriately sized Defense Acquisition Workforce will be key to achieving DoD efficiency and better buying power objectives, and providing the warfighter with world-class capability.



Garry Shafovaloff

*Acting Director, Human Capital Initiatives
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for Acquisition, Technology and Logistics*

¹ Carter, Ashton B. (2010). *DoD Strategic Human Capital Plan Update-The Defense Acquisition Workforce* (Appendix 1). Retrieved from <https://acc.dau.mil/adl/en-US/364255/file/50222/DAW%20Report%20To%20Congress.pdf>.

2011 DAU ACQUISITION COMMUNITY SYMPOSIUM

Fort Belvoir, Virginia | April 12, 2011

MAKING EVERY DOLLAR COUNT -Improving Acquisition Outcomes-



The Defense Acquisition University (DAU) will host its annual Acquisition Community Symposium on Tuesday, April 12, 2011, at its Fort Belvoir campus. The theme for this year's symposium is: **Making Every Dollar Count - Improving Acquisition Outcomes**. The symposium will provide congressional, federal-level, Office of the Secretary of Defense, Service-level, and industry perspectives on implementing affordability initiatives announced by the Under Secretary of Defense for Acquisition, Technology and Logistics in 2010. Through a series of speakers, panels, and breakout sessions, the symposium will examine issues such as: "Affordability and Control of Cost Growth," and "Reducing Non-Productive Processes and Bureaucracy." The agenda includes a congressional staff speaker, an acquisition executive panel, an industry panel, a presentation by the Director, Cost Assessment & Program Evaluation, and seven breakout sessions covering DoD cost-reduction initiatives. One of the breakout sessions will include presentation by the DAU Alumni Association of Hirsch Research Paper Competition prizes. The 1-day symposium will conclude with a dinner in the evening honoring the winner of the 2011 DAU Alumni Association's Acker Award; induction of new DAU Hall of Fame members; and presentation of Hirsch Research Paper Competition prizes. Congressman Duncan Hunter of California's 52d Congressional District has been invited to be the dinner speaker.



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Training the Army Acquisition Workforce

Stephanie L. Watson

An integral part of the mission of the assistant secretary of the Army for acquisition, logistics, and technology (AL&T) is to educate and train the men and women of our Army AL&T workforce, who strive daily to provide high-quality, cutting-edge products for our soldiers. To this end, and in accordance with the Defense Acquisition Workforce Improvement Act (DAWIA), the director, acquisition career management (DACM) must ensure the readiness and sustainment of a professional civilian and military (active, reserve, and National Guard) acquisition workforce by promoting leadership and professional development. The DACM provides a wide range of recruitment and retention incentives, training, education, and leadership programs to ensure a professional Army Acquisition Corps.

To date, the Army AL&T workforce consists of over 42,000 civilians and 1,600 officers and noncommissioned officers, for a total workforce in excess of 43,500. They specialize in 14 acquisition career fields (ACFs) to support the warfighter. The Army has implemented dozens of programs to support the AL&T workforce and their commitment to learning and successfully executing mission-critical tasks. These programs focus on certification, leadership, professionalism, and experiential career-broadening opportunities. This article highlights some of the programs that best represent the diversity of Army acquisition career development.

Defense Acquisition University Senior Service College Fellowship Program

The Defense Acquisition University Senior Service College Fellowship (DAU-SSCF) program is an opportunity for Army Acquisition Corps members to receive leadership and acquisition training that will better prepare them for senior and key leadership positions. The DAU-SSCF was piloted in Huntsville, Ala., in 2006 and has since expanded to include two additional regional locations: Warren, Mich., and Aberdeen Proving Ground, Md. The program is designed for high-performing GS-14s and above or broadband/payband equivalents who have exhibited leadership potential. The DAU-SSCF is a 10-month program. An order-of-merit list determines the number of selectees. Individuals who complete the DAU-SSCF program receive equivalency for the DAU Program Manager's Course (PMT 401) and have the opportunity to pursue a master's degree. Typically, most selectees already have a master's degree, so this is an option for a second degree. The DAU-SSCF program is very beneficial for those who excel in their current positions because it prepares them to succeed in leadership through rigorous courses, a mentoring program, and extensive research. To date, 66 fellows have graduated from the DAU-SSCF program and have been assigned to vital acquisition roles.

Competitive Development Group/Army Acquisition Fellows Program

The Competitive Development Group/Army Acquisition Fellows (CDG/AAF) program is one of the premier leadership developmental programs initiated by the U.S. Army Acquisition Support Center to improve the quality of the Army's civilian acquisition workforce. The CDG/AAF program was created to provide professional development opportunities for GS-12/13s and broadband/payband equivalents, who have demonstrated potential to meet Army Acquisition Corps education, training, and experience requirements, and displayed the potential for future success and exceptional service to the Army. They are afforded developmental assignments within the acquisition community, including assignments in: program executive offices; program management offices; systems acquisition offices; and senior Army staff offices. The program was launched in May 1997 with an inaugural class of 25 participants; since then, a total of 161 civilians have been competitively selected and participated in this 3-year program. CDG/AAF program graduates are paving their way to future leadership roles within the AL&T workforce. Three CDG/AAF program fellows have achieved Senior Executive Service (SES) status, and more than 21 CDG/AAF program fellows are now serving in critical acquisition positions and key leadership positions.

Defense Acquisition Workforce Development Fund

Enabled by Section 852 of the *National Defense Authorization Act for Fiscal Year 2008*, the Defense Acquisition Workforce Development Fund provides the Army's DACM with enhanced capabilities to ensure the "acquisition workforce has the ca-

capacity, in both personnel and skills, needed to properly perform its mission, provide appropriate oversight of contractor performance, and ensure that the department receives the best value for the expenditure of public resources." To that end, the Army has deployed numerous initiatives. The following discussion focuses on some of the most far-reaching initiatives.

Grow the Acquisition Workforce

The Department of Defense allocated 1,885 new growth positions to Army acquisition to be funded with Section 852 funds. Significant progress has been made, in a relatively short period, toward this growth directive, with over 950 interns and journeymen hired to date, across the 14 ACFs.

Student Loan Repayment Program

Army acquisition has offered its Student Loan Repayment Program (SLRP) for the second year, repaying more than three times the number of applicants' student loans in 2010 than it did in 2009. All AL&T workforce members with outstanding federally insured student loans and a college degree are eligible to apply for SLRP. This program is used as a retention incentive for individuals who are considered highly qualified in their current position. The recipients agree to remain within the DoD for 3 years, with an additional 1-year commitment with each successive payment in the following years. SLRP has been a successful recruiting tool, helping to make Army acquisition organizations competitive employers. The application process is online, using the Army Acquisition Professional Development System within the Career Acquisition Personnel and Position Management Information System (CAPPNIS). CAPPNIS is the Army's central repository for acquisition workforce data. The highly accessible application process, with the capability of displaying the dates applications are being accepted, resulted in an overwhelmingly positive response to SLRP in 2010. The 2010 announcement opened on April 21 and closed May 28. In 2009, 1,130 applications were reviewed and 438 of those were selected for funding, for a total of \$4.1 million. In the 2010 offering, 2,751 applications were submitted and 1,331 were funded, for a total of \$11.9 million spent to retain those qualified individuals.

Excellence in Government Fellows Program

The Excellence in Government Fellows (EIGF) program is conducted by the Partnership for Public Service, located in Washington, D.C. EIGF is a leadership development program tailored specifically to federal and state government professionals with an acquisition concentration. This is why Army acquisition chose this program as a retention incentive for AL&T workforce members with demonstrated leadership potential. EIGF provides attendees with a hands-on, transformational experience focusing on leadership and management challenges specific to the government. During the course of a year, each fellow participates in multiple training events in different locations, where they spend several days developing their management and leadership competencies with their coaching teams. An EIG fellow of

the 2010 class, Lisa Stangle, director of Apache Contracting for Army Materiel Command in Huntsville, Ala., said, "I found that the benchmarking activities we conducted at commercial, not-for-profit, and government organizations to understand their leadership perspectives provided excellent insight into varied leadership approaches. Networking with the many EIGF program participants from numerous civilian and DoD agencies allowed me to share ideas and learn from other leaders facing many of the same challenges in the federal workplace."

Each of the training events complements the five core qualifications for SES: Leading Change; Leading People; Results-Driven; Business Acumen; and Building Coalitions. The fellows also devise and test strategies to achieve results for their own organizations. All AL&T workforce members at GS-13 and above or broadband/payband equivalent who have met their current position certification requirements are eligible to apply. Army acquisition's latest class of eight fellows graduated in August 2010. Members of the class of 2010 were selected from all over the country, including several traveling from acquisition positions in New Jersey, Virginia, Alabama, Michigan, and Colorado. The ACFs represented were life cycle logistics, contracting, program management, and test and evaluation. As a result of the success of this program in 2010, Army acquisition will sponsor 19 participants for the 2011 class. These new fellows are from the following locations: Maryland, Alabama, Florida, Michigan, New Jersey, Pennsylvania, Virginia, Arizona, and Missouri. They are certified in the following ACFs: business, cost estimating, and financial management; test and evaluation; program management; systems planning, research, development, and engineering; information technology; and contracting. With these two pilot offerings, we have a great cross-section of people from different areas and with different functional and leadership expertise.

Active Duty Special Work

Currently, Army National Guard (ARNG) and U.S. Army Reserve (USAR) soldiers are not afforded an opportunity to gain contracting experience before deploying; therefore, they lack the full-time experience necessary to meet the certification requirement. AL&T contracting personnel are required to be a minimum of DAWIA Level I-certified in contracting. This leaves the multi-component force structure at risk because of a lack of skill within the ARNG/USAR workforce. Active Duty Special Work (ADSW) was implemented to provide ARNG and USAR soldiers a chance to become familiar, over the course of a year, with expeditionary contracting prior to deployment. ADSW facilitates developmental opportunities to build solid leadership skills, while providing career-broadening experiences that will prepare our ARNG/USAR workforce to develop, design, deploy, acquire, field, and maintain all soldier systems that will impact the success of our soldiers in tactical, strategic, and operational environments. To date, 19 soldiers have benefited from ADSW and gained the necessary experience.



The director, acquisition career management must ensure the readiness and sustainment of a professional civilian and military acquisition workforce by promoting leadership and professional development.

Army Intermediate Contracting Laboratory

The Army Intermediate Contracting Laboratory (AICL) was implemented in 2008 to teach new acquisition officers and newly reclassified acquisition noncommissioned officers how to use procurement desktop-defense (PD2) contracting software and how to operate and work in a contracting organization. AICL provides them DAU equivalency training in contingency contracting (CON 234). PD2 supports all phases of the procurement cycle, from inputting the customer's requirements to closing out the contract. The software tool uses desktop icons that resemble folders, documents, envelopes, and filing cabinets to replicate an office environment; and divides procurement functions into three contract phases—requirements, pre-award and award, and post-award. This 2-week course is held five times per year at the Army Acquisition Center of Excellence in Huntsville, Ala. Each AICL is scheduled to follow the Army Acquisition Intermediate Contracting Course (AICC). AICC provides DAU equivalency for Level II DAWIA contracting certification training. Approximately 144 soldiers have completed the AICL training during fiscal year 2010.

Army Acquisition Workforce of the Future

The Army's success starts with the education of its current and future leaders. Army AL&T civilian and military professionals will become 21st century leaders who personify the warrior ethos in all aspects, spanning warfighting support, statesmanship, and business management. Army acquisition education, training, and experience programs encourage our AL&T workforce to develop functional expertise, seek career-broadening experiences, and obtain strategic leadership positions. Career development opportunities and initiatives, such as the ones discussed in this article, establish a qualified and professional AL&T workforce that is properly trained, educated, and poised to meet the needs of our warfighter.

Watson is a human capital strategic analyst in the Army DACM office, Fort Belvoir, Va. She welcomes comments and questions and can be contacted at Stephanie.L.Watson@us.army.mil.



Steering Toward a More Capable Acquisition Workforce

Rene' Thomas-Rizzo

The goal of the Department of the Navy's Director of Acquisition Career Management (DACM) office is to provide the Navy with the highest quality acquisition workforce possible. "Having the right people, in the right job, at the right time will translate to effective and efficient execution, delivering the finest warfighting capability in the world at an affordable price," said James Thomsen, principal civilian deputy, assistant secretary of the Navy for research, development and acquisition (ASN[RD&A]).

In this dangerous world, the Navy's acquisition workforce must become more capable in providing our service-members the proper tools to do their job. The DACM office has been charged with oversight of growing the acquisition workforce and with revitalization of the force, to include improved training, focused recruiting, and deliberate management of career pipelines. We aim to build a stronger acquisition workforce, beginning with the current acquisition team, by offering continuous learning opportunities, tuition assistance, and clear advancement paths. We are initiating new recruiting techniques, searching for the best and brightest from top-ranked universities to build a stronger science and engineering foundation. We are also getting the word out to potential new hires that the Navy acquisition workforce is a great place to build a career. Although we have set the bar high, we are convinced that our goal to create a highly professional and sustainable acquisition workforce is attainable.

The Navy Acquisition Workforce Strategic Plan

In 2009, the acquisition workforce represented 8 percent of the Navy's total military and civilian workforce, yet it was responsible for executing nearly 45 percent of the Navy's total obligation authority. That same year, the President issued a memorandum calling for a stronger, more capable federal acquisition workforce. Following the President's announcement, the Secretary of Defense released his plan to rebalance the department's workforce, including the in-sourcing of 10,000 acquisition positions department-wide. Armed with the Navy's *Total Force Vision for the 21st Century* and the Secretary of Defense's 2010 *DoD Strategic Human Capital Plan Update: The Defense Acquisition Workforce*, we in the DACM office set off to build a strategic plan to act on the President's and the Secretary of Defense's guidance.

We established six pillars of action:

- Rebalance the Navy's acquisition workforce
- Integrate acquisition workforce requirements into the Navy's annual planning, programming, budgeting, and execution system
- Reinforce the science and engineering foundation
- Improve program management and acquisition business skills pipelines
- Return to deliberate flag officer/senior executive service member acquisition community management
- Plan acquisition workforce sustainment.

Those six pillars, along with the DoD human capital initiative, led us to use analytical forecasting to optimize recruitment, retention, and hiring while establishing a strong management process to align billets, qualified people, and competencies. That ensures we invest in the right people, considering both the Navy's acquisition workforce needs as well as the individual's needs.

Rebalancing the Acquisition Workforce

The first call to action from the Secretary of Defense was to reduce our reliance on out-sourcing and contractor support services, which aligns with the first pillar in our strategic plan: rebalance the Navy's acquisition workforce. As such, the Navy DACM office has focused on rebuilding our bench strength in specific competencies and career fields. We are instituting initiatives to rebalance the current acquisition workforce and set objectives to increase the numbers of acquisition workforce government civilians based upon core technical and business functions and credible demand signals. Main areas of focus include execution of the acquisition workforce growth plan over the Future Years Defense Plan (FYDP), to include appropriate in-sourcing of civilian personnel and hiring 1,590 civilians using the 2008 National Defense Authorization Act Section 852 defense acquisition workforce development funds. We also aim to establish a comprehensive, data-driven acquisition workforce analysis and decision-making capability through total force analytical models, leveraging Office of Naval Operations (Manpower and Personnel) and Marine Corps modeling.

We are working with our "Big 6" acquisition commands to determine acquisition workforce requirements and demand signals, and we are also implementing and encouraging new growth in the workforce using initiatives like in-sourcing and Section 852 funds. Currently, we are on target for our in-sourcing goal, with 759 acquisition workforce employees in-sourced to the acquisition workforce since we started at the beginning of fiscal year 2010, with plans for a total in-sourcing goal of 3,500 acquisition positions over the next 5 years.

The Naval Acquisition Intern Program was established to recruit high-potential people into the acquisition workforce. The program involves hiring paid, full-time individuals for all career fields. In 2010, we saw the largest intern class in program history, with more than 1,500 interns to date—the highest number in the 20 years of the program's existence. Additionally, the annual Intern Conference, held in Washington, D.C., was attended by more than 500 people. In addition to having more talent and volume than previous years, the 2010 intern class was also the most racially and ethnically diverse to date. This class was divided 60:40 male to female, with ages ranging from 22 to over 41 years old. About 16 percent were veterans, comprising various career fields and commands. Nearly 27 percent of the interns were brought in under the Section 852 funding, which represents the influx of the new way to build the acquisition workforce, and that percentage will continue to increase over the next few years.

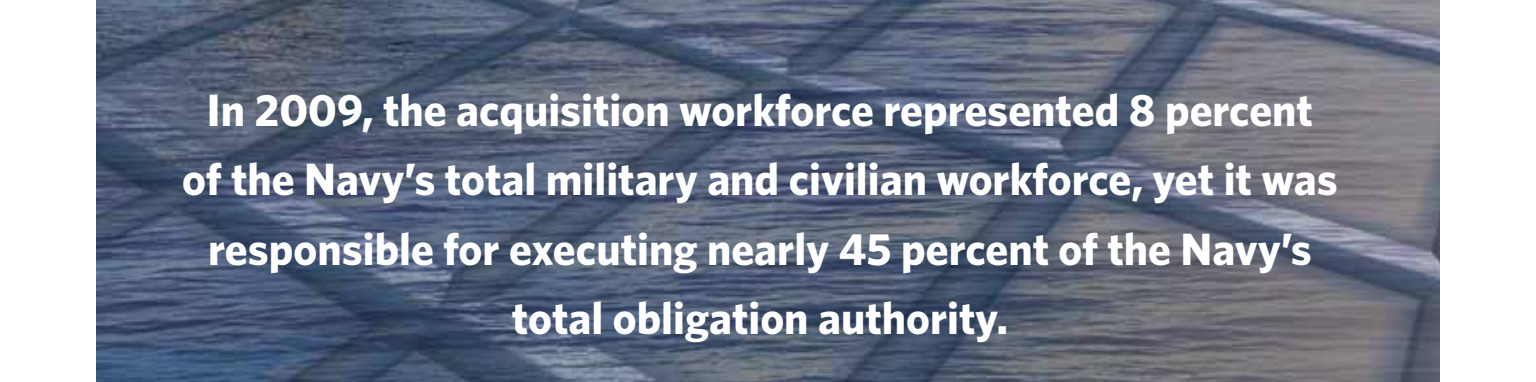
The Section 852 initiative has been key to finding quality new hires. It has allowed us to hire more than just intern-level positions, though, as we can offer journeyman-level opportunities through the Navy Associates Program. This successful effort has pulled highly talented engineers and program managers from the troubled auto industry in Detroit, and it has helped us expand the expert-level knowledge of our acquisition workforce.

Keeping Acquisition Workforce on the Radar

If we are to properly manage the Navy acquisition workforce, the DACM must have a voice in the program objective memorandum process. The Navy DACM is now a full participant in staffing requirements as submitted to the planning, programming, budgeting, and execution system process. The DACM's involvement in that system process ensures an informed investment is made in our future acquisition workforce. The DACM office monitors the quality of the workforce as well as its rightsizing. By staying in sync with the planning, programming, budgeting, and execution system process, the DACM office is providing meaningful input to the acquisition workforce investment and is able to monitor progress of the growth plan.

Strengthening Science and Engineering

Long gone are the days of simple warfare systems and unsophisticated enemies. As the battlespace becomes more complex, the acquisition workforce must follow suit in its understanding of the increasingly sophisticated weaponry and acquisition processes required to equip our forces properly.



In 2009, the acquisition workforce represented 8 percent of the Navy's total military and civilian workforce, yet it was responsible for executing nearly 45 percent of the Navy's total obligation authority.

That is why it is so important to reinforce our science and engineering foundation.

The Department of the Navy has a longstanding tradition of in-house expertise in science and engineering. Over the past 15 years, the capacity of science and engineering expertise has reduced by nearly 47 percent, while the workload has gone up by 26 percent over the same period. As an inherent part of the Navy's strategic plan, we intend to restore science and engineering talent back to the Navy's acquisition workforce, allowing us to maintain a technological advantage and regain ownership of the technical-cost tradespace in our acquisition programs.

Thus far, the DACM has promoted and instituted initiatives to reinforce the science and engineering foundation that hires scientists and engineers at the Navy's Warfare Centers and the Naval Research Laboratory who have the expertise that the Navy needs to regain knowledge of the technical-cost tradespace of naval acquisition programs. These initiatives include:

- Increasing in-house technical domain expertise (networks, ships, missiles, sonar, etc.) and increasing systems engineering capacity by 14 percent over FYDP
- Re-starting Navy Laboratory/Center Coordinating Group as well as Navy systems engineering stakeholders groups to improve systems engineering competency
- Reinvesting in the Navy's science and engineering workforce by attracting, rewarding, and retaining the nation's most capable scientists and engineers
- Leveraging Navy science and technology community through Section 219 (fiscal year 2009 National Defense Authorization Act) and other approved methods to make immediate changes
- Investigating and improving current Navy policy regarding independent research and development partnerships with industry.

Our workforce must have the same level of technical, business, and leadership acumen as our industry partners who will be building the systems that the Navy and the Marine Corps will be operating at sea and in the battlespace.

Pipelines

The need is urgent, not only for quality of experience for acquisition assignments, but also for standards in the amount of time served in approved acquisition positions. We must have

qualified, certified, experienced, and technically competent people in our acquisition billets. The fourth pillar in the Navy's acquisition workforce strategic plan—to improve the program manager and acquisition business skills—is aimed at accomplishing that task.

To improve program manager and acquisition business skills, the DACM office established initiatives that will get the right people in the right jobs, at the right time with the right certification across all acquisition competencies. Initiatives include standardizing the slating process for ASN(RD&A), reviews of current qualification requirements and assessing the need for qualifying versus quantifying experience and knowledge, and implementing appropriate waiver policies for all acquisition workforce positions. Another important initiative spearheaded by the DACM office is the effort to drastically reduce seat cancellations in required courses and ensure candidates applying for key acquisition and leadership positions are meeting statutory training requirements in the allotted timeframe. We have taken a more proactive role in ensuring key acquisition leaders are taking the required executive-level training courses at the right phase in their careers as well as expanding curriculum availability to our future leaders filling critical acquisition-coded positions. The eventual goal is to have clearly developed career paths for all acquisition workforce competencies.

Under the direction of the ASN(RD&A), the DACM office manages a number of affiliations, partnerships, or cooperative agreements with educational and professional organizations in support of developing the Navy acquisition workforce. The University of North Carolina Kenan-Flagler Executive Education, LLC, previously delivered an initial pilot course in early 2010, "Navy Government-Industry Partnership Program," designed to develop a cadre of Navy acquisition and requirements professionals who understand the industry mindset, financial and decision-making processes, and incentives program. The pilot was so successful that acquisition leadership requested the course be continued semiannually in the spring and fall.

The Senior Leadership Pipeline

Our fifth pillar, deliberately managing senior acquisition billets, flows from the fourth pillar. Along with ensuring proper pipelines for those entering the workforce, it is paramount to have customized pipelines and hands-on career management for those in senior leadership positions. We must have members

of the acquisition workforce who are properly groomed for eventual community leadership positions. Our first step was to designate an acquisition community leader for military and civilian acquisition professionals. We have assigned the principal military deputy, ASN(RD&A), oversight responsibilities across the military acquisition workforce members, and the principal civilian deputy, ASN(RD&A), as the senior executive service acquisition community leader. We intend to establish an acquisition community management board of senior leadership to coordinate senior acquisition billets/assignments and to leverage the senior executive service talent management process. Members will be hand-selected by the ASN(RD&A) office to fill the senior leadership billets, codifying the practice of deliberate management of senior acquisition billets.

In addition to that senior leadership pipeline, we have endorsed the Corporate Leadership Program, which provides senior military members the opportunity for first-hand industry experience. We have secured the Navy two seats in that prestigious and growing program, and we will continue to offer our senior officers the opportunity to gain experience with industry partners through the exchange of invaluable workforce knowledge and skills. Companies and corporations across the gamut, from Boeing and Cisco to Sears and 3M, provide training in long-range planning, organizational and management innovation, and implementation of new information and other technologies. This initiative offers our senior leadership a balanced portfolio of training and expert testimony to lead and mentor the acquisition workforce of the future.

Planning for the Future is Key

The final pillar of our strategic plan, though perhaps the most obvious, relies heavily on the success of the previous five pillars. This pillar—the sustainment of the workforce—is a culmination of the DACM's acquisition workforce goals and relies on finding the right people, finding those people across all backgrounds, steering those people into the right career paths, and nurturing those individuals to become the leaders of the acquisition community of the future.

To plan acquisition workforce sustainment, the DACM office has established initiatives that use analytical forecasting to optimize acquisition workforce recruitment, retention and hiring, and to establish a strong management process to align billets, qualified people, and competencies. Those initiatives include identifying and prioritizing areas for acquisition workforce retention management and exploring strategies to improve retention. The DACM commissioned a study to build a predictive tool to help identify the attributes, qualifications, experience, training, and education that epitomizes the successful acquisition professional.

Along with providing the acquisition workforce membership with career paths and balance, it also provides leadership with awareness of gaps before they occur. Analytical forecasting allows us to do just that and facilitates our ability to maintain a stable, competent, and self-sustaining acquisition workforce.

Continued Learning Opportunities

We are using several different inducements to attract and retain a high-quality workforce. Along with tuition assistance, we rely heavily on the Defense Acquisition Workforce Improvement Act (DAWIA) to ensure the workforce continually improves. The continuous learning program is an ongoing effort that enables individuals to stay current with all acquisition policies and procedures. DAWIA requires each acquisition workforce member to earn 80 continuous learning points over a 2-year period. The requirement is targeted toward keeping the community in touch and relevant as times and conditions change. The DACM office is looking into more and better ways to train the acquisition workforce, including Navy- and Marine Corps-tailored DAU courses that address Department of Navy-unique acquisition issues (for example, the newly established “Ships are Different” course).

Moving Toward Acquisition Excellence

The past year's efforts in the DACM office have focused on three cornerstones to success and sustainment: “Back to basics”; Navy acquisition workforce strategic plan; and execution of our acquisition workforce growth plan.

Back-to-basics efforts have focused on enhancing the professionalism of our acquisition workforce through maximizing DAWIA certification achieved and compliance with statutory requirements. In July 2010, the DACM established fiscal year 2011 DAWIA goals to track and measure progress in the acquisition workforce.

Publishing the first-ever Department of Navy acquisition workforce strategic plan, which lists the six most important pillars that undergird the acquisition workforce, is a significant accomplishment. Additionally, we have developed a plan of action and milestones by which we are monitoring execution and success of each of the pillars.

The DACM office is working with its major acquisition system commands to develop standard reporting metrics, and we meet quarterly to discuss and monitor progress and track against our growth plan. We are on target to meet the Navy commitment to the secretary of defense's initiative to grow/rebalance the acquisition workforce over the FYDP. Our Naval Acquisition Intern Program has been a major focal point, and one that has allowed for great success in raising the bar in professionalism in the acquisition credentials of the workforce.

Growing the acquisition workforce, converting core functions back to government, recruitment and retention of world-class engineers and scientists, improved pipeline planning, and deliberate and thoughtful leadership preparation all play a part in the Navy's pursuit of a more capable acquisition workforce.

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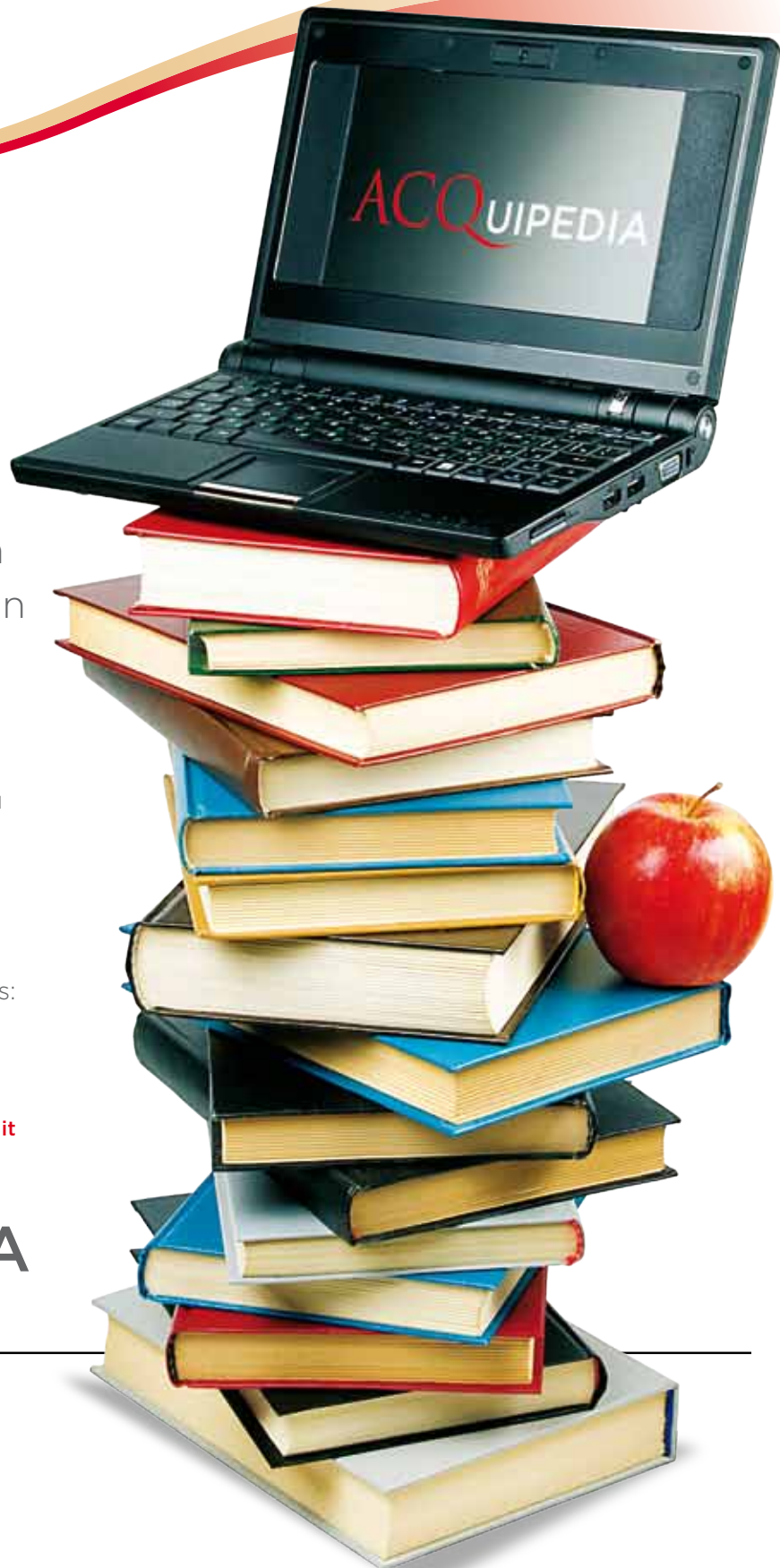
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Acquisition Workforce Growth Initiative

*A Report from the Field: U.S. Air Force
Aeronautical Systems Center*

Years of downsizing coupled with a 3-year hiring freeze have led to a serious shortage of experienced workers across the Acquisition workforce. Compounding the problem is an aging workforce comprised primarily of “Baby Boomers” approaching retirement eligibility. As the acquisition community across the country struggles to overcome manpower shortfalls and the attendant knowledge gaps, Aeronautical Systems Center’s Contracting Directorate (ASC/PK) is well on its way to conquering both. Thanks to an infusion of Section 852 funding, an innova-



tive recruiting and training strategy, and the development of some key partnerships, ASC/PK is aggressively acting to address its acquisition mission needs.

A Depleted Workforce Reinvigorated

Given the state of ASC's contracting workforce just 2 years ago, no one could have foreseen such a remarkable turnaround in such a short time. In its mid-1980s heyday, ASC/PK employed an average of 800+ contract specialists, but that number steadily declined as retirement-eligible workers left and the positions they occupied were cut. The 40 or so interns hired between 2000 and 2007 were not nearly enough to keep pace with an increasingly heavy workload and a fairly constant attrition rate of 50 per year. When ASC's new Director of Contracting Patsy Reeves arrived in July of 2008, she found herself at the helm of a severely depleted workforce with a 40 percent vacancy rate and no hiring budget.

Shortly thereafter, ASC learned about the potential to receive Section 852-funded intern positions through the Defense Acquisition Workforce Development Fund. Called "Section 852" because of its relationship to that section of the 2008 National Defense Authorization Act, its purpose was to beef up the Acquisition workforce through recruiting, hiring, and training. Over the next 4 months, new trainee positions dribbled in from a variety of funding sources, with the numbers fluctuating constantly. When the dust finally settled in December 2008, ASC/PK had 35 Section 852-funded positions, 63 Air Force

Personnel Center-funded Copper Cap slots, 15 locally funded positions, and 32 Student Career Experience Program (SCEP) slots for a total hiring picture of 142 trainee allocations to be filled by August 2009.

At the same time ASC/PK was receiving positions, so were the other four Air Force contracting organizations at Wright-Patterson Air Force Base (WPAFB). Historically, ASC/PK competed with Air Force Research Labs (Detachment 1 AFRL), Electronic Systems Center (ESC), Headquarters Air Force Materiel Command (HQ AFMC), and more recently the Enterprise Sourcing Group (ESG) for the same scarce resources, often finding themselves at odds over the hottest prospects at the local college fair or in a local bidding war for top talent. Foreseeing the possibility of a reinvigorated contracting workforce, Reeves encouraged and energized the group to think more strategically, resulting in a desire by all parties to pool resources and recruit, hire, and train together. Leadership from each of the five contracting organizations formalized a partnership with a Memorandum of Agreement (MOA), changing the atmosphere from competition to collaboration. ASC was given the lead since it was easily the largest contracting organization on base.

Recruiting Strategy: A Plan to Attract the Very Best

ASC's 142 contracting allocations, plus 18 from across the other four contracting organizations, made for a combined

**The creative vision of the
Aeronautical Systems Center's
personnel department
facilitated the in-processing
of 160 new hires as a group
on one of three prescheduled
dates in June, July, and August
2009.**

total of 160 open trainee positions. Recognizing the need for quick execution and an organized approach to recruiting, Reeves challenged the recruiting team to formulate a hiring plan. The plan detailed the type of trainees to be recruited at each location, i.e., undergraduates from Miami University, master's of business administration (MBAs) from The Ohio State University, SCEPs from the University of Dayton, and so on. With over 100 stellar universities from which to choose and as many positions to fill, the team narrowed down its list by categorizing universities into four major areas: past successes at a particular university, quality of programs, student body make-up, and location. If a previous recruiting visit netted exceptional candidates, that same university would appear on the current schedule. Likewise, a top-notch business school with a first-class MBA program almost guarantees its graduates have strong business acumen, so that was a consideration. To ensure a diverse mix of available candidates, the minority and gender population at a school was relevant. Finally, just like in real estate, location is critical. Students recruited at schools inside a 200-mile radius of the base tend to stay more than a few years at WPAFB. As such, the team directed its recruiting efforts toward schools within a 3-hour driving distance of the base. With these factors in mind, ASC led the effort to schedule hiring trips to colleges and universities in Ohio, Kentucky, and Virginia.

In previous recruiting events, the recruiting team located, interviewed, and selected candidates prior to any staffing office involvement. Afterward, the staffing specialist ensured the selectees met minimum qualifications before official job offers were made. When a new staffing specialist came on board, the recruiting team invited the specialist to travel to one recruiting event to offer a first-hand look at the process. This grew to a game-changing initiative as the specialist was able to review a candidate's resume and transcripts while the interview was

being conducted. Additionally, when more information was needed, candidates were there to provide it. At that recruiting event and every one thereafter, the staffing specialist traveled with the team, qualifying (or disqualifying) candidates on the spot, enabling selections to be made by day's end and offers extended within 24 hours.

The Numbers at a Glance

The impact of employing these new strategies was significant, as supported by the number of applicants interviewed and hired for Wright-Patterson's contracting workforce between January and August 2009.

- Candidates interviewed: 382
- Offers made: 183
- Offers declined: 23 (or 12.5 percent)
- Positions filled: 160 trainees
 - 112 with MBAs, Juris Doctorates (JDs), or both
 - 16 with Bachelor of Science (BS) degrees
 - 32 SCEPs (7 pursuing BS; 25 pursuing MBAs)

Sharing the Wealth

Word spread of the recruiting team's success in filling positions quickly with exceptional candidates. As more Section 852 funding was released by DoD, calls began coming in from bases around the country and from other functional offices at Wright-Patterson seeking hiring assistance. Encouraged by contracting leadership to support their acquisition brethren, the recruiting team partnered with others in three ways. For the smaller contracting shops around the country with no recruiting teams and very few slots to fill, at their request the Wright-Patterson team made selections on their behalf from the pool of top candidates who expressed a desire to relocate. For others, it was a matter of someone from the contracting recruiting team traveling to another base and coaching them step-by-step through a real recruiting event. Those in closer proximity who solicited help, such as Wright-Patterson's program management team, accepted the contracting team's invitation to recruit as a cooperative. They held information sessions and interviews together at the universities, deciding each day which candidates were best suited for each profession. Consequently, the program management team filled all of its 852-funded intern positions with highly qualified MBAs.

A New Approach to On-Boarding

In the midst of the flurry of interviews and hiring, the contracting team reengineered the on-boarding process and created excitement and camaraderie along the way. Instead of scheduling 6 months' worth of individual in-processing appointments with personnel, the creative vision of the personnel department facilitated the in-processing of 160 new hires as a group on one of three prescheduled dates in June, July, or August 2009. The new process included being welcomed and sworn into government service by senior leaders like AFMC Commander Gen. Donald J. Hoffman, ASC Commander Lt. Gen. Thomas J. Owen, or HQ AFMC Director of Contracting Michael A. Gill. Following the swearing-in ceremony, the new hires attended a new employee orientation course, where

contract specialists, along with recent hires from many other career fields on base, were instructed on matters related to the base and the Air Force at large. The culmination of this week-long class was graduation and issuance of a CAC (Common Access Card). At the start of Week 2, the contract specialists progressed into *Jumpstart*, the newly developed 10-week contracting-specific course.

The Intensive Training Begins

The precursor to *Jumpstart* was a 2-week course that provided an overview of contracting-related topics. During the years when hiring was scarce and there was an abundance of experienced workers to provide on-the-job training, the quality of the up-front training mattered less. With the new wave of hiring, a different training model was necessary. It was unrealistic for the already constrained workforce to train 160 new employees. Instead, a comprehensive program similar to one developed at Robins AFB was needed, but building such a program takes money and experienced personnel. The stars aligned as both became available, the latter coming from an unlikely source. Two retired senior ASC/PK managers, both known and respected leaders, expressed interest in developing and teaching the new program. Both agreed to become rehired annuitants, build the new training program, and serve as instructors. Salaries were paid by Section 852 funding, and the new instructors began work immediately.

The two instructors borrowed and expanded curriculum generously provided by WR-ALC, Defense Acquisition University (DAU), and others. They formed a partnership with DAU that enabled students to take DAU online classes at night to achieve Level I certificates, and come to *Jumpstart* the following day for the instructors' real-world application of those lessons. A second partnership was formed with Wright State University, a well-respected local college that offered use of its new facilities to accommodate the first *Jumpstart* class at no charge. When all was said and done, *Jumpstart* was up and running in mid-June 2009 when the first 50 of the 160 new hires reported to work. The instructors ran two training sessions of 25 students in parallel for a total of 12 weeks, including lecture, projects, field trips, and case studies. One full week was set aside for a pricing scenario, including mock negotiations. Time was also spent on important subjects like contract law, integrity, the Federal Acquisition Regulation (FAR), and learning the contract writing system known as ConWrite. Guest speakers like Reeves and other Senior Executive Service members from the base, as well as outside organizations like the National Contract Management Association (NCMA) and the Small Business Office were used to spark interest. For their last 2 weeks of class, the students attended CON 120 at the local DAU campus—a capstone course for Level I Acquisition Professional Development Program certification.

In the afternoon of their last day of training, the students learned the office where they would begin their Air Force careers. Their new supervisors, in attendance at the celebration, welcomed them, provided reporting instructions for their first

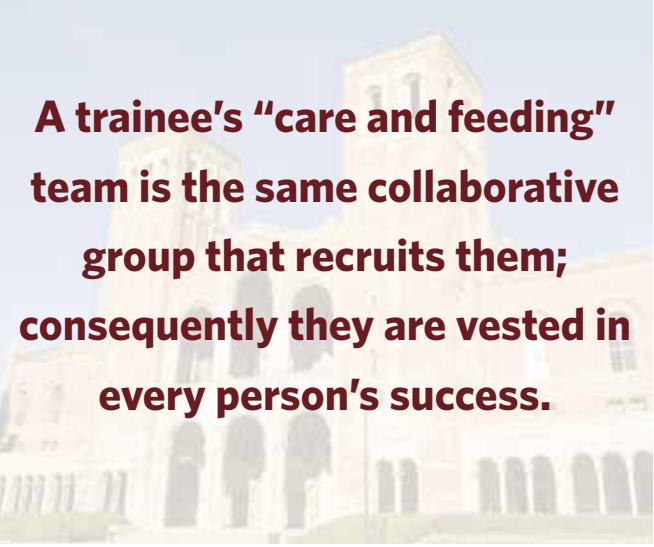


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A trainee's "care and feeding" team is the same collaborative group that recruits them; consequently they are vested in every person's success.

day on the job, and joined them in an offsite celebration afterward.

Managing the Training Program Today

It is important to provide new hires with a solid foundation through excellent up-front training. It is even more critical to manage their "care and feeding" throughout their training program to ensure we retain the new employees we've worked so hard to recruit and train.

At Wright-Patterson, managing an intern program of 225 trainees takes a village. A trainee's "care and feeding" team is the same collaborative group that recruits them, and consequently, they are vested in every person's success. Supervisors also play an integral part in the trainee's further development. Prior to a trainee reporting, each supervisor receives a letter identifying the employee's hiring program, the grade at which they were hired, the date of their next rotation, their education level, and any prior experience. With this information in hand, supervisors are better able to plan appropriate workload for each new employee.

Further, the team monitors progress through quarterly and semiannual evaluations from the supervisors and the interns. The team provides an individual training plan for each intern to follow; arranges and tracks training and development, including DAU certification classes and leadership opportunities; organizes social events that promote camaraderie; and manages trainee rotations.

Rotations allow the trainee to develop a breadth of contracting knowledge through a variety of on-the-job experiences and to observe distinctive management styles. To ensure they receive unique rotation opportunities, the intern meets with a Senior Advisory Board comprising of members from senior contracting leadership prior to each 18-month rotation. They meet again with the board prior to their outplacement from the training program.

Enticing them to Stay

People who develop relationship connections at work tend to stay in the workplace. Therefore, providing opportunities for

intern interaction is just as essential as rotations and training. While bowling, sand volleyball, picnics, and paintball are part of the equation, the more meaningful involvement comes from their participation in two all-trainee committees: CARE (Community Action Reaches Everyone) and ACTIVE (Association for the Camaraderie of Trainees Incorporating Value-Added Entertainment). With an average of 15 participants per event, CARE members have judged science fairs at local schools; provided spring cleanup at WPAFB's Fisher House and Child Development Center; collected over 4,000 miniature toiletries for the Veterans Administration Center; and provided school supplies for the Crayons to Classrooms program.

"Being part of and connected to like-minded trainees who want to do something extra and over-the-top for people, groups, and our communities is what makes the CARE committee tick," says Megan Rosenbeck, CARE co-chair. "Our servicemen and women give their all—the least we can do as government servants is to give our all to make every place we serve better."

Likewise, ACTIVE hosted an ASC/PK bowling event attended by 350 contracting employees, an all-trainee summer picnic for 120, and an offsite at a local Party Barn with 160 trainees. Amanda Thompson is one of ACTIVE's co-chairs.

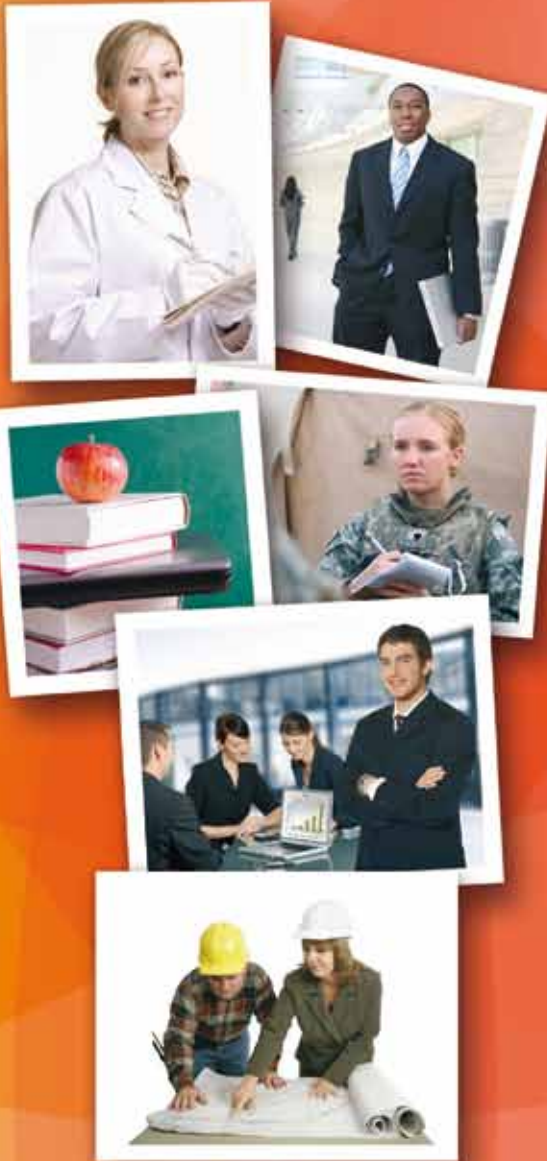
"We work very hard to plan events and coordinate opportunities that allow each and every trainee to be involved, get to know peers, and to share experiences that will hopefully be beneficial to the workforce as a whole," she says.

Going Forward

Much has changed since that first *Jumpstart* class in June 2009. Thanks in large part to the continued availability of Section 852 funding, another 143 contract specialists were added to the WPAFB workforce in FY 2010, and FY 2011 recruiting efforts are well underway.

In recognition of the success achieved by the collaborative recruiting team, in June 2010, Gill expanded the focus of the WPAFB contracting alliance to include force development and human resources, and facilitated the signing of a second MOA. He instituted single announcements for similar jobs across base to be posted each quarter. As a result, all rotations, promotions, and lateral vacancy fills are done cooperatively with input from each of the five contracting organizations, which now meet on a regular basis.

The Aeronautical Systems Center Contracting Directorate supports ASC's mission to deliver affordable, sustainable capabilities to the nation's warfighters—Air Force, Joint Service, allied, and coalition partners—on time and on cost; and to work the priorities of the Secretary of the Air Force, Chief of Staff of the Air Force, Air Force Materiel Commander, and the Service Acquisition Executive. The directorate welcomes comments and questions. Contact Selwa "Stel" Kirbabas at Selwa.Kirbabas@wpafb.af.mil or Elizabeth "Jeana" Adducchio at Elizabeth.Adducchio@wpafb.af.mil.



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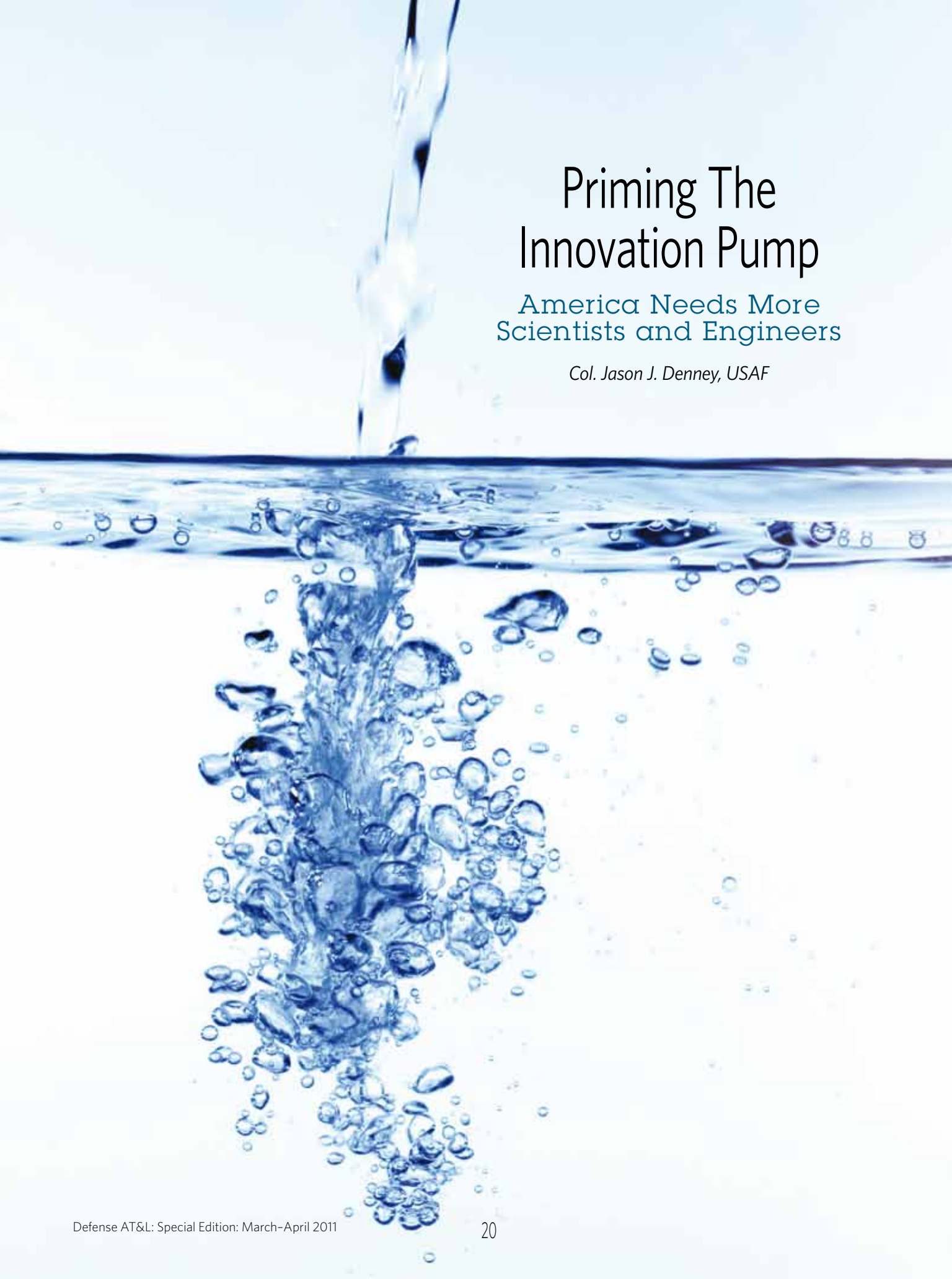
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Priming The Innovation Pump

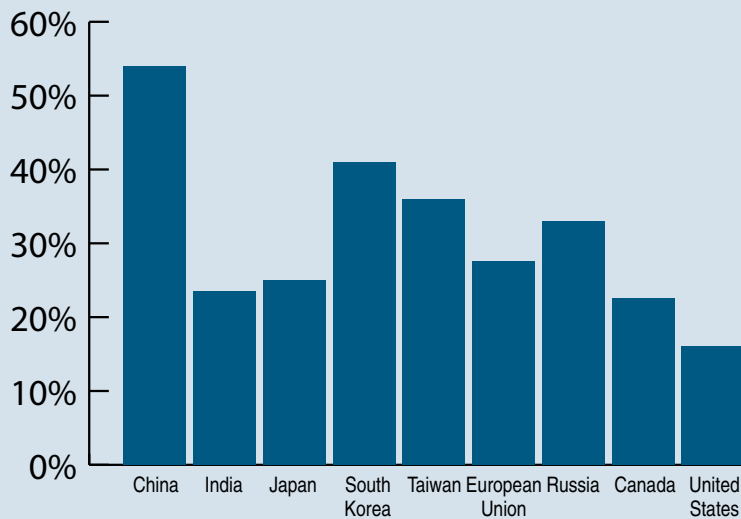
America Needs More
Scientists and Engineers

Col. Jason J. Denney, USAF



The United States has led the world in science, technology, knowledge generation, and innovation; however, the nation can no longer take its position for granted. Nations fueled by globalization and competitiveness are on a fast track to surpass the United States in scientific excellence and technological innovation. Specifically, downward trends in the number of U.S.-born scientists and engineers (S&Es) are exacerbating this challenge and creating troubling implications for U.S. economic prosperity and national security.

United States Lags in Percent of University Students Receiving Degrees in Science and Engineering



Note: Adapted from *Innovation and U.S. Economic Growth*, by R. D. Atkinson, Feb. 5, 2009, Information Technology and Innovation Foundation presentation to Industrial College of the Armed Forces.

with China's growth at 9 percent, dwarfing all other countries, including the United States, whose S&T investment decreased by 6 percent. The U.S. output of native-born S&E talent is a major contributor to this strategic dilemma.

As depicted in the bar chart, the United States lags global competitors in the percentage of undergraduates earning S&E degrees. In 2002, the National Science Foundation (NSF) found that only 17 percent of U.S. undergraduates earned engineering degrees, as compared to 53 percent in China. In addition, the U.S. global share of S&E doctorates and undergraduate degrees fell from 40 to 20 percent and from 30 to 14 percent respectively, between 1970 and 2000. The NSF also determined that 58 percent of engineering doctorates awarded in the United States in 2003 went to non-citizens, while greater than half of the students enrolled in U.S.-taught engineering programs were foreign-born. Also, according to the Aerospace Industries Association, in a recent survey of more than 270,000 U.S. college freshmen only 7.5 percent said they intended to major

From Producing Stuff, to Producing Ideas

The liberal, neo-classical economic doctrine and its principle that capital drives growth have given way to knowledge economics and its principle that innovation drives growth. During the Industrial Revolution, physical capital was the competitive advantage, and growth was the product of land, labor, and capital—in other words, how much “stuff” was produced. In 1930, Joseph Schumpeter, an Austrian economist, first pointed out that innovation is the key to economic growth. Today, Paul Romer's new growth theory builds on Schumpeter's premise by stressing that information leads to knowledge and then knowledge leads to innovation. Unfortunately, the U.S. innovation engine—fueled by the supply of U.S.-born S&Es—is quickly losing ground to international competitors. Of specific concern is the general lack of interest among American-born youth in pursuing careers in the science, technology, engineering, and math (STEM) fields. If this trend continues, the United States will find itself at a severe disadvantage.

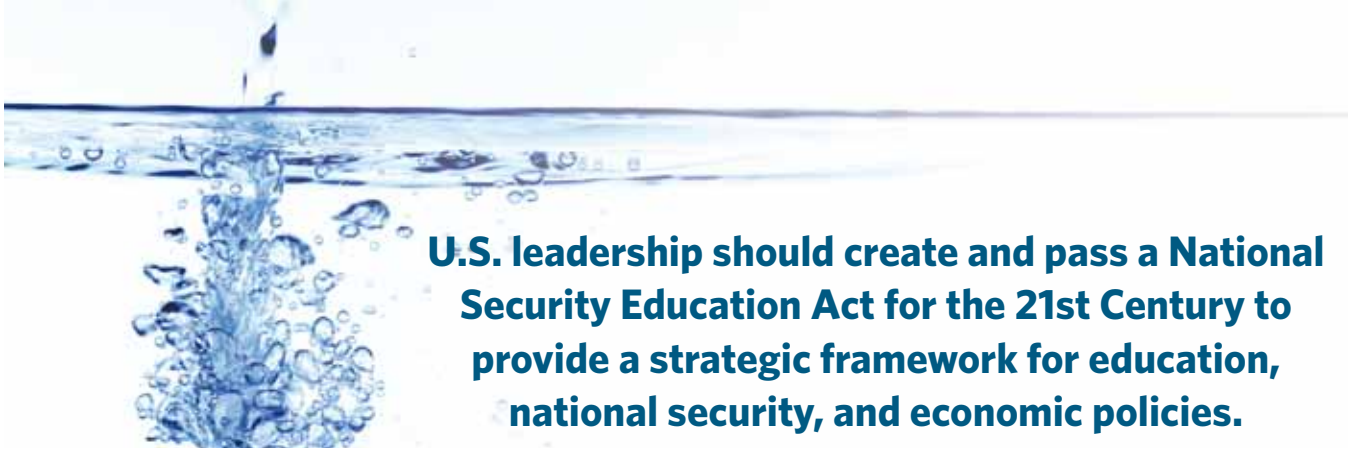
Losing Ground on All Fronts

By most science and technology (S&T) metrics, the United States leads the world. However, the nation has already lost and is continuing to lose ground in critical technology output metrics such as its trade balance of high-tech goods, the number of technical articles published, and the number of technical articles cited by others. Growth in overseas S&E talent and infrastructure has increased the off-shoring of U.S. industrial research and development. According to William Berry and Cheryl Loeb of the National Defense University, the world's S&T investment increased by 96 percent from 1996 to 2006,

in engineering—the lowest level since the 1970s. This is especially worrisome since over half the American-born S&E workforce is over 40 and will retire in the next 20–30 years.

The Department of Defense (DoD) alone, based on National Defense Education Program statistics, is expected to lose more than 13,000 S&Es in the next decade. Industry is not immune either. Sixty percent of the aerospace industry workforce is 45 or older, and 27 percent of its engineering workforce is qualified for retirement, based on AIA data. Foreign-born S&Es are earning the lion's share of undergraduate and graduate S&E degrees, but security concerns with foreign-born S&Es limit their opportunities within the DoD, and its supporting contractors, as well as other federal agencies. Even the U.S. economy cannot rely on a steady influx of foreign S&E talent.

Foreign students, particularly Asian students, are less likely to study in the United States for several reasons. First, foreign countries are growing their own higher education capabilities. According to the Task Force on the Future of American Innovation, the number of Chinese, South Korean, and Taiwanese doctoral students at U.S. universities dropped by 19 percent from 1994 to 1998, while their enrollment at institutions in their native countries doubled. Berry and Loeb found in 2006 that five Chinese universities ranked in the top 100 universities for science, with Peking University ranking 12th. Second, foreign countries are developing their own high-tech industries and research capacity. As a result, increasing numbers of U.S.-educated doctoral S&E graduates are returning to their native countries to pursue research opportunities. And finally,



U.S. leadership should create and pass a National Security Education Act for the 21st Century to provide a strategic framework for education, national security, and economic policies.

tighter visa restrictions post-9/11 deter foreign students from studying in the United States. As a result of this reduction in foreign S&E talent to supplement innovation, the United States must produce more homegrown STEM talent to maintain its economic and national security edge.

The U.S. Innovation Engine... Running Lean on S&Es

U.S. investment in the physical sciences and engineering has not kept pace with demands of the global economy and national security threats. September 11, 2001, and its continuing aftermath underlie the need for a powerful U.S. S&T effort; however, the number of U.S. citizens enrolling in graduate math, engineering, and physical science programs—the fields of broadest DoD application—fell by 25, 21, and 17 percent, based on NSF data. How can this be, given that the majority of Americans believe S&T plays a significant role in national security, is critical to stopping future terrorist threats, and will impact the nation's future economic prosperity? Actions need to match sentiment for a shift to occur.

The U.S. technological and military dominance is the product of S&T investments in education, infrastructure, and research and development made in the 1950s through the 1970s; therefore, shortsightedness today may concede U.S. military and technological dominance 10, 20, and up to 30 years or more in the future. It is akin to a farmer who wishes only to harvest and not to sow. If the United States does not invest to rebuild its S&E talent, it will not maintain its global economic and military position long into the 21st century.

Rebuilding the S&E Talent Pool...It Starts with K-12 Math and Science Education

The American K-12 education system is failing our children and threatening the U.S. economy and national security. Specifically, downward trends in math and science education—particularly on international assessments—has troubling implications. U.S. leaders must make the strategic connection between math and science education, the ability of our high school graduates to even pursue STEM degrees, and its link to economic and national security. One only needs to review the latest 2009 Program for International Student Assessment results released in December 2010 to see that America's kids are not making the grade, particularly in math and science in which they scored 24th and 19th out of 64 developing and

developed countries. As compared to the 33 Organisation for Economic Cooperation and Development countries (for a more apples-to-apples comparison), American 15-year olds were 18th in math and 13th in science. These results are sobering given that the United States prides itself as having a technologically advanced society, economy, and military. Those days are quickly becoming numbered unless we cultivate our kids to love science and math, and hence, to have the abilities to pursue STEM degrees.

Implications of a U.S. S&E "Brain Drain"

The productive power of the U.S. economy and its national security lies primarily with its people. The Office of Management and Budget estimates that privately owned capital in the United States is worth \$13 trillion, while its human, intellectual capital is worth \$48 trillion. According to Alan Greenspan, "If we are to remain preeminent in transforming knowledge into economic value, the U.S. system of higher education must remain the world's leader in generating scientific and technological breakthroughs and in preparing workers to meet the evolving demands for skilled labor."

Since 1980, S&E positions in the United States have grown by five times the rate of other professions, according to the Task Force on the Future of American Innovation. However, the number of S&E degrees earned by U.S. citizens is decreasing. This is especially critical to DoD laboratories and agencies like the National Security Agency, where U.S. citizenship is a security requirement. Additionally, the time and cost to pursue S&E graduate degrees have increased while the compensation in S&E fields has declined relative to other high-level occupations. These trends clearly signal the need to create incentives—such as higher wages, fellowships, and employment guarantees—to maintain the pipeline of quality S&E talent that our nation's economy and national security structure sorely need. Unless more U.S. students choose S&E fields, the U.S. public and private innovation sectors will experience a significant "brain drain."

Industry has been working to avoid this "brain drain" for some time, but is still struggling to hire the talent it needs. According to the Aerospace Industries Association, 13 percent of the overall aerospace and defense workforce is qualified for retirement, and within 10 years this figure will grow to 50 percent. And, of the 70,000 engineering bachelor's degrees awarded

in the United States annually, most disciplines are not in high demand by DoD contractors. With an aerospace and defense workforce that is half its size at the end of the Cold War, DoD and industry are in a precarious position, particularly when it takes several years to grow an experienced engineer from entry-level talent. To stop and reverse this innovation “brain drain,” new policies are needed to increase the number of quality American-born S&Es, in addition to supplementing the private sector with foreign S&E talent.

Policy Recommendations

U.S. technological leadership requires effective government policies to keep the nation at the leading edge of the scientific frontier. The September 11, 2001, attack is analogous to the Sputnik launch that created the National Defense Authorization Act in 1958; however, Americans need to once again find the excitement and urgency of 50 years ago that led to technological achievements such as the Apollo moon landings. Time is of the essence because the Apollo generation is ripe for retirement. U.S. leadership should create and pass a National Security Education Act for the 21st Century to provide a strategic framework for education, national security, and economic policies. The following policies, while not an exhaustive list, would be a step in the right direction.

National Innovation Policy Recommendation

Simply educating more S&Es is not enough. The United States must create national innovation policies to provide focus, to promote the diffusion of innovative ideas across private and public lines, to advocate for innovative projects, to ensure a continuous supply of quality S&Es and basic research and development resources, and to tie innovation to the U.S. economic and national security.

S&E Policy Recommendations

Increase the number and value of S&E graduate research fellowships (GRFs). At a minimum, the NSF should restore the ratio of GRFs to undergraduate engineering degrees to the ratio that existed in the early 1960s, following Sputnik. Increasing GRFs will incentivize the most talented S&E students to continue on to graduate work versus pursuing more lucrative fields.

Continue to attract the best and brightest S&Es from abroad. Highly skilled immigrant S&Es contribute significantly to U.S. economic growth. According to the Brookings Institution’s Hamilton Project, a third of all businesses founded in the Silicon Valley in the 1990s were started by foreign-born S&E entrepreneurs. Also, foreign-born competition will drive U.S.-born S&Es to achieve greater educational heights and innovation to compete.

Increase the H-1B visa caps to pre-9/11 levels. The United States is failing to take full advantage of the global talent pool. The Hamilton Project found that the number of international S&E students in U.S. graduate programs declined by 20 per-

cent between 2001 and 2004. The United States must reverse this trend to maintain its innovative edge.

Improve STEM education. By developing programs that demonstrate the practical uses of math and science, the government can generate interest in STEM careers and support students interested in these programs through government-funded fellowships, thus providing a steady stream of S&E talent.

K-12 Education

Create a national standard for math and science education. High standards improve teaching and learning. The time has come for the adoption of national math and science standards. Algebra is algebra and photosynthesis is photosynthesis, no matter what your zip code is; therefore, a national math and science standard—based on the broad inputs of educators, elected officials, federal agencies, community and business leaders, and experts in pedagogy—is the natural starting point to focus other math and science education reforms.

Establish a rigorous and challenging math and science curriculum. According to former Assistant Secretary of Education Susan Sclafani, the strongest predictor of completing a STEM degree is a rigorous high school math and science curriculum.

Establish initiatives to retain and recruit “quality” math and science teachers. According to the NSF, 80 percent of public schools report teacher vacancies—74 percent in math and 56 percent in science. In addition, the highest percentage of out-of-field teachers (teaching without a degree in the subject) are in math and science, based on National Center for Education Statistics.

Conclusions

Innovation is more important to the U.S. economy and national security now than in the past. Since World War II, the United States has been the leader in innovation; however, international competition is posing a growing challenge to U.S. technological supremacy. The United States has the best market environment in the world to support innovation, but arguably weak innovation policies. Effective government innovation policies are critical to keeping the nation at the leading edge of the scientific frontier. Knowledge and innovation are powerful drivers of economic growth; therefore, America must rebuild its foundation of competitiveness—its supply of S&E talent—that has served the country so well for the past 50 years. America must also recognize that the strength of this foundation starts with improving K-12 math and science education—sowing the seeds of innovation from the start. The challenges are real and growing, so knowledge generation and innovation must become a national priority...America’s future depends on it!

Denney is the deputy for tactical aircraft systems, Portfolio Systems Acquisition, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics. The author welcomes comments and questions and can be contacted at Jason.Denney@osd.mil.

Carter Announces 2010 Acquisition Award Program Winners

Collie J. Johnson

The Defense Acquisition Workforce is more than 145,000 strong, and possesses a broad spectrum of technical expertise, program skills, and institutional knowledge. To recognize and reward their efforts, Under Secretary of Defense for Acquisition, Technology and Logistics Dr. Ashton B. Carter recently announced the results of three 2010 acquisition award programs: the David Packard Excellence in Acquisition Award, the USD(AT&L) Workforce Achievement Award, and the USD(AT&L) Workforce Development Award.

David Packard Excellence in Acquisition Award

On Nov. 2, three program teams, selected from a field that included 22 nominated teams, received the Packard for outstanding accomplishments on their programs. Carter, joined by Defense Acquisition University Acting President James McMichael, presented the awards at a luncheon held in conjunction with the first day of the Program Executive Officers'/Systems Command (PEO/SYSCOM) Commanders' Conference at Fort Belvoir, Va. The winners are:

The **Combined Enterprise Regional Information Exchange System-International Security Assistance Force (CX-I) (Army)** team, for its rapid response in addressing a critical gap in electronic data sharing among coalition partners in Afghanistan.

The **F-35 Radar Electronic Protection (Navy)** team, for its innovation and agility in responding to rapid changes and updates to software-based jamming systems, and successfully demonstrating a quantum leap in performance

against enemy jammers designed to meet an advanced threat.

The **Aegis Readiness Assessment Vehicle (Missile Defense Agency)** team, for its innovative acquisition practices in building, integrating, and launching eight ballistic missile targets, including a new, highly sophisticated vehicle that provided the United States with the ability to test against complicated threat representative countermeasures.

"Congratulations to the award winners," Carter said, "and to those nominated as well, for their dedication in supporting the warfighter and contributing to our national security."

Deputy Secretary of Defense William Lynn, the luncheon speaker, also joined in congratulating the winners. The Packard award is the most prestigious team award within the Department of Defense Acquisition, Technology and Logistics (AT&L) community. It recognizes organizations, groups, and teams that have demonstrated exemplary innovation and best practices in acquisition.

2010 DAVID PACKARD EXCELLENCE IN ACQUISITION AWARDS

The 2010 David Packard Excellence in Acquisition Awards were presented to three outstanding teams on Nov. 2, 2010, at Fort Belvoir, Va., by Under Secretary of Defense for Acquisition, Technology and Logistics Ashton B. Carter and Defense Acquisition University Acting President James McMichael.



The Combined Enterprise Regional Information Exchange System-International Security Assistance Force (CX-I) (Army) Team

Front row, from left: Carter; Jennifer Zbozny; Army Lt. Col. Bob Backman; McMichael. Back row, from left: Bill Sverapa, Mary Woods, John Kays, Garry Vittorini, Matt Iannelli, Doug Wiltsie, Army Brig. Gen. Tom Cole.

The F-35 Radar Electronic Protection (Navy) Team

From left: Navy Vice Adm. David J. Venlet; McMichael; Mark Strayer; Dave Black; Bill Dooley; Air Force Col. Tim Morris; Doug Ebersole; Carter.



The Aegis Readiness Assessment Vehicle (Missile Defense Agency) Team

From left: Tom Johnson; McMichael; John Winstead; Navy Rear Adm. Joseph Horn; Carter; Tim Troske.

Photos by Erica Kobren

USD(AT&L) Workforce Development Award

On Nov. 3, the second day of the PEO/SYSCOM Commanders' Conference, Principal Deputy Under Secretary of Defense for Acquisition, Technology and Logistics Frank Kendall and Defense Acquisition University Acting President James McMichael recognized seven winners of the 2010 USD(AT&L) Workforce Development Award. As with the previous day's awards, the ceremony was held at a luncheon in conjunction with the PEO/SYSCOM Commanders' Conference. The accomplishments of the award winners are varied, but all illustrate many creative and innovative initiatives in developing comprehensive learning and development programs for their workforces. The winners are:

Large Organization Category

Gold Award—Naval Undersea Warfare Center Division, Keyport

Silver Award—U.S. Army Tank Automotive Research, Development and Engineering Center

Bronze Award—U.S. Army Natick Soldier Research, Development and Engineering Center

Bronze Award—Air Force Global Logistics Support Center

Small Organization Category

Gold Award—Cost and Systems Analysis Office, U.S. Army TACOM Life Cycle Management Command

Silver Award—Air Force Security Assistance Center

Bronze Award—Office of Naval Research

The 2010 USD(AT&L) Workforce Development Award recognizes Department of Defense institutions that have made exemplary contributions to the career-long development of their workforces. These organizations, both large and small, make it their mission to strengthen their existing team.

Chairman of the Joint Chiefs of Staff Adm. Mike Mullen, luncheon guest speaker, joined Kendall in commending the winners and encouraged them to keep sharing the best practices contained in their award submissions.

"By doing so," Kendall told the award recipients, "you are all helping to recruit, develop, and retain a mission-ready Defense Acquisition Workforce."

2010 USD(AT&L) WORKFORCE DEVELOPMENT AWARDS

The 2010 USD(AT&L) Workforce Development Awards were presented to seven outstanding organizations on Nov. 3, 2010, at Fort Belvoir, Va., by Principal Deputy Under Secretary of Defense for Acquisition, Technology and Logistics Frank Kendall and Defense Acquisition University Acting President James McMichael.



Gold—Large Organization Winner: Naval Undersea Warfare Center Division, Keyport

From left: Frances Shaw, head of Operations Services Department; Amanda Andrikopoulos, Strategic Goal Mentoring team member; Navy Capt. Stephen Iwanowicz, commander, Naval Undersea Warfare Center Division, Keyport.

Silver—Large Organization Winner: U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC)

From left: Dr. Grace Bochenek, director, U.S. Army TARDEC; Marque Cryderman, human capital manager, TARDEC.



Bronze—Large Organization Winner: U.S. Army Natick Soldier Research, Development and Engineering Center

Edward Doucette, director, Warfighter Protection and Aerial Delivery Directorate.

**Bronze—Large Organization
Winner: Air Force Global Logistics
Support Center**

From left: Ray Forcier, chief, Workforce Development; Denise Rogers, deputy director, 406th Supply Chain Management Squadron.



**Gold—Small Organization
Winner: Cost and Systems
Analysis Office, U.S. Army TACOM Life Cycle
Management Command**

From left: Richard Bazy, chief, Cost and Systems Analysis, U.S. Army TACOM Life Cycle Management Command; David Holm, chief, TACOM Cost Analysis (Tactical); Diane Hohn, project officer, Cost and Systems Analysis.

**Silver—Small Organization
Winner: Air Force Security Assistance Center**

From left: Dr. Schneata Shyne-Turner, chief, Workforce Development; Minerva "Minnie" Pepperman, program analyst, Workforce Development.



**Bronze—Small Organization
Winner: Office of Naval Research**

From left: Dr. Joseph Lawrence, director of transition, Office of Naval Research; Margaret Mitchell, director, Civilian Personnel Programs.

USD(AT&L) Workforce Achievement Award

Also at the Nov. 3 luncheon, Kendall recognized eight outstanding members of the Defense Acquisition Workforce with the 2010 USD(AT&L) Workforce Achievement Award. The winners are:

Contract Auditing

Army Col. Frank Steinbugl, Defense Contract Management Agency, for expertly crafting the contract administration tactics, techniques, and procedures that allowed the simultaneous stabilization of Iraq and commencing of the largest drawdown of forces since World War II.

Business

Mary Kathleen Allen, U.S. Air Force, for managing all financial resources for the \$8 billion portfolio of Miniature Munitions and providing expert advice to program leadership for the efficient and transparent allocation of program resources in direct support of the Small Diameter Bomb Increment I, Focused Lethality Munition, and Small Diameter Bomb Increment II.

Contracting and Procurement (including Industrial/Contract Property Management, Contract Oversight, Quality Assurance)

Patrick Losse, Defense Contract Management Agency, for voluntarily assuming responsibility for all Quality Assurance functions of a program identified by Secretary of Defense Robert Gates as the most critical acquisition program in the Department of Defense, coordinating government inspection of 1,000 armored Mine Resistant Ambush Protected All Terrain Vehicles (M-ATV) per month in Pennsylvania and Wisconsin.

Program Management (including Information Technology)

Margaret E. G. McCaskey, U.S. Special Operations Command, for unparalleled program management and leadership in the acquisition and sustainment of United States Special Operations Command Unmanned Aircraft Systems and Intelligence, Surveillance, and Reconnaissance systems.

Life Cycle Logistics

Barry Thrower, U.S. Army, for his exceptional level of support as Director of Logistics, Close Combat Weapon Systems (CCWS) Project Office, for the CCWS family of weapon systems, which are fielded throughout all units in the U.S. Army, the United States Marine Corps, and numerous international customers, involving a number of

accelerated fieldings of multiple configurations to units deploying in support of Operation Enduring Freedom/Operation Iraqi Freedom.

Systems Planning, Research, Development and Engineering (including Production, Quality, and Manufacturing)

James F. Carter, U.S. Air Force, for leading the development and fielding of the first Directed Energy Non-Lethal weapon system—the Active Denial System; providing the engineering and program management leadership for the Small Diameter Bomb Increments I and II weapon development programs; developing a U.S. Air Force program office for medium caliber ammunition for airborne platforms; and revitalizing the Air Armament Center's engineering workforce.

Test and Evaluation

Stuart Butts, U.S. Air Force Operational Test and Evaluation (OT&E), for leading technical activities surrounding the OT&E of the \$299 billion F-35 Joint Strike Fighter, the largest acquisition program in the history of the Department of Defense, and the Secretary of Defense-designated No. 1 fighter acquisition priority.

Acquisition in an Expeditionary Environment

Dave Seagle, U.S. Navy, for outstanding support as the Broad Area Maritime Surveillance-Demonstrator Integrated Product Team Lead, managing all technical and acquisition aspects of the program's requirements; and providing over half of the total maritime intelligence, surveillance, and reconnaissance (ISR) to Central Command in 2009 and 2010, freeing multiple manned maritime patrol and reconnaissance aircraft to participate in other high-value ISR activities.

The 2010 USD(AT&L) Workforce Achievement Award encourages and recognizes individual acquisition excellence by members of the Defense Acquisition Workforce. The eight different functional categories of the award all represent critical areas of the acquisition process.

"I commend all those individuals who were nominated for the 2010 [Workforce] Achievement Award. You represent the many high-performing and conscientious professionals dedicated to our mission," said Kendall. "I thank each of you for your effort."

More detailed information about the award winners and the application process is available at www.dau.mil/acqawards.

2010 USD(AT&L) WORKFORCE ACHIEVEMENT AWARDS

The 2010 USD(AT&L) Workforce Achievement Awards were presented to eight outstanding members of the Defense Acquisition Workforce on Nov. 3, 2010, at Fort Belvoir, Va., by Principal Deputy Under Secretary of Defense for Acquisition, Technology and Logistics Frank Kendall and Defense Acquisition University Acting President James McMichael.



Contract Auditing

Winner: Army Col. Frank Steinbugl, commander, Defense Contract Management Agency-Iraq.



Business

Winner: Mary Kathleen Allen, chief of finance, 918th Armament Systems Group, U.S. Air Force.

Contracting and Procurement (including Industrial/Contract Property Management, Contract Oversight, Quality Assurance)

Winner: Patrick Losse, quality coordinator, Defense Contract Management Agency Mine Resistant Ambush Protected (MRAP) All Terrain Vehicle.



Program Management (including Information Technology)

Winner: Margaret E. G. McCaskey, program manager, Unmanned Aircraft Systems, U.S. Special Operations Command.





Life Cycle Logistics

Winner: Barry Thrower, director of logistics, Close Combat Weapon Systems Project Office, U.S. Army.



Systems Planning, Research, Development and Engineering (including Production, Quality, and Manufacturing)

Winner: James F. Carter, team lead, U.S. Air Force Active Denial System and Small Diameter Bomb Increments I and II.



Test and Evaluation

Winner: Stuart Butts, technical lead, F-35 Joint Strike Fighter, U.S. Air Force Operational Test and Evaluation.



Acquisition in an Expeditionary Environment

Winner: Dave Seagle, team lead, U.S. Navy Broad Area Maritime Surveillance-Demonstrator Integrated Product Team.

Developing Key Leaders to Manage Complex Programs

Roy Wood ■ Patrick Barker



In August 25, 2010, Principal Deputy Under Secretary of Defense for Acquisition, Technology and Logistics Frank Kendall signed out a letter to the Services asking them to identify key leadership positions in their programs and to ensure the positions are filled by “properly qualified” individuals.

These key leadership positions are (with some caveats):

- Program executive officer and deputy program executive officer
- Program manager and deputy program manager
- Senior contracting official
- Program lead systems engineer
- Program lead cost estimating
- Program lead contracting officer
- Program lead logistician (product support manager)
- Program lead business financial manager
- Program lead test and evaluation
- Program lead production, quality, and manufacturing
- Program lead information technology.

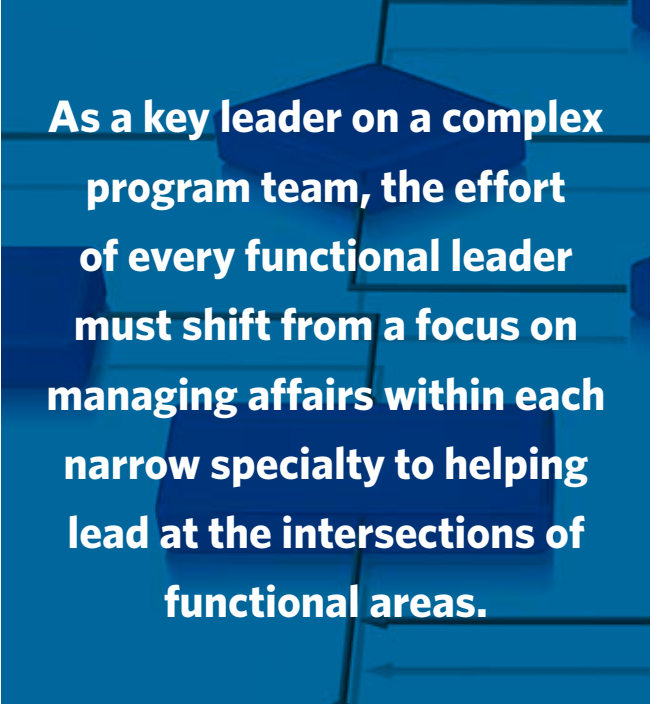
To be properly qualified, key leaders need to have the requisite education, training, and experience that has distinguished them from their peers as recognized experts in their functional craft. In addition, key leaders are expected to function as an integrated senior management team to execute some of the most complex defense acquisitions. This may require some successful functional leaders to make a challenging shift in mindset from functional expert to key leader.

What, then, are the elements of change that need to occur for an individual to make this mindset shift to become a successful key leader? Five leadership paradigms must be embraced.

First, and perhaps most difficult for any individual at the top of his or her technical field, is “opening the aperture” to the interplay *between* key functions. As a key leader on a complex program team, the effort of every functional leader must shift from a focus on managing affairs within each narrow specialty to helping lead at the intersections of functional areas. Here, the “seams” are messier, and the tradeoffs often result in sub-optimized individual functions. The availability of less crisp and readily identifiable alternative solutions demands that contributing team members become comfortable with multi-functional, thorny, and chaotic problems.

The second paradigm shift is one of overall approach. For much of their careers, functional experts were expected to have all the right *answers*. As key leaders of a complex program team, these leaders are now expected to be able to ask the right *questions*. Key leaders now need to frame questions differently—not necessarily framed around a single function but considering how all the functions might work together to produce the right outcome. Questions are certainly *informed* by the expertise of the functional leader, but they must also be appropriately couched within the larger decision framework of complex functional interactions.

Embracing the “Big A” acquisition framework of requirements generation, budgeting, and traditional “Little A” acquisition is the third mindset change that must be made. Each member of the senior leadership team must understand the intricacies of how the pieces of the system work together and the broader implications, including possible unintended consequences, of



As a key leader on a complex program team, the effort of every functional leader must shift from a focus on managing affairs within each narrow specialty to helping lead at the intersections of functional areas.

every key decision. New stakeholders with new agendas enter the scene for functional leaders who have previously, perhaps, never had to deal with them. The leadership team must use their collective expertise to think through these decisions as a tightly integrated team and anticipate likely outcomes. Stove-piped thinking is no longer an option.

The fourth shift is temporal. The old saw says that “time is money.” Not only does a program’s top leadership team need to be able to make good decisions, they need to be able to make them quickly. A close and synergistic working relationship among the key leaders will facilitate quicker, more accurate, and less costly decisions.

Finally, the top leadership team cannot be content with its own successes. Some time must be set aside by members of the team to train and develop their replacements. The true mark of a good leader is in the ability to mentor and coach subordinates. This is much harder than it sounds, however, given the frenetic pace and massive workload in most defense program offices. There is almost never discretionary time available to have a leisurely mentoring session, so key leaders must make the time and incorporate the training and mentoring into the work itself through appropriate empowerment and delegation of meaningful tasks.

The Department of Defense is working to develop a pool of key leaders who are capable of leading large, complex programs to successful outcomes. The key leader pool will be made up of successful functional experts who must transform themselves into a cross-functional team of executive-level leaders capable of managing at the functional intersections. We can do this. Our future success depends on it.

Wood is dean of the Defense Systems Management College at DAU.
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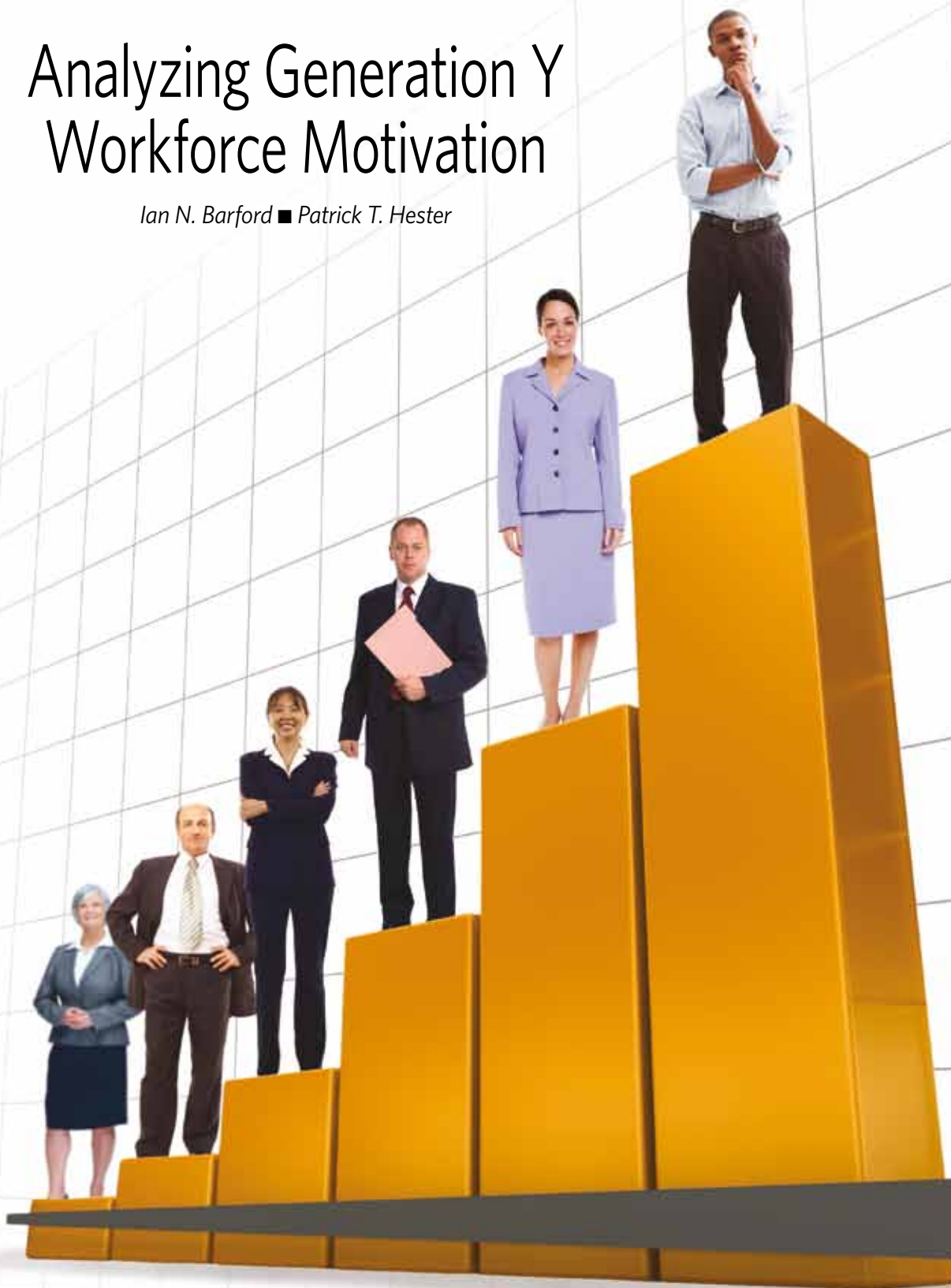
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Analyzing Generation Y Workforce Motivation

Ian N. Barford ■ Patrick T. Hester





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esearchers, supervisors, and human resource professionals have long struggled with perfecting management strategies for employees, made more difficult by the presence of distinct personalities of the three most prevalent working generations, namely the Baby Boomers (born between the years 1946 and 1964), Generation X (born between 1965 and 1979), and Generation Y (born between 1980 and 2000).

A heightened government retirement of the Baby Boomers is almost certain in the next several years, which will leave employment gaps that Generation X and Y must fill. Retention of the newly hired Generation Y workforce—those born between 1980 and 2000—is critical to the preservation and existence of the civilian government workforce.

A heightened government retirement of the Baby Boomers is almost certain in the next several years, which will leave employment gaps that Generation X and Y must fill. Today, 60 percent of all federal employees (all of whom are Baby Boomers) are eligible to retire, and the Office of Personnel Management expects about 40 percent to do so in the next 5–8 years. Retention of the newly hired Generation Y workforce is critical to the preservation and existence of the civilian government workforce.

The authors surveyed 18 government workers, comprising six each of Generation Y, Generation X, and the Baby Boomers' Generation, regarding five motivational factors according to importance and level of happiness. The survey was designed to provide insight on the overall average job satisfaction of each respondent (how happy each respondent is with their job compared to the average of all respondents); the overall average job satisfaction of each generation (how happy each generation is with their jobs compared to the average of all generations); normalized average importance for each generation (how each generation values the five motivational factors converted to a single scale); average level of happiness for each generation (how each generation is satisfied with their current jobs based on the five motivational factors); the overall average utility (how all generations combined express value and satisfaction for each of the five motivational factors); and average attribute utility for each generation (how each generation expresses value and satisfaction for each of the five motivational factors). The research questions that this study seeks to answer follow.

Research Questions

Using the previous research on generational life events coupled with work values and attitudes, the following three research questions were generated for analysis in this study:

- Does Generation Y assign different levels of importance to the five motivational factors than Generation X and Baby Boomers?
- Does Generation Y assign different levels of happiness to the five motivational factors than Generation X and Baby Boomers; and which of these factors is ranked the highest across generations?

- Does Generation Y's average attribute utility of the five motivational factors differ from Generation X and Baby Boomers?

Method

Participants

Government workers, six in each of the three age groups categorized by Generation X, Generation Y, and Baby Boomers, who work at Naval Sea Systems Command, Virginia Beach Detachment, were selected at random by the detachment security manager. All 18 respondents were given an unsealed envelope that included a cover letter and an identical three-page survey. All participants were asked to voluntarily complete the anonymous survey and return the envelope sealed to ensure confidentiality. Twelve respondents were male (67 percent), and six were female (33 percent).

The mean age of the survey respondents was 36.56 (standard deviation = 11.08). Deeper examination into respondent demographics shows 13 people (72 percent) had completed either a bachelor's or master's degree.

Materials and Procedure

The motivational factor survey was arranged with six demographic questions, one motivational factors' ranking question, and one level of happiness question for a total of eight questions. The demographic set (questions 1–6) consisted of: age, gender, job classification (either management or nonmanagement), occupational category (government-designated categories based on the type of job a person has), highest education completed, and pay plan.

The motivational factors ranking (question 7) presented the five motivational factors and asked the respondent to rank them according to importance. Each factor was given a bounded definition unique to working within a government context. Factor 1 (responsibilities) was defined as the value given to all responsibilities inside the office and while on government travel. Factor 2 (compensation) was defined as the value of the total government compensation package, which includes salary, pension, retirement plan, annual bonuses, cost of living increases, etc. Factor 3 (work environment) was defined as the value given to the job location, people work-

ing in the location, and physical work environment. Factor 4 (advancement potential) was defined as the value given to a career path clearly defined for advancement. Factor 5 (free time) was defined as the value given to the amount of free time away from work. Free time is allocated by the following means: compressed work schedule, accrued sick days, accrued annual days off, and the number of holidays given.

The level of happiness (question 8) consisted of each respondent ranking the level of happiness in their current position using each of the five motivational factors.

Motivational Factor Rankings

Motivational factor rankings were determined by each respondent in their survey. Each respondent was given a maximum of 100 points to distribute among each of the five motivational factors. The more points the participant gave to a particular factor, the more they valued that factor.

Level of Happiness Rankings

Level of happiness rankings were determined by each respondent in their survey. Each respondent was asked to rank the five motivational factors based on their current position. The format chosen was a 10-point Likert scale (1 = being extremely dissatisfied and 10 = being extremely satisfied).

Procedure

The detachment's security manager handed each respondent an open envelope, with a cover letter and an identical survey. Participants were notified in writing that their completion of the survey indicated their consent to participate in this study. Respondents were told if they had any questions regarding the survey to direct them to the security manager. The surveys were not traceable to the survey respondent, and the deadline to finish was 1 week. Once completed, the surveys were to be placed back in the envelope, sealed, and returned to the detachment security manager. The security manager collected all 18 surveys, and they were returned to the primary author.

Results

Analysis focused on respondents' values for importance and level of happiness for each of the five motivational factors. For initial data reduction and ease of calculation, respondents' ages were grouped together by their generation, as defined earlier in this article.

Question No. 1. *Does Generation Y assign different levels of importance to the five motivational factors than Generation X and Baby Boomers?*

To determine whether Generation Y assigns different levels of importance, the data were analyzed using a two-tailed hypothesis test at a 0.10 significance level. Generation Y results were compared to Generation X, and then Baby Boomers for a total of 10 tests. Of those 10, five were statistically significant and therefore reported. Generation Y views responsibilities as much less important than Generation X and Baby Boom-

ers and least important of all the motivational factors. These results are statistically significant. Generation Y ranked compensation as less important than did Generation X and Baby Boomers. This was expected, but only the comparison between Generation Y and Baby Boomers is statistically significant. Generation Y ranked advancement potential higher than Generation X and Baby Boomers. Again, the results between Generation Y and Baby Boomers are statistically significant. Generation Y ranked free time higher than Generation X and Baby Boomers. This time the results between Generation Y and X are statistically significant.

Question No. 2. *Does Generation Y assign different levels of happiness to the five motivational factors than Generation X and Baby Boomers, and which of these factors is ranked the highest across generations?*

The data were analyzed using a two-tailed hypothesis test at a 0.10 significance level. Generation Y results were compared to Generation X, and then Baby Boomers for a total of 10 tests. Of those 10, two were statistically significant and therefore reported. Generation Y is satisfied with its current advancement potential in the government more than Generation X and Baby Boomers. However, only the results between Generation Y and X are statistically significant. These results show that Generation Y is very satisfied with its current advancement potential within the federal government. Generation Y is currently satisfied with its current free time more than Generation X and Baby Boomers. Again, the results between Generation Y and X are only statistically significant. These results show that Generation Y is very satisfied with its current free time within the federal government. Results of all three generations' motivational factors were averaged from the average attribute utility for each generation. Compensation was the highest, with advancement potential being the lowest motivational factor.

Question No. 3. *Does Generation Y's average attribute utility of the five motivational factors differ from Generation X and Baby Boomers?*

The data were analyzed using a two-tailed hypothesis test at a 0.10 significance level. Generation Y results were compared to Generation X, then Baby Boomers for a total of 10 tests. Of those 10, four were statistically significant and therefore only reported. Generation Y's average attribute utility for compensation was less than Baby Boomers, which was statistically significant, but slightly more than Generation X, which was not significant. Generation Y's average attribute utility for advancement potential was much higher than both Generation X and Baby Boomers. Both results were statistically significant. Generation Y's average attribute utility for free time was also higher for Generation X and Baby Boomers, although the comparison to Generation X was only statistically significant.

Discussion

This analysis aimed to investigate if Generation Y assigns differing levels of workplace motivation and happiness than

The government can be in the forefront of understanding and retaining the Generation Y workforce by conducting research, validating results based on proven mathematical techniques, and slowly changing the retention landscape with these results.

Generation X and Baby Boomers in a federal government context. Three research questions were developed based on the literature review: (1) Does Generation Y assign different levels of importance to the five motivational factors than Generation X and Baby Boomers? (2) Does Generation Y assign different levels of happiness to the five motivational factors than Generation X and Baby Boomers? and (3) Does Generation Y's average attribute utility of the five motivational factors differ from Generation X and Baby Boomers?

The results of the first research question would be a tentative yes. Generation Y has a statistically significant difference in four of the five motivational factors pertaining to level of importance. This shows Generation Y does have varying levels of importance for four of the five motivational factors when compared with Generation X and Baby Boomers.

The low values Generation Y attributes to the responsibilities' motivational factor are of intense concern. One possible explanation may be that the government is not providing enough responsibilities to fully engage Generation Y. Another possible explanation may be that Generation Y is not happy with their current responsibilities, and this has impacted their responses to what motivates them.

Generation Y ranks compensation as the highest motivational factor—but not by much—over the other factors. The importance ranks much less for Baby Boomers, and this response is expected. The reason is the Baby Boomers are nearing retirement age and are trying to reach their maximum earning potential, which dictates the amount they will receive from their pension. Overall, Generation Y places a much higher importance on advancement potential and free time than the other generations.

The answer to Question No. 2 is a cautious yes. Even though two of the 10 possible combinations are statistically significant (advancement potential and free time), they do provide

some insight. Additionally, the two highest importance levels over the other generations are advancement potential and free time, which corresponds with the level of happiness calculations. Not only does Generation Y regard advancement potential and free time as very important, but they are content with their levels of both motivational factors.

The results of Question No. 3 are also a tentative yes. Advancement potential and free time are emerging as the most diverse attributes compared to Generation X and Baby Boomers. Based on the literature, Generation Y proactively plans its professional development and expects to achieve it within the federal government. The majority of Generation Y research is done on the work/life balance factor. Research points to members of this new generation aspiring to attain this balance in their everyday lives. The results presented here promote this same idea.

Conclusions

Questions may be raised about the sample size, concise question set, and significance level used. A much larger sample size and more extensive survey are needed to gain an in-depth understanding of this generation. The authors plan to expand the participant pool in the near future to include a statistically significant number of respondents. The expectation is that the survey and results (although limited due to small sample size) described in this article, coupled with the literature review, will begin to unveil what Generation Y expects from a long and prosperous career in federal civilian service. This can help management in aligning corporate incentives to motivate Generation Y workers not only by compensation, but by the other motivational factors.

The federal government's workforce climate is shifting, and conducting internal studies allows management to be more aware and able to adapt to emerging situations. This study provides the initial basis for conducting more detailed studies specific to the federal government. The government can be in the forefront of understanding and retaining Generation Y by conducting research, validating results based on proven mathematical techniques, and slowly changing the retention landscape with these results. By motivating Generation Y using the outlined factors, governmental managers can tailor retention plans specific to this generation to ensure a sustainable workforce for the future.

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Department of Veterans Affairs Acquisition Academy

Making a Meaningful Difference

Laura Edwards



The Department of Veterans Affairs (VA) Acquisition Academy in Frederick, Md., opened in September 2008 to respond to the growing acquisition workforce challenges facing VA and the federal government overall. Two decades of downsizing and hiring freezes, and increased congressional scrutiny and oversight has strained an over-tasked acquisition workforce.

The 16-classroom bricks-and-mortar facility currently houses three professional schools: Acquisition Internship School, Contracting Professional School, and Program Management School; with two additional schools—Facilities Management School and Supply Chain Management School—scheduled to open in 2011. Using a centralized

training model, the VA Acquisition Academy (VAAA) trains and certifies the entire acquisition team including the next generation of acquisition professionals, program and project managers, contracting officer technical representatives, and the existing acquisition workforce.

"At the VA Acquisition Academy, we create learning interventions to change behavior and improve performance," said VAAA Chancellor Lisa Doyle. "We are not about check-the-box training. We use a competency-based experiential learning model to make a substantial and immediate impact in VA's acquisition workforce."

The academy's training programs are a critical element of VA's succession planning and workforce development, designed to make a positive and meaningful improvement in the acquisition function.

Growing the Next Generation

The Acquisition Internship School was created to grow the next generation of acquisition professionals. The program uses a holistic approach to create trusted business advisors capable of exercising sound business judgment to achieve best value solutions.

"Technical skills are not enough," remarked Doyle. "Our rigorous curriculum is grounded in the FAR [Federal Acquisition Regulation] Guiding Principles and includes interpersonal, program management, leadership, communication, innovative thinking, and risk management skills, in addition to the critical technical skills.

"The three-year internship program includes classroom training, skill building in a learning laboratory to solidify learning, and job rotations to provide practical hands-on experience in contracting offices," she said.

The curriculum accelerates the learning curve to reduce time to performance; increases productivity; builds competence and confidence; emphasizes the translation of theory, fundamentals, and concepts to practical application; and evolves from basic to more complex acquisition strategies during the course of the internship.

"That translates into productive resources [interns] who create an immediate impact for the department," said Doyle. "During fiscal year 2010, our interns supported more than 1,000 VA contracts with a total value of approximately \$5.4 billion. Their contributions have not gone unnoticed. In fact, we have increased the number of job-rotation hosting organizations within VA from one at the start of the program to 47. That's a direct result of interns demonstrating their competence and being sought out by our contracting organizations."

A representative of one hosting VA organization remarked, "I am one of your biggest fans. Many of the acquisitions we have

been able to accomplish are as a direct result of the quality of contract specialists your program is producing."

A representative of another stated, "Thank you for allowing each of these individuals to participate and train here. Each of them has proved time and again how valuable your program is in providing experienced, well-trained personnel to the contracting community."

"Another important part of our curriculum is mission service so that the interns understand who the customer is and how they contribute to the mission of serving veterans," said Doyle. "The interns are exposed to what their job function means to VA's mission, and it provides them an opportunity to see, touch, and feel our mission first-hand. We are extremely proud of our interns and look forward to their continued impact, resulting in better mission results for veterans."

Program/Project Managers

Launched in March 2009, the Program/Project Management School was created for program/project managers and contracting officer technical representatives to develop the requisite skills to deliver projects on time, within budget, and that achieve the assigned outcomes in support of VA's mission. These skills demand specialized training and development based on best practices.

"In its first year, the school trained 1,386 VA program managers with up to 400 students in class [at] locations across the country every day; but while 166,320 hours of training delivery is impressive, this effort is not about numbers," said Richard Garrison, Program Management School vice-chancellor. "This effort is about impact to the VA's program and project management performance," he said.

A recent graduate said he is managing meetings more efficiently and paying close attention to risk and mitigation strategies as a result of the training.

"The action planning process is probably the most important takeaway," he stated. "I have a much greater focus on areas for improvement that I wouldn't have had without the training."

A VA construction program manager said he is very metrics-focused as a result of the training.

"My acquisition planning is much more focused, scheduling is more precise because of the work breakdown structure, and I realized how earned value management has to be used if you're using anything other than a firm-fixed-price contract," he said.

The training consists of four course segments in program/project management, acquisition management, business management for government applications, and leadership and interpersonal skills, followed by a certification exam known as the Capstone. The curriculum also includes action planning.

"We are not about check-the-box training. We use a competency-based experiential learning model to make a substantial and immediate impact in VA's acquisition workforce."

**—Lisa Doyle, chancellor,
Veterans Affairs Acquisition Academy**

"Functional knowledge, principles, and techniques are taught during the course segments," said Garrison, "then three to four months later, students attend the Capstone. The Capstone is an evaluation and validation of a student's skills."

Many participants remarked that they found the action planning particularly useful. "The action planning was most significant, offering the opportunity to really focus on areas that are important and need improvement," stated one student. Another participant said that the action planning helped to execute his ideas.

"This is an important part of the curriculum," stated Garrison. "Research has indicated that learning is far less likely to be retained and implemented, especially when dealing with technical skills, if that learning is not reinforced by follow-up once learners return to their workplace."

"It's the same experiential learning model that is used across the enterprise at the VA Acquisition Academy," Garrison continued. "We are making an immediate impact; improving how our programs are managed."

Nearly 50 percent of participants have identified opportunities for improving project management processes while the balance are focusing on improving communication, cost and performance, and other areas. Approximately 75 percent are rapidly improving VA processes, procedures, and artifacts within 1 to 3 months of the training investment; and 89 percent have compliant action plans.

"Ultimately," said Garrison, "we will know we are successful as more VA programs deliver their performance requirements on time and within budget."

While the adage "If you give a man a fish, he eats for a day; if you teach him how to fish, he eats for a lifetime" is true, it can take too long to train someone to fish, and he will perish if you do not feed him along the way. In that spirit, the Program Management School is beginning to focus on team training because for a program to be successful, teamwork is paramount.

"We are training VA's major initiatives about program management best practices as applied directly to their program. We then facilitate the application of those best practices in their program," said Garrison. "When the initiative completes these workshops, they have established a common picture of success: a common language and a common set of program management best practices. They also have an action plan to create their remaining program management artifacts with coaching available during those efforts."

Contracting Professionals

The Contracting Professional School serves the existing VA acquisition workforce with an objective to achieve and maintain required Office of Management and Budget certifications and to close competency proficiency gaps. Since it opened in September 2008, the school has trained 3,335 students with an average student course rating of excellent.

"Over the past year, we have worked with our training vendors to add civilian equivalent case studies and examples in our training to increase relevance," said Doyle. "The examples are practical to our students and create a meaningful theory-to-practice connection. We also developed a standardized student evaluation tool and commenced in-class instructor evaluations to ensure we are delivering the best training available," she said.

The Contracting Professional School has supported several other government agencies in their acquisition training.

Governmentwide Challenge

The development of the acquisition workforce is a challenge being faced by all federal agencies.

"It takes a highly trained acquisition workforce to effectively award and manage contracts to execute our critical missions," remarked Doyle. "To ensure the training being delivered is the best it can be, the Academy created a Learning Standards Office to evaluate and assess learning content, delivery, and instruction across the enterprise to ensure high-quality training. The VA Acquisition Academy is having a departmental impact on VA's acquisition workforce. My goal is to get it right for the VA and open it as a resource to other federal agencies," she said.

Edwards is public affairs officer for the VA Acquisition Academy. This article was a collaborative effort among academy staff. The author welcomes comments and questions and can be contacted at Laura.Edwards2@va.gov.



A Renewed Focus on Recruitment

Karen R. Penn

The Diversity, Inclusion, and Recruiting Division of the Defense Contract Management Agency (DCMA) is a relatively new division within DCMA's Human Capital Directorate. Like many agencies within the Department of Defense and the federal sector at large, DCMA's workforce is facing the challenge of an aging workforce, 63 percent of whom can retire within the next 5 years. That 63 percent represents tremendous years of acquisition experience, skill, and knowledge that are not easily replaced from within the civilian labor force, considering the requisite skill, abilities, and security clearance requirements DCMA candidates must meet to fill our key acquisition-series positions.

An additional challenge facing DCMA, like other federal agencies, is diversifying the workforce so that the demographics better reflect the public we serve. To underscore this commitment to diversity and inclusion, the first Human Capital Strategic Initiative in DCMA's 5-year Strategic Human Capital Plan is to "attract, recruit, develop, and retain a high-performing and diverse workforce, representative of the public it serves." To better enable ourselves to accomplish this strategic initiative, DCMA established an Office of Diversity and Inclusion, and appointed a seasoned diversity executive with both public- and private-sector experience to head this new office in December 2009. Within a few months' time, DCMA's full-time recruitment staff members were realigned to the Diversity and Inclusion Office to ensure appropriate alignment and synergy with the agency's Diversity Strategic Execution Plan, which called for measurable milestones to assess the efficacy of recruiting efforts aimed at attracting a highly qualified, diverse applicant pool.

One milestone calls for leveraging voluntary candidate self-identification forms at all recruiting events to assess each event's ability to provide gender, disability, veteran status, ethnicity, and race/national origin diversity. The

demographic data are included in the recruiter's trip report, enabling a return-on-investment analysis, which permits continual enhancements and modification to the agency's targeted recruitment initiatives. For example, if a particular division's workforce profile analysis reveals less-than-expected participation for Hispanics, we can assess which of our recruitment events have yielded a larger number of Hispanic candidates and leverage them as a recruitment source for vacancies for which they qualify.

Another area of success is targeted recruitment of highly qualified, diverse college students as pipeline talent, as well as entry-level engineers, contract specialists, and quality assurance specialists. In summer 2009, DCMA leveraged full-time recruiters as well as a cross section of more than 30 field recruiters and subject matter experts (SMEs) to participate in targeted diversity recruitment events through Monster.com. SMEs were engineering, contracting, and quality assurance professionals from DCMA's East, Central, and West regions. Participation in four targeted recruitment events provided DCMA with 3 days of around-the-clock interaction with a dedicated group of 10 to 20 students per event who met established prerequisites, as well as more than 200 students per event who met broader prerequisites. After the event, DCMA gained access to 2,000 highly qualified, diverse student leaders representing 650 colleges and universities around the nation, all of whom had been selected by Monster.com from among 25,000 applicants. Presently, DCMA is working to hire 20 students as SCEP participants. This pipeline is richly diverse, with 85 percent representing a racial/ethnic minority.

DCMA's fall 2010/fiscal year 2011 recruitment schedule consists of targeted recruitment events for both entry-level and journeymen-level positions, aligned by region and workforce manning requirements. The recruitment schedule is posted on DCMA's intranet and identifies the event name and location, the DCMA region, and the target recruitment pool. Each recruitment event leverages the local area cadre of field recruiters, SMEs, or Special Emphasis Program coordinators, so that while supported centrally, DCMA's recruitment is executed locally.

The length of time to hire is another continual challenge facing DCMA and other federal agencies. Accordingly, DCMA's recruitment strategy calls for increasing use of hiring events as well as use of the various special appointing authorities including Expedited Hiring Authority for acquisition positions, Veterans Recruitment Appointment, 30 percent or more disabled veteran, and Schedule A-Individuals with Targeted Disabilities.

A recent special appointing authority success was an Expedited Hiring Authority hiring event in Manassas, Va., on June 29, 2010. DCMA's central recruitment team worked with DCMA-Manassas Contract Management Office leadership and field recruiter staff to hold a hiring event targeting contract specialists; one of DCMA Manassas' challenges is retaining experienced contract specialists because of National Capital

DCMA's fall 2010/fiscal year 2011 recruitment schedule consists of targeted recruitment events for both entry-level and journeymen-level positions, aligned by region and workforce manning requirements.



Area competition. Donna Albrizio, director, DCMA-Manassas said, "It's hard to compete with private industry and other federal agencies. We've experienced an attrition rate of 20 to 25 percent."

For this particular event, there were 27 vacancies to be filled, with most positions ranging on the General Schedule scale from GS-11 to GS-13. Prior to the event, 87 candidates were identified from DCMA's Expedited Hiring Authority database. The Army Servicing Team (AST), which provides human resources support to DCMA, conducted pre-qualification analysis on the 87 candidates, and 32 were invited to interview. In addition to central recruitment staff, hiring managers and the AST were onsite with DCMA to interview the pre-screened and pre-qualified candidates. Of the 32 candidates interviewed, 17 were given tentative job offers onsite, and three were given tentative job offers after the event, with two applicants receiving entry-on-duty dates within 30 days of the hiring event. To date, eight have already commenced duty, six are in the security process, and two have entry-on-duty dates the second week of December 2010. Applicants not selected were given a final disposition outcome and pointers on how to continue to apply for DCMA and federal jobs.

Plans for fiscal year 2011 include continual collaboration with regional Contract Management Office leadership, SMEs, field recruiters, and Special Emphasis Program coordinators, as well as internal human capital and agency division colleagues and customers to leverage best practices and lessons learned to enhance our strategic/targeted recruitment efforts as we strive to attract, recruit, develop, and retain a high-performing and diverse workforce, representative of the public we serve, while working diligently to support the nation's warfighters.

DCMA looks forward to future success at the Springfield, Va., hiring event in February 2011 for more than 80 contracting, cost-price, and quality assurance positions in the D.C./Baltimore Metro areas. Interested candidates can go to [www.dcma.mil/Careers/feb 2011 event.cfm](http://www.dcma.mil/Careers/feb%202011%20event.cfm) to register.

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Special Authority Speeds Hiring in Acquisition Career Fields

Ed Worley



M

any federal government employers would agree that hiring a civilian employee off the street is challenging. Hiring managers agree that the standard recruitment and hiring systems aren't the quickest way to increase an organization's talent pool. The process averages about 120 days—that is, unless the candidate is being hired under the Expedited Hiring Authority.

"EHA has made it possible for us to reach into a talent resource that would have been very difficult for us to penetrate without it," said Jeff Parsons, Army Contracting Command executive director. "It gives us the ability to compete for and quickly hire highly qualified contracting specialists from the private sector. It's a great asset for us as we work to develop a professional contracting workforce to support our warfighters."

The Department of Defense delegated authority and responsibility for the use of EHA in 2008. It allows the military departments to "appoint highly qualified individuals to shortage category positions in the career fields ... identified," according to a joint memorandum signed by the under secretary of defense for acquisition, technology and logistics, and the under secretary of defense for personnel and readiness.

The memorandum identified 12 career fields:

- Auditing
- Business, cost estimating, and financial management
- Contracting
- Facilities engineering
- Information technology
- Life cycle logistics
- Production, quality, and manufacturing
- Program management
- Quality control and assurance
- Science and technology management
- Systems planning, research, development, engineering, and testing
- Test and evaluation

ACC's hiring managers have been putting the EHA to good use. The result, so far, is 196 new acquisition personnel hired by the command. At

Tank-Automotive and Armaments Command (TACOM) Contracting Center, Rock Island, Ill., Sally Turke said that EHA has helped the contracting center remain functional as its operations transition under the BRAC (Base Realignment and Closure) Commission-required move to the contracting center's Warren, Mich., headquarters.

"It kept us functioning longer because we were able to bring employees in at a higher grade," explained Turke, chief, TACOM Contracting Center's contract support division. "And because we were able to bring them in at a higher grade, they stayed with us longer before they began to look for other positions [as a result of the center's relocation to Warren]. We

picked up one guy who had 13 years of contracting experience in the private sector."

Turke said some of the new hires, while not making the move to Michigan, are being hired "down the street" by ACC's Rock Island Contracting Center. She singled out a 2009 hiring campaign as her biggest success to date.

"We issued the [request for personnel action] on May 22, and had them all on board by July 27." She hired nine nongovernment employees in that period, and all are still working for the U.S. Army. "It was a very successful class for us," Turke said.

Farther north at TACOM Contracting Center's headquarters, Kimberlee Menzel has also been successful hiring nongovernmental employees. TACOM

participated in the state's 2009 "Michigan Jobs for Michigan People" job fair, resulting in the hiring of 12 new employees. The organization was able to hire information technology journeymen, contract specialists, contract cost/price analysts, industrial cost/price analysts, and procurement and production specialists. Of the 12 hired from the 2009 job fair, nine are still with the contracting center.

"EHA has helped us retain people across the TACOM Contracting Center during this time of BRAC mission transfer," Menzel said, referring to the authority to bring people on board at journeyman levels. "We've kept them longer than if we had brought them on board at the GS-5 or GS-7 level because they see that we recognize

the value of their experience in the private sector."

Valerie Ward, ACC's corporate recruitment program manager, says the EHA reduces the amount of time spent on the front end of the hiring process.

"Under the standard system, a job is posted on the Web for a period of time, then the system kicks out a candidate list. It's filtered by personnel, based on the critical skills listed in the announcement; then a list is sent to the hiring manager for consideration, interviews, and selection. With EHA, the manager can decide to use some, none, or all of the standard process," Ward said. Once selected, a prospect's credentials

"It [Expedited Hiring Authority] gives us the ability to compete for and quickly hire highly qualified contracting specialists from the private sector. It's a great asset for us as we work to develop a professional contracting workforce to support our warfighters."

—Jeff Parsons, Army Contracting Command Executive Director

and education are validated and the candidate receives a tentative offer.

"Using the EHA, it's possible for a hiring manager to go to a job fair, collect résumés, review credentials, select a candidate, and make a tentative offer on the spot," said Ward. She added that the Missile Defense Agency, her former organization, used the EHA to hire more than 30 candidates on the spot at a job fair.

If required by the position, candidates still have to go through the standard security clearance and drug testing processes. Those haven't been expedited, she explained.

Ward said it also gives ACC the flexibility to bring in people who wouldn't normally be classified eligible for the selection list under the standard process because they don't have status, e.g., current or former government employees. EHA positions are open to all U.S. citizens.

The National Capital Region Contracting Center in Alexandria, Va., has also been successful using the EHA to increase its staff, according to Steve Carrano, the center's deputy director.

"With the traditional program we tended to get people who were already government employees," he explained. With EHA, he said, the lists were "significantly different."

The NCRCC used an open continuous vacancy announcement through a pilot project with Rock Island Arsenal, Ill. The longest it took to receive qualified applicant names was about 3 days, Carrano said.

"The time saved on the front end was enormous—2 to 4 months. The Rock Island people did a good job of confirming applicants' credentials before they were put on the list. We could farm those names out to managers and supervisors on a weekly basis and say, 'Do any of these people interest you?'" Carrano said.

To date, ACC has used the EHA to hire mostly contract specialists—70 percent of the command's workforce—but the command's goal is to expand EHA's use. Ward hopes to establish a corporate recruiting plan that incorporates all centers. Part of that plan includes using EHA to include all relevant career fields authorized by the Department of Defense.

"EHA is a wonderful authority," Ward said. "If we use it the way it was intended, we will strengthen the acquisition workforce and give the oversight the DoD is looking for. It allows us to bring in the workforce to save taxpayers' money."

Worley is Public Affairs team chief for the U.S. Army Contracting Command in the Office of Public and Congressional Affairs. He served more than 30 years in the U.S. Air Force and 3 years in the private sector before joining the ACC Public Affairs team. He can be contacted at edward.g.worley@us.army.mil.

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Learning Organizations

HCI Accelerators

Donna J. Seligman





etter preparing the acquisition workforce for the challenges ahead is a strategic imperative across the community. Personnel changeover and inexperienced new hires are placing increased demand on organizations. Without proper planning, focus on, and attention to this issue, maintaining our edge in weapon systems, services, and other acquisition becomes problematic.

To maintain our competitive warfighting advantage, the Department of Defense has initiated the *Strategic Human Capital Plan Update* (April, 2010) to accelerate and sustain the capability of the acquisition workforce and ultimately protect our national security interests.

Importance of a Human Capital Initiatives Program

With the increasing departure from the workforce of the Baby-Boomer generation, DoD is facing the loss of critical acquisition experience that has taken many years to grow. This places heavier importance on human capital initiatives to fill a near-term gap while adequately preparing an acquisition culture that is changing as well. In the last few years, recognizing noticeable experience shortfalls within the ranks of DoD's acquisition arm, the U.S. Congress has elevated the importance of workforce capability. On April 6, 2009, Secretary of Defense Robert Gates announced his plans to grow the defense acquisition workforce by 20,000 through fiscal year 2015.

But has DoD adequately responded to the challenge and instituted effective measures, or is it too early to tell? If DoD has placed solutions into motion, what is the measure of success? Will these programs boost the human skills needed to assure future program development successes? Whatever the answers, leadership in both government and industry must stay closely connected to a workforce solution. Without their support, experience gains may be lost. Industry has already found middle managers to be the critical links influencing per-

formance and growing experience within the overall workforce context. Invariably, middle managers are part of the solution to the success of a company's goods and services. Leadership at all levels is, however, ultimately the most crucial.

HCI and its Application to the Defense Acquisition Workforce

Several examples can be cited where organizations have implemented workforce initiatives that are producing real dividends. They have many of the same common successful practices. Some include strong partnerships between senior leaders and middle managers; some recognize that experience should be a daily consumable; and some seek external support in the form of training partnerships to augment their own internal training programs. And when they seek external training, they tend to tap training organizations with the knowledge and experience to help them reassess their key processes and essential competencies to ensure better alignment with their organization's overall strategic goals. More and more, however, they also find that training is just one variable inside the workforce equation. How organizations view learning tends to become a much more predominant factor and can produce visible dividends. In essence, they act something like learning organizations and help leaders become more savvy consumers of learning; strengthen the connection between manager and improved performance, since research has confirmed that managers are the number one reason whether or not learners apply what they learn; and bring leadership into the training prescription to emphasize its importance.



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This year's symposium will be held at the **DAU Fort Belvoir campus on April 12, 2011**...to register for the symposium go to <http://www.dauaa.org/Symposium2011/Index.htm>

Other Alumni Association membership activities/benefits on behalf of the Department of Defense and defense industry workforce include:

- Support of an annual Research Paper (Hirsch Prize) Competition
- Access to hot topic forums on key defense acquisition issues
- Access to networking events at all five DAU regional campuses
- Quarterly Association Newsletter
- Receptions for DAU courses at all DAU campuses
- Professional relationships with other premier associations (Program Management Institute; Reliability, Maintainability, and Supportability Partnership; National Defense Industrial Association; Aerospace Industries Association; National Contract Management Association)
- Sponsorship of numerous other activities related to defense acquisition

More information on the Alumni Association and its activities is posted to the DAUAA website at <http://www.dauaa.org/>

Not surprisingly, the common thread found throughout successful organizations in the government and industry is the development of a learning culture that harbors leadership involvement, creates opportunities for mentoring, leverages expertise across the enterprise, encourages interaction and experimentation at all levels, and creates an environment conducive to learning.

Learning Organizations—Examples

The following learning organizations are representative of those organizations that have effectively applied a number of learning techniques with successful outcomes.

Space and Missile Systems Center (SMC) Los Angeles, Calif.

SMC implemented a customized version of ACQ 101 for SMC entry-level personnel. Initial feedback indicated the need for experience accelerators for entry-level personnel outside the standard Defense Acquisition Workforce Improvement Act (DAWIA) certification path. Over 150 students have participated.

One student said, "Instructor summaries and exercises made the information more useful and definitely more applicable. I'll be leaving the course with information that will help me understand my new job."

Students say the largest impact will be enhanced effectiveness, productivity, and quality on the job. SMC also conducted an intensive 2½-day "Guardian Challenge"—an event geared to test inherent leadership and functional expertise of SMC personnel, specifically in the acquisition community. The space acquisition community competition demonstrated the strength of various DAWIA certification levels. The Defense Acquisition University and SMC joined forces to produce a real-world challenge facing the space community today: how to best satisfy a shortage in satellite communications bandwidth in a wartime theater of operations. Many junior personnel had an opportunity to demonstrate their collective mettle and test-drive their acquisition skills across the entire acquisition integrated framework, within their own product line, at their own base, and alongside their own colleagues. [Editor's note: *The Guardian Challenge* was the subject of an article in the September-October 2010 issue of *Defense AT&L*.]

Space and Naval Warfare Systems Command (SPAWAR) San Diego, Calif.

HCI efforts at SPAWAR focused on enhancing business processes, workload assignment balance, and benefits/opportunities for their acquisition and *program management leadership personnel*. SPAWAR also took an intensive look at program performance within their enterprise. This intensive review resulted in a SPAWAR Competency Development Model

(CDM) for the Program and Project Management Competency, which defines the assignments/experience as well as the knowledge, skills, and abilities for the personnel aligned to the CDM. The CDM provides objective metrics through four stages (entry, intermediate, advanced, and expert) to assess individual capability and to provide a recommended path for growing that capability. This particular action is expected to provide a clear, objective path toward expert-level program management capability and improved performance throughout an individual's career.

Joint Tactical Radio System (JTRS) Program Office, San Diego, Calif.

JTRS conducted frequent workshops that helped both new and seasoned employees understand the structure of the Joint Program Executive Office as well as the interdependencies that exist among five Acquisition Category 1D program offices. Topics covered in the workshop included organizational functions, mission, goals, and how the workers actually fit into the overall program. These workshops benefited the participants by creating personnel synergy and enduring networks. Participants noted the training broadened their understanding of a huge range of functions within JTRS and represents, in the words of one, "a must-attend for all new JTRS employees and [should be] strongly advertised to DoD, governance, and congressional stakeholders." Additionally, the JTRS program hired two naval acquisition associates through the Naval Development Program in Mechanicsburg, Pa. This program was established to provide qualified and talented entry-level college graduates with the opportunity for development and career-broadening assignments.

Program Executive Office for Command, Control, Communications, Computers, and Intelligence (PEO C4I), San Diego, Calif.

PEO C4I standardized key processes and used hiring authorities to attract qualified mid-level personnel rapidly. To support the new hires, PEO C4I conducted intensive 4-day programmatic workshops that accelerated the learning experience. Over 500 personnel have attended. This workshop represented a cross-cutting opportunity to share experiences inherent in the PEO C4I organization. PEO C4I also initiated a career progression model that clearly defined entry-, inter-

mediate-, advanced-, and expert-level positions in accordance with DAWIA-defined guidelines.

Defense Contract Management Agency (DCMA) Los Angeles, Calif.

DCMA's keystone program, a selective 3-year management training program, provides on-the-job training and leads to career-building opportunities in business, engineering, information technology, quality assurance, personnel management, and other fields throughout the agency. Jennifer Pueblo, who has been with the program for 2 years, said she has learned so much from the keystone program and that it has placed her years ahead of her college peers.

Marine Corps Tactical Systems Support Activity (MCTSSA)

MCTSSA focused on recognizing and celebrating the acquisition excellence of the workforce. In a recent Acquisition Excellence Day, the theme "Changing Times...Creative Minds: A Strategic Focus on Innovation and Change" rang clear as personnel were acknowledged for their contributions. Events such as this reinforce the value organizations place on people, and validate the premise that an encouraged and motivated workforce tends to have a larger impact on organizational goals.

Defense Acquisition University

DAU provided greater access to key learning assets, including mobile learning, gaming, and simulation (e.g., cohort training) that engaged the learner through virtual technology methods that were immediately accessible 24/7 and were appealing to all learning levels. As a learning organization, DAU established five strategic goals uniquely designed to meet a wide range of AT&L workforce learning needs ranging from targeted training to focused consulting, in addition to the core DAWIA training it already provided.

Benefits of Learning Organizations

With active HCI programs that embrace a learning organization model, acquisition organizations in particular seem to strengthen their human capital talent and increase the likelihood of successful outcomes, even though the baby boomers, who have served as the experience foundation, will be making a dramatic exit from the workforce. Organizations that have instituted chief learning officers known to champion their respective learning organizations are demonstrating how learning partnerships can cultivate talent more quickly at the ground level and respond more quickly to cultural needs that sometimes get short circuited. In the acquisition business, bridging experience gaps will always be paramount. Building flexible learning maps becomes a key enabler, since they are tightly aligned with strategic goals and help lead to purposeful outcomes. There are other considerations to keep in mind.

Accelerated Learning: View training as fundamentally interactive and experiential. Work closely with organizations and their

interns to help build relevant and timely training programs. These programs should advance supervisors' and employees' vitally important skillsets that fill the gaps in the near- and far-term.

Environmental Acclimation: With new jobs emerging as the baby boomers exit the workforce, new employees should understand the history and future of the programs they support. Make the most out of teaching moments that are unplanned. What opportunities exist in the short run that might be overlooked by not taking a risk on newly acquired talent and allowing them to learn in any scenario? Experiences can be gained by guided practice in spite of mistakes that may occur. Let practice shape the necessary learning pathway.

Early Professional Development: Short-term results are modest, but over longer periods, investing early and with a variety of professional development and training initiatives will assure the workforce is thoughtfully aligned with key organizational functions.

Training Rhythm: Keeping up with currency in a field of expertise can seem insurmountable, given the limited time available to attend events like trade seminars, conferences, symposia, and formal training. When it comes to experience gains, however, nothing beats exposure and practice often found at these events. There is a direct and favorable relationship between practice and success. The nominal investment is well justified, and over time it keeps the workforce motivated about learning and focused on certain changes that keep them current and engaged for the long haul.

Not surprisingly, the common thread found throughout successful organizations in the government and industry is the development of a learning culture that harbors leadership involvement, creates opportunities for mentoring, leverages expertise across the enterprise, encourages interaction and experimentation at all levels, and creates an environment conducive to learning. Acquisition organizations have found rewards with these same elements. To grow a capable and skilled workforce that is second to none, organizations must recognize the continuing importance of learning programs that support the changing and dynamic nature of both the workforce and acquisition demands. Many acquisition organizations in the Department of Defense are already reaping the benefits on the convergence between the two. It is safe to say that greater concentration on and commitment to human capital initiatives, especially in the form of learning organizations, will help organizations that produce the goods and provide the services that maintain their competitive advantage so U.S. warfighters can do the same.

Seligman is a management program analyst at DAU West Region. Her experience and expertise are in developing business applications, performing system analyses, and conducting research. Contact her at **donna.seligman@dau.mil**.

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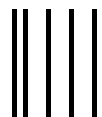
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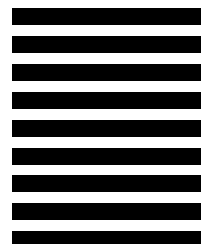
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Defense AT&L

Writer's Guidelines in Brief

Purpose

Defense AT&L is a bi-monthly magazine published by DAU Press, Defense Acquisition University, for senior military personnel, civilians, defense contractors, and defense industry professionals in program management and the acquisition, technology, and logistics workforce. The magazine provides information on policies, trends, events, and current thinking regarding program management and the acquisition, technology, and logistics workforce.

Submission Procedures

Submit articles by e-mail to [datl\(at\)dau.mil](mailto:datl(at)dau.mil) or on disk to: DAU Press, ATTN: Managing Editor, 9820 Belvoir Rd., Suite 3, Fort Belvoir VA 22060-5565. Submissions must include the author's name, mailing address, office phone number, e-mail address, and fax number.

Receipt of your submission will be acknowledged in five working days. You will be notified of our publication decision in two to three weeks.

Deadlines

Issue	Author Deadline
January-February	1 October
March-April	1 December
May-June	1 February
July-August	1 April
September-October	1 June
November-December	1 August

If the magazine fills before the author deadline, submissions are considered for the following issue.

Audience

Defense AT&L readers are mainly acquisition professionals serving in career positions covered by the Defense Acquisition Workforce Improvement Act (DAWIA) or industry equivalent.

Style

Defense AT&L prints feature stories focusing on real people and events. The magazine also seeks articles that reflect your experiences and observations rather than pages of researched information.

The magazine does not print academic papers; fact sheets; technical papers; white papers; or articles with footnotes, endnotes, or references. Manuscripts meeting any of those criteria are more suited to DAU's journal, *Acquisition Research Journal (ARJ)*.

Defense AT&L does not reprint from other publications. Please do not submit manuscripts that have appeared in print elsewhere. *Defense AT&L* does not publish endorsements of products for sale.

Length

Articles should be 1,500 – 2,500 words.

Format

Submissions should be sent via e-mail as a Microsoft® Word attachment.

Graphics

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