



The Future of Acquisition Excellence

Army, Navy, and Air Force Acquisition Strategies

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This is a very challenging period of time for the Department of Defense and the nation.

The president and the secretary of defense have established acquisition reform and improving acquisition outcomes as a top priority. President Barack Obama's March 4, 2009, memorandum, "Government Contracting," communicated his intent that the acquisition workforce have the capability and capacity to manage and oversee acquisitions appropriately. On April 6, 2009, Secretary of Defense Robert Gates announced his intention to significantly improve the defense acquisition workforce by increasing the size of the organic workforce by 20,000 through fiscal year 2015. The department's acquisition workforce improvement strategy reflects both the administration and congressional commitment to right-size, rebalance, and restore the quality of the acquisition workforce. This strategy is supported by workforce initiatives that will grow, enhance, and sustain a high-quality workforce. This includes recruiting and hiring, retention and recognition incentives, and training and workforce development initiatives.

On October 26, 2009, the Under Secretary of Defense for Acquisition, Technology and Logistics Dr. Ashton B. Carter chaired the DoD Acquisition, Technology and Logistics Workforce Senior Steering Board. In opening the board, he stated: "The department is in an enviable position because President Obama and Secretary Gates intend to improve the acquisition process and rebuild and reshape the acquisition workforce. In addition, there is congressional support on both sides of the aisle. We must grow and reshape the workforce to meet current needs, with special emphasis and focus on improving workforce quality."

The DoD acquisition mission represents the largest buying enterprise in the world. Today, there are over 100 major defense acquisition programs with an investment of more than \$1.6 trillion. The defense acquisition workforce has experienced a significant increase in demand for services; contracting; and the overall acquisition workload to include support for expeditionary, counter-insurgency, and other critical missions. In 2001, the defense department spent \$138 billion on contracts, and in 2008, spending reached \$396 billion—\$202 billion of it was for services. During this period, the use of contractor support personnel increased significantly while the organic acquisition workforce declined. Between 2001 and through 2008, the size of the organic defense acquisition workforce (civilian and military) had a slight decrease of 2.6 percent.

In this magazine, we highlight acquisition workforce initiatives in the Army, Navy/Marine Corps, and Air Force. Lt. Gen. N. Ross Thompson III, military deputy, Office of the Assistant Secretary of the Army for Acquisition; James Thomsen, principal civilian deputy assistant secretary of the Navy for research, development and acquisition; and Lt. Gen. Mark D. Shackelford, military deputy, Office of the Assistant Secretary of the Air Force for Acquisition, shared insights about their respective programs and services. I thank them for their time and for their contribution to *Defense AT&L* magazine.

Frank J. Anderson,
*President, Defense Acquisition University
and Director, Human Capital Initiatives*



People are our greatest asset. We have designed our acquisition education and training efforts to ensure our people are the best of the best.

Q
Can you give an overview of your roles and responsibilities?

Thompson

As the principal military deputy to the assistant secretary of the Army for acquisition, logistics and technology, I am delegated responsibility as the Army's director for acquisition career management to assist the ASA(ALT) in his role as the Army acquisition executive performing duties with respect to the AT&L workforce. The DACM acts under the authority of the secretary of the Army and the AAE to manage the integrated execution and oversight of the AT&L Workforce Education, Training, and Career Development Program within the Army.

The Defense Acquisition Workforce Improvement Act focuses heavily on a systematic approach for making the acquisition workforce more professional. DAWIA addresses specific requirements for work assignments, experience, education, and training. In my role as the DACM, I am responsible for the Army workforce's compliance with DAWIA and the implementation of civilian and military acquisition workforce education, training, and career development programs and activities. A major challenge and focus for today's Army is to integrate military and civilian acquisition workforce members' education, training, and career development into the mission of the organization. The DACM must communicate to commanders and leaders—at all levels—a clear understanding of their roles and responsibilities to meet this challenge.

I also advise the ASA(ALT), the Army chief of staff, and the secretary of the Army on the aspects and impact of legislation, policies, procedures, and programs that may have a broad political and public impact on the Army's mission. In this advisory role, I help formulate policy for the Department of the Army.

In addition to serving on the editorial board of the *Army AL&T* magazine and occasionally testifying before congressional committees, I represent the Army and DoD on matters relating to acquisition program areas, including interdepartmental committees organized to develop national policy. I serve as a member of multiple standing boards, such as the AT&L Workforce Senior Steering Board and the AT&L Workforce Management Group. To encourage professional development in our workforce, I publish a monthly professional reading list that serves as a resource for busy acquisition professionals. The list highlights at least two books or articles that supplement current acquisition workforce and career development issues or challenges.

Thomsen

The secretary of the Navy and assistant secretary of the Navy for research, development and acquisition established the position I hold—principal civilian deputy assistant secretary of the Navy for research, development and acquisition—in June 2008 to be the senior career executive for acquisition in the Department of the Navy. Some of the priorities of the position are to rebalance the naval acquisition workforce and to reinforce our technical infrastructure that includes our warfare centers and Naval Research Laboratory. They are priorities because of the nearly 50-percent reduction in our acquisition workforce since the 1990s, with particular erosion in our technical bench strength. Yet recently, the Navy has had more ship and aircraft designs under way than any time in the previous 30 years. In addition to the normal responsibilities of overseeing acquisition program execution, the secretary and assistant secretary gave this office a couple of strategic priorities relating to the workforce:

- Reverse the Department of the Navy's overreliance on contractors performing core acquisition functions. We want to reclaim a deeper understanding of the real technical and cost trade-space of our programs since, ultimately, we are responsible to the taxpayer for making quality decisions in what we are buying. That is especially true in the pre-Milestone B phase of our programs. It's important that we strike the right balance among outsourcing and insourcing domain expertise. The Department of the Navy should not contract out its ability to understand military problems in technical terms, but it should know who has the potential to solve those problems and be able to verify a technically correct solution when it is presented. This domain expertise is important for all aspects of acquisition. Take cost estimating, for example. You can have the best cost-estimating process in the world, but it will be flawed unless it is performed by knowledgeable technical personnel who have actually done some part of the function themselves. In addition, we have specific congressional language in the fiscal year 2008 National Defense Authorization Act (NDAA) that prohibits the Services from contracting for lead systems integrators beginning in fiscal year 2010. That compels us to rebuild that part of the engineering (and business) domain expertise that we have been steadily outsourcing for years.
- Deliberately steward the Department of the Navy's warfare centers/labs to ensure long-term effectiveness. The Department of the Navy has a proud history of a solid science and engineering foundation. The intentional investment in our technical infrastructure and the ability to team with industry is, in short, a principal reason we have a high-tech naval force today. Our labs revolutionized naval gunfire, launched the first GPS satellite, originated 80 percent of the world's air-launched ordnance, and developed the first ship-launched ballistic missiles. Today, the labs represent more than 50 percent of our

naval acquisition workforce and are the science and engineering foundation for our programs. Yet a Center for Naval Analysis study recently found "the Navy's in-house technical capability, most of which resides in the warfare centers, still exists, but is thin in several areas and rapidly losing capability and capacity. Moreover, these centers/labs have lost 44 percent of their personnel since 1991, while workload significantly increased after 9/11."

My office works with the Office of Naval Research and the systems commands to restore and invest appropriately in our future technical capability. We expect to grow the technical part of our workforce by about 10 percent over the future years defense program. We are recruiting scientists and engineers using funds authorized by NDAA Section 852 and Section 219. Both of those authorizations were put in place to ensure we are investing properly in our acquisition workforce of the future, and they have already served us well. Using these authorities, in just four months, we hired over 475 acquisition personnel, with only 11 people declining our job offer. That's a phenomenal acceptance rate.

Shackelford

The assistant secretary of the Air Force for acquisition (SAF/AQ) works closely with other Air Force headquarters offices to assist the secretary of the Air Force in carrying out his or her responsibilities. As the military deputy for the SAF/AQ, I have overall responsibility for acquisition systems for the Department of the Air Force (except certain space acquisition authority reserved for the under secretary of the Air Force); and assist in SAF/AQ's roles of serving as senior procurement executive, service acquisition executive for non-space related programs, and a member of the Air Force Council.

The military deputy is the principal advisor to the Air Force chief of staff on all acquisition and contracting issues, serves as military director to the Air Force Scientific Advisory Board, and is a member of the Air Force Council. The military deputy establishes, maintains, and fosters scientific and technical interchange and working relationships with and among private, quasi-governmental, United States, and international organizations and foreign governments in furthering programs of the United States and Air Force development interests. The military deputy:

- Presents research and development technology and new concepts/initiatives
- Prepares, presents, and defends the fiscal budget to Congress and allocates/reallocates monies to accommodate program changes, operational necessity, or developmental priorities
- Is responsible for efficient research, development, and acquisition through utilization of current technology, inter-Service knowledge transfers, industry-sponsored programs, and foreign governmental exchanges
- Excepting program approval and cancellation, is responsible for all actions necessary to research, develop, and

acquire systems and subsystems to maintain effectiveness, sustain modernization, or increase the Air Force operational worldwide capability.

The military deputy is accountable to the secretary of the Air Force, SAF/AQ, and the Air Force chief of staff for the cost, schedule, and technical performance of Air Force weapons systems (except those assigned to the under secretary of the Air Force for space systems).

An interesting aspect of the military deputy position is that SAF/AQ may delegate certain roles and responsibilities to the military deputy; however, the military deputy may not act as SAF/AQ. In accordance with Title 10 of the U.S. Code, an active duty officer may not hold or exercise the functions of a civil office, such as that of the SAF/AQ, that requires appointment by the U.S. president with the advice and consent of the Senate.

Q Secretary of Defense Robert Gates has proposed hiring 20,000 new acquisition professionals by 2015. Thousands of new jobs would be created, and contractors are expected to convert to government jobs. Can you discuss your military service's plans in place to respond to the hiring and conversion?

Thompson

The Army Acquisition Corps' plans for hiring and converting over the future years defense program are as follows: conversion of approximately 3,200 contractor positions performing acquisition career field-specific actions to Department of the Army civilian positions and growth of approximately 1,900 acquisition career field-specific positions with a heavy emphasis on contracting and cost and pricing positions. To date, we have hired more than 300 people within the contracting acquisition career field. Plans are currently being formulated for our other acquisition career fields. We plan on using every available authority to expedite the intake of quality professionals into the Army acquisition workforce. The number of positions converted will likely grow as we identify the critical skills and refine the numbers that will be Department of the Army civilians.

Thomsen

The Department of the Navy will increase its acquisition workforce by at least 5,000 government employees, or about 12 percent, over the next 5.5 years. Of those, about 3,500 will be contractor conversions, which will help reverse outsourcing our core acquisition functions. We will also hire at least 1,500 new government employees to reinforce the foundation of our Navy/Marine Corps acquisition workforce.

These new hires will strengthen the naval acquisition workforce in four principal areas. The first is systems engineering, and I've already addressed the need for systems engi-

**The naval warfare centers/
labs must scout the scientific
horizon for knowledge that
may be translated into future
technological advantages.**



neering and technical domain expertise. The second area is contracting officers. We estimate that we need to grow the contracting officer part of our workforce by at least 30 percent. When I was a program executive officer, it was not uncommon for my industry counterparts to ask me to increase the capacity of our system commands' contracting officer workforce. They knew what I did: that knowledgeable and skilled contracting officers were critical to the acquisition team and our ability to execute programs on time and budget. The third area is cost estimating. In order to set budgets appropriately, it is critically important to have credible cost estimates to which we can budget. It is also important for us to understand the relationship between a program's cost elements and technical options before we commit taxpayer money to a legally binding contract. Another area of growth is adding qualified program managers.

Shackelford

The Air Force began working initiatives to increase the size of our acquisition workforce in the fall of 2008, when the SAF/AQ directed the Air Force program executive officers to re-examine and provide acquisition workforce requirements for our product centers. After review by the Air Staff and Air Force Corporate Structure, the Air Force validated 2,062 acquisition workforce positions, with 1,804 civilian, 247 officer, and 11 enlisted positions. Those positions were incorporated in the fiscal year 2010 president's budget and will be phased in between fiscal year 2010 and fiscal year 2013.

Our next step was to assess additional acquisition manpower needs at the Air Logistics Centers, which are currently estimated to total approximately 900 positions, of which about 850 are civilian. Finally, we identified over 900 contractor positions for conversion to civilian acquisition positions, to include acquisition managers, systems engineers, contracts experts, cost and pricing analysts, and others. The conversion effort started in early fiscal year 2009 and will continue through fiscal year 2013.

From the headquarters level, we're providing oversight and tools that help the field keep positions coded properly and that improve the accuracy of the acquisition data in the military and personnel data systems. The Air Force today has a very accurate count of our acquisition workforce, thanks to the diligence of our Acquisition Professional Development Program managers and manpower professionals at our acquisition centers. Those individuals work with supervisors and workforce members to ensure that acquisition positions are coded properly to reflect the acquisition functional specialty and certification level required. Additionally, in the last few years, we've implemented metrics that give managers at all levels visibility into the qualification status of members in critical acquisition positions (including key leadership positions), as well as certification and professional currency status of the workforce. Our metrics help promote accurate

position coding, which is the key to getting and maintaining an accurate count of the acquisition workforce.

Our strategic planning is focused on ensuring we have the workforce we need to meet current and future mission requirements, including the right competencies and the right numbers. To help guide our strategic planning, we've completed a RAND Corporation study of Air Force cost estimators and have undertaken reviews of price analysts and future engineering requirements. Those studies will help inform our decisions as we specify hiring targets under the growth strategy announced by DoD.

For the long term, we are working with Air Force manpower experts—building on lessons learned from our first-generation acquisition manpower model—to develop a family of corporate Air Force-sanctioned, objective-based, workload-driven manpower models that predict, define, and validate the manpower requirements needed to efficiently launch and manage a weapon system program. When completed, the Acquisition and Sustainment Unit Manpower Models will give us the ability to quantify the manpower resources needed for new, existing, and/or changing missions. We expect to have several of these models available for use on the fiscal year 2012 Program Objective Memorandum.

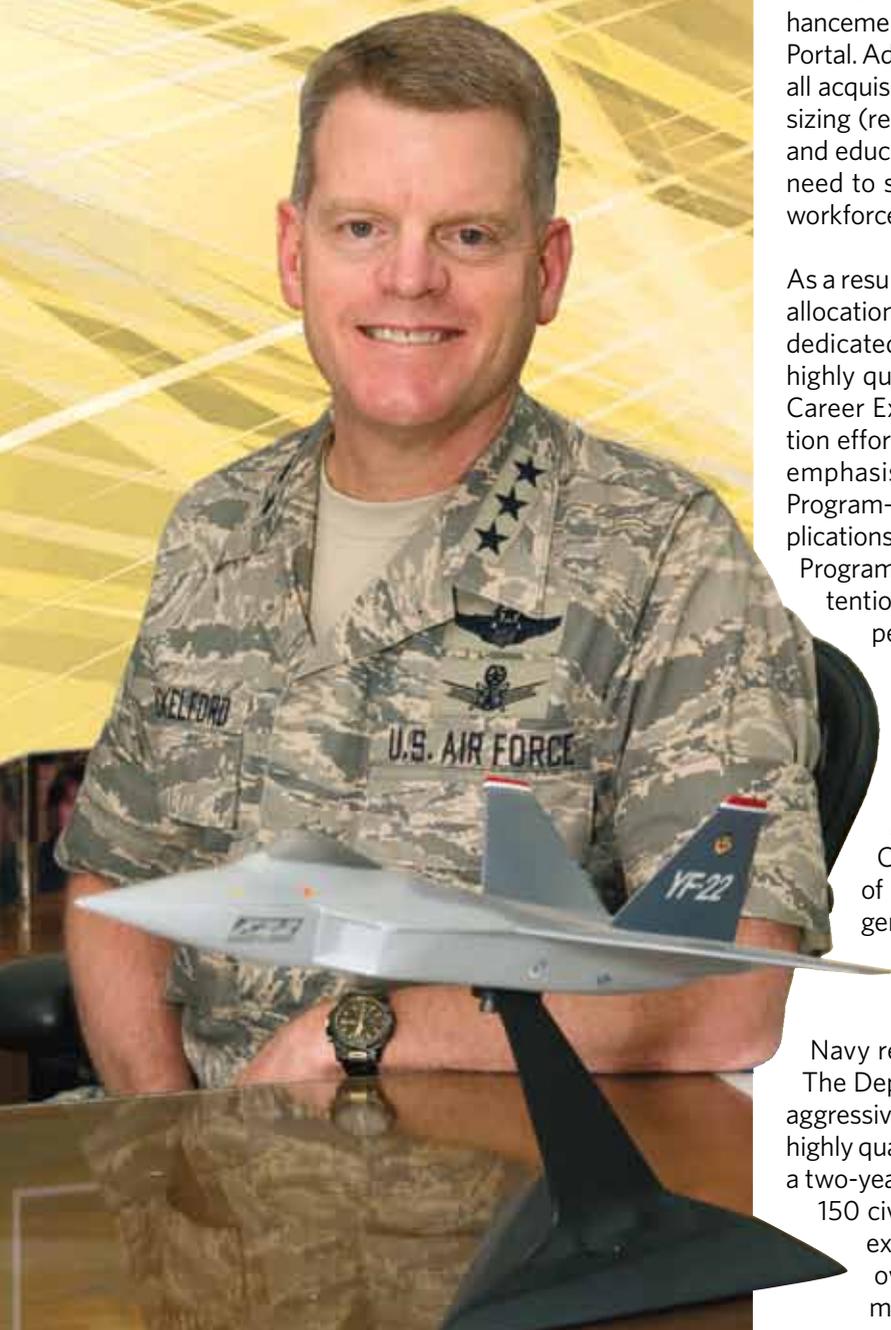
We believe the Air Force can meet the higher targets for hiring and conversions that Secretary Gates has established, and we're working closely with the USD(AT&L) to address the funding and specific functional allocations.

Q *Section 852 of the fiscal year 2008 National Defense Authorization Act establishes the Defense Acquisition Workforce Development Fund. The fund provides DoD agencies and services with money to recruit and retain talented members in the acquisition, technology, and logistics career fields. Can you discuss how your military service is preparing to use the current and future funds?*

Thompson

The U.S. Army Acquisition Corps utilized several factors during the Section 852 requirements generation process for fiscal year 2008. We relied heavily on the deficiencies and recommendations annotated in the recent Gansler Commission Report (also known as the Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations) with principal focus on improving the Army's contracting community. Secretary of the Army Pete Geren chartered the commission in October 2007; and chaired by Dr. Jacques Gansler, under secretary of defense for acquisition, technology and logistics from 1997 to 2001, the commission provided an independent, long-term, strategic assessment of the Army's acquisition and contracting system and its ability to support expeditionary operations and sustained high-operational demand in an era of persistent conflict. Recommendations

Incremental acquisition strategies that deliver early, if only partial, operational capability will be pursued, rather than strategies that deliver the 100-percent solution.



in the commission's report determined four overarching strategies to ensure the success of future expeditionary operations to which the Army is responding:

- Increase the stature, quantity, and career development of military and civilian contracting personnel, particularly for expeditionary operations
- Restructure organization and restore responsibility to facilitate contracting and contract management
- Provide training and tools for overall contracting activities in expeditionary operations
- Obtain legislative, regulatory, and policy assistance to enable contracting effectiveness in expeditionary operations.

Recognizing the paramount importance of our acquisition, logistics, technology and workforce database system, we invested considerably in enabling information system enhancements to the Army's Career Acquisition Management Portal. Additionally, we wanted to ensure a proper balance of all acquisition workforce initiatives as they pertain to right-sizing (recruitment and retention), development, training, and education, at all levels and in all disciplines. Lastly, the need to sufficiently recognize and retain our acquisition workforce was a major emphasis for Section 852 funds.

As a result, we are presently executing our fiscal year 2008 allocation of \$69.6 million, with 72.57 percent of the fund dedicated to recruitment—we've hired 419 interns, three highly qualified experts, 24 journeyman, and 90 Student Career Experience Program students. The Army's retention efforts, at 13.14 percent of the fund, includes special-emphasis programs like the Student Loan Repayment Program—with the pilot offering attracting over 1,200 applications (with 438 approved)—and the Civilian Incentive Program dedicated to the provision of recruitment and retention incentives. Lastly, our training efforts, at 14.29 percent of the fund, ensure state-of-the-art facilities and programs to increase the Department of the Army throughput capability in 22 programs (for example, school of choice, Mission Ready Airmen Course, and Darden's Commercial Business Environment Course). We have also activated our first Active Duty Special Work Program for the Reserve Component/National Guard, enabling one full year of hands-on contracting experience prior to contingency contracting assignments.

Thomsen

For fiscal year 2009, the Department of the Navy received about \$50 million in Section 852 funds. The Department of Navy is already using these funds to aggressively hire more interns, mid-career journeyman, and highly qualified experts. The funds have helped us establish a two-year journeyman program, which is hiring more than 150 civilian personnel annually. They have also helped expand our three-year acquisition intern program to over 400 new interns this year, with plans to hire more next year. Both programs have already met

their fiscal year 2009 hiring goals. These new hires are filling positions in systems engineering, contracting, business cost estimating, and program management.

We are not having trouble hiring qualified personnel (excepting a few niche areas). The economy has had something to do with it, but we also believe it's because of the exciting work we offer—as it's been described by a number of people at our hiring events. I don't have a metric, but we are also sensing a renewed interest by people who favor public service.

Shackelford

Our acquisition human capital strategic plan includes a focus on initiatives to attract, select, develop, and foster talent with the competencies we need to do the current and future acquisition mission. It establishes a competency management framework to support hiring and succession planning as well as initiatives to identify required critical skills, replenish the workforce, advance workforce development, and foster knowledge transfer. To accomplish these objectives, the Air Force is making full use of the funds provided by Section 852.

Section 852 funding has enabled us to jump-start hiring today while we work through the corporate process to establish permanent civilian and military authorizations for a larger workforce, sized to meet program requirements. Based on needs gathered from the Air Force acquisition community, our fiscal year 2009 Section 852 hiring targets include more than 300 additional interns, at least 130 additional participants in the Student Career Experience Program, and at least 330 experienced journey-level overhires. We distributed the first allocated Section 852 funds to Air Force acquisition commands in mid-January; and our product, logistics, research and development, and test centers are hard at work recruiting and hiring using those resources.

We are also investing more in the people we already have. Our human capital strategic plan outlines four major objectives to increase the effectiveness of the workforce: identify and address training gaps; train people before they are assigned to positions of higher responsibility; emphasize professional currency; and revitalize position qualification and tenure management. Here again, we're leveraging the Acquisition Workforce Development Fund to address training capacity shortfalls, and that includes sending more civilians to acquisition initial skills courses and increasing seats in other courses we believe can help improve acquisition outcomes. We've also been working closely with Defense Acquisition University to focus their use of the fund on high-priority Air Force training needs.

Q *A major challenge in recruiting talented acquisition professionals—particularly those in the science, mathematics, technology, and engineering career fields—is that industry has been a more lucrative career path. What plans are in place to draw talented professionals, including recent college graduates, into the DoD*

acquisition workforce? And what are the plans being developed to keep them in the government?

Thompson

In general, we are investigating various methods of attracting and retaining the best and the brightest. When we find people who have proved themselves to be effective, especially in areas that mirror our own best practices, we intend to leverage them to the maximum extent possible. As I mentioned earlier, the Army recently deployed a centrally managed and centrally funded Student Loan Repayment Program, whose pilot attracted over 1,200 applications; and the Civilian Incentive Program focused on providing certain recruitment and retention incentives. We are presently awaiting feedback from the acquisition community on requirements for the Civilian Incentive Program, but I anticipate a positive response very similar to that obtained by the Student Loan Repayment Program. Additionally, we have expanded our use of targeted job fairs throughout the continental United States in order to spread the word about exciting job opportunities with the U.S. Army Acquisition Corps.

Thomsen

We are hiring qualified personnel much faster than previously. In the past, our typical hiring cycle was around 175 days—from creating the vacancy announcement to getting someone to accept an offer. Today, we can hire qualified personnel within five days under the expedited hiring authority established by Congress in Section 833 of the fiscal year 2009 National Defense Authorization Act. We also have been given direct hiring authority for individuals with advanced degrees. This has been especially helpful in quickly bringing aboard notable scientists and engineers.

Through public outreach and recruiting events, our material acquisition commands have interviewed hundreds of mid-career candidates and have had a terrific response. We are not having problems hiring folks in most career fields, even at the mid-career level. As far as interns (a program that encompasses more than new college graduates) are concerned, we have already filled our fiscal year 2009 target of 400 positions, from over 4,000 applicants. Because of the economy, we have also had the luxury of conducting targeted hiring. For example, one of our acquisition commands, the Naval Sea Systems Command, recently went to Detroit, Mich., to recruit skilled technical and business professionals who have left the automobile industry. They came back with an armful of qualified candidates.

Within the Navy, we are also pursuing uniformed officers who are separating from the Service. These are typically very talented individuals with business or technical degrees from the Naval Academy or other outstanding colleges, and many have a desire to support the Department of the Navy as civilians. We have teamed with the Naval Personnel Command to provide specific information on the acquisition workforce to those members as they separate from the Service. For ex-

ample, we targeted officers at the naval flight school in Pensacola, Fla., who were required to separate from the Service for various reasons. We held a special recruiting event just for those officers and recruited them for entry-level and mid-level jobs. We think that's pretty appealing for officers at the O-1 to O-3 levels, and it's been extremely successful. So far, we have hired over 90 percent of the officers we have targeted.

For new college graduates, our main leverage is offering incentives, such as signing bonuses. But our successful hiring is largely attributable to our warfare centers/labs all around the country, as representatives there have personal interaction and investments in the local community. They are able to get out in their communities and inform the public of the exciting work the Department of Navy has to offer and to inspire folks to consider a civilian technical or business career supporting the men and women of the Navy/Marine Corps team. Additionally, our warfare centers/labs have a



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multitude of outreach efforts to attract college students. In fact, many of our scientists and engineers also teach at local colleges or community college campuses. Additionally, our warfare centers and labs offer scholarships to local students at nearby college campuses and community colleges.

But the best incentive was described by noted naval scientist, Dr. James Colvard: "Challenging work attracts people, and pride in their output retains them." The Navy and its labs enabled great innovations like the laser, fiber optics, GPS, and others that have literally changed the world. Many people want to be a part of that; they want to have an impact. They also seek something else. As a recently hired computer scientist at a naval warfare center in Charleston, S.C., stated, she was "looking to serve the warfighter and my country." So we are working diligently to remain engaged in

our local communities and remind them of the exciting work that is available in the Navy.

Shackelford

The Air Force is using a corporate recruitment strategy targeted to ensure the right talent applies for available acquisition positions. We've partnered with the Office of Personnel Management and the Air Force Personnel Center to create an employment brand, recruitment materials, and Web site; to create concise, easily understood, and user-friendly vacancy announcements, and streamlined assessments and certification for our featured vacancies. We've established strategic recruiters at each acquisition center, who, in conjunction with their senior acquisition functionals, have overall responsibility for local recruitment plans, activities, and events to target highly qualified candidates. We're seeking

diverse quality talent using external recruitment sources tailored to the types and levels of the positions. That includes searching for qualified job seekers through professional and community outreach to colleges and universities, professional organizations, alumni associations, career-building organizations, professional conferences, non-federal employment sites, job fairs, contractor-to-civilian conversions, transition centers for separating and retired military, employment agencies, and employee referrals. We're using the full range of recruitment and retention flexibilities such as recruitment, relocation, and retention incentives; student loan repayment; work-life programs such as alternate work schedules, transportation subsidies, fitness programs, and tuition assistance; and available pay-setting flexibilities.

Thanks to the recent expedited hiring authority in the fiscal year 2009 NDAA, we've been able to streamline the hiring process for all acquisition functional positions at the mid- and senior-level. The Air Force goal is to make an offer within one pay period after the receipt of the request for personnel action. Compared to what had been a months-long process, this is a notable improvement that enables us to hire highly qualified individuals quickly. We continue to use individual and open continuous internal and external vacancy announcements to attract internal Air Force candidates, other current federal employees, veterans, and other noncompetitive appointment eligibles.

Q
How is your military service working to prevent the brain drain that is threatening DoD? What processes are being established to ensure that knowledge of retiring workers isn't lost, and that there are people who can take the place of those retiring?

Thompson
With the infusion of Section 852 funding, we are now able to hire more intern- and journeyman-level employees. That provides us the opportunity to ensure new personnel will be mentored by our knowledgeable acquisition professionals. As we craft our intern programs, we must ensure mentorship opportunities, access to lessons learned, and new opportunities are incorporated into the programs so our new talent will have a solid foundation in order to develop into future Army leaders. Our retention incentives may also help to prevent our trained interns from leaving the government for industry positions. Our recruitment efforts have included roadshows at colleges and high schools to encourage students to consider future employment with the Army acquisition community. Our organizations are also developing implementation plans for knowledge management in conjunction with the principles of the Army chief of staff's guidance on knowledge management. This and our focus on knowledge transfer and continuous education learning will be instrumental in our knowledge retention efforts. The importance of continuous learning is stressed for current employees at all levels, and Army activities across the country are hosting knowledge-sharing events: cross-

training, job-shadowing, brown bag training sessions, and roundtable discussion groups with knowledgeable acquisition leaders on key acquisition topics. Those and other activities will ensure the continued growth of our current acquisition workforce into our future leaders.

Thomsen
The Department of the Navy has very specialized technical expertise that it can't afford to lose. As I've said before, we have a very high-tech Navy. We have some of the most enticing, complex engineering challenges. For example, the systems integration and complexity of an aircraft carrier is enormous. It is, arguably, the most complex man-made system in the world—5,000 people on-board, an airwing, two nuclear reactors, integrated network operations, all moving briskly on the ocean to meet a number of different missions. Developing new concepts for these complex systems typically requires much more than a fresh-out-of-college graduate with an engineering or science degree; rather, we need experienced and talented engineers, information technology, logisticians, and people with excellent business skills to assist in the acquisition and contracting functions.

We are doing several things to ensure such specialized knowledge is retained and passed on to the next generation. For example, we're providing retention bonuses to personnel in areas where we would be especially vulnerable if they left. Use of such funds is authorized under Section 852. Those bonuses have enabled us to keep key personnel onboard for another year or two, allowing them to mentor new personnel. That's been very helpful. Another thing we are using is the Retired Annuitant Program, which allows us to bring back retired individuals to mentor employees in a particular area or expertise.

We are also using the Highly Qualified Expert Program, which Congress authorized in 2004. It allows us to bring on personnel who can provide mentorship and senior executive capabilities in areas where we are particularly weak or where we have lost folks who are very difficult to replace. Those programs have helped us preserve and pass on expertise before it is lost. But again, what is critical to keeping and getting quality personnel is quality work. That is why we have asked our program executive officers to assign a deliberate measure of hands-on work to our Navy technical labs/warfare centers.

Shackelford
This issue highlights the fact that acquisition excellence requires more than book learning; it relies on acquisition savvy that only experience can bring. We've made knowledge transfer a primary purpose of our Section 852 journeymen hiring program, which was designed to bring experienced acquisition personnel into the workforce as "overhires" in anticipation of vacancies due to separations or retirements. One example of a resource we plan to exploit is separating acquisition officers. We're reconstituting a program to solicit

their interest in civilian Air Force acquisition employment opportunities and connect them to hiring offices at their preferred employment locations. Coupled with our strong entry-level hiring programs and the Air Force's "deliberate development" philosophy using career field development teams, we're working to ensure orderly knowledge transfer as experienced members leave the acquisition workforce.

Q
How is your military service working to ensure that there is a steady pipeline of program managers who have the training and experience necessary to oversee DoD acquisition programs?

Thompson

We're using a holistic and comprehensive approach to prepare program managers through our education, training, and career development programs. One specific career development program offered to our Army acquisition workforce members is the Competitive Development Group/Army Acquisition Fellowship (CDG/AAF) Program. This is a feeder group for future senior leadership positions within the Army Acquisition Corps, and the three-year leadership development program provides leadership opportunities in the form of developmental assignments within PEO/PM offices as well as carefully selected leadership courses to enhance the fellows' leadership skills. Developmental assignments range from serving as assistant product/project manager to the Department of the Army; as a systems coordinator for a PEO in the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology; to a deputy product/project manager. CDG/AAF fellows assigned to the PM track apply for the acquisition key billet lieutenant colonel/GS-14 product manager board in the second and third years of their CDG/AAF program. I am pleased to share that we have 5 CDG/AAF fellows selected as alternates to the 2010 Product Manager Command Select List. In addition, most of our civilian PMs were graduates of the CDG/AAF Program. When a project or product manager is assigned to a program management office, the Acquisition Management Branch, U.S. Army Human Resources Command begins planning for the mandatory DAU training and pre-command course requirements.

Thomsen

We actively manage our military acquisition workforce career paths, which is also of particular interest to Congress. We have found that the Department of the Navy's acquisition leadership is most effective when staffed with a calibrated mix of warfare community personnel. Additionally over the last two years, we have revised some community career paths to meet anticipated shortfalls in critical acquisition positions.

On a similar note, the Marine Corps has established a military occupational specialty for acquisition management, with 114 officers in this specialty, which currently includes two general officers: commander of Marine Corps Systems

Command and the Joint Strike Fighter PEO. Typically, officers in the specialty are assigned to acquisition leadership positions in programs for ground equipment and/or weapons systems programs, which prepares them for program management and executive officer assignments.

On the Navy side, uniformed program managers are drawn from staff corps, restricted and unrestricted line officer communities. The Supply Corps and restricted line officer communities—engineering duty officers, aerospace engineering duty officers, and aerospace maintenance duty officers—have been very effective in ensuring a deliberate career path, yielding highly experienced and qualified acquisition professionals. Supply Corps and engineering duty officers, in particular, work in acquisition early in their careers.

It's a little bit more challenging for Navy unrestricted line officers, coming from the aviation, surface, and submarine communities. Their career paths are very busy with operational demands, making it challenging to assign them to acquisition billets early in their careers. We continue to adjust the career paths and opportunities by working through the three-star community managers. The naval aviation unrestricted line officers community, for example, has recently refined its acquisition career path so that aviators can be assigned to an acquisition career path earlier in their careers. Last year, the surface warfare community similarly adjusted its career path.

Shackelford

Our acquisition specialties, including acquisition management, deliberately develop acquisition professionals according to well-defined career path models that serve as a guide for developing both military officers and civilians through assignments, education, and training. These career models define career paths to greater rank and responsibility within the acquisition workforce. The development of acquisition workforce members is enhanced by the use of career field development teams consisting of senior leadership from within each acquisition career field. Using the published acquisition career path models as a guide, the acquisition development teams provide each individual with developmental guidance that vectors them on paths of progression and opportunity in the acquisition workforce. The development teams also nominate officers and civilians for service schools (developmental education), and identify military candidates for command leadership positions within the acquisition workforce. The Air Force also has well-established career field management and force development functional responsibilities at the Headquarters, Air Staff level to provide strategic direction to the career fields and oversight of the developmental team process.

Q
Can you talk about current and future leadership development programs of your military service? How are GS-15s and SESes,

and their military equivalents, gaining the experience necessary to do their jobs?

Thompson

In an effort to provide a leadership development program for our Army Acquisition Corps members at the GS-14/15 or equivalent rank, the Army Acquisition Corps instituted a pilot Senior Service College Fellowship Program for our high-performing GS-14/15 Army Acquisition Corps members in 2006 in Huntsville, Ala. Since then, we have expanded the program to Warren, Mich., and will soon be implementing one at Aberdeen Proving Ground, Md. The SSCF program provides leadership and acquisition training and has an excellent mentoring program. Individuals who complete the program are awarded equivalency for the DAU Program Managers Course (PMT 401) and are given the option to complete a master's degree. The SSCF program emphasizes leadership in acquisition with core elements in leadership, research, program management, and mentoring. Senior leaders at each of their locations place the graduates in key acquisition positions after completion of the SSCF program.

Our military officers and civilian equivalents also compete for and attend other Senior Service Colleges, such as the Industrial College of the Armed Forces and the Army War College. ICAF prepares officers and civilians for senior leadership and staff positions. They are offered a wide choice of research and elective opportunities, and also follow a common core curriculum and two mandatory advanced studies in acquisition policy courses. While separate attention is given to acquisition coursework, students have the benefits of mingling with other students from the operational and other functional communities. We are allocated seven acquisition seats each year for senior-level GS-14s and above. Graduates receive a master's degree in national security strategic studies and also fulfill the Office of Personnel Management's Senior Executive Service core competencies. ICAF graduates are placed in key leadership positions after graduation.

The Army War College prepares officers and civilians for leadership responsibilities in a strategic security environment during peacetime and wartime. The college emphasizes theory, concepts, systems, and the national security decision-making process—all of which prepares senior



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military officers and civilians for key leadership and staff positions.

Our senior-level Army Acquisition Corps members also participate in my Executive Leadership Program Team Learning Event, in which key leaders in the Army come together twice a year to discuss major issues impacting the workforce. The event is by invitation only and includes high-performing GS-15s/equivalents and promotable colonels.

Other programs—such as the Harvard Program for Senior Executive Fellows and the Federal Executive Institute's Leadership for the Democratic Society—are leadership opportunities for our senior-level staff. The Senior Executive Fellows program builds executive skills in political and public management, negotiation, human resources and management, organizational strategy, and leadership. The Federal Execu-

tive Institute program focuses on personal leadership, organizational transformation, policy, and global perspectives.

Another effort within our contracting career program offers our senior Army contracting and acquisition professionals in the grades of GS-14/15 or equivalents the opportunity to apply for the Senior Leadership Development Program, which is a feeder group to the Senior Executive Service. The program develops core leadership competencies and extends over an 18-month period, alternating learning between the classroom and on-the-job experiences. The classroom component consists of three one-week residential sessions. The learning activities outside the classroom involve a mix of individual work and small group work. The on-the-job component includes a mentor, a faculty coach, developmental assignments, team projects, leadership forums, field experiences, focused reading, and Web-based learning.

Shackelford

Our acquisition process improvements depend on continuity of leadership, and we've made succession planning across the acquisition enterprise a key objective of our human capital strategic plan. A precept of DAWIA is to develop a strong pool of qualified, talented candidates from which to choose leadership successors. Our Force Development Teams are key tools in the deliberate development of competencies and leadership experience to meet future leadership needs. As needed, we're investing in career broadening and mobility incentives, including through the use of Section 852 funding. In addition, based on competency requirements, we're investing in cross-functional certification training, acquisition leadership training, and executive-level acquisition training.

Q

Mr. Thomsen, can you explain what role the Department of Navy's labs and warfare centers play in the future of the Navy's acquisition workforce?

Thomsen

The importance of our warfare centers/labs was stated by Supreme Allied Commander, Europe and Commander, U.S. European Command Adm. James Stavridis: "We will win—or lose—the next series of wars in our nation's laboratories."

Our warfare centers/labs were founded to institutionalize innovation for our naval forces—to know how to apply technology to fleet needs—because technology readily translates into naval operating advantage. The centers/labs interpret military requirements in terms of technology, develop potential approaches to meeting those needs, and validate proposed solutions. Their role is not to produce the final product, but to understand the underlying science and engineering and determine its viability.

In keeping with this role, warfare centers/labs can help the Department of the Navy reclaim that technology and cost-

trade space that I mentioned, particularly prior to Milestone B. They are ideally suited to support program offices by understanding the technical merits of a proposed system. Additionally, per a Sept. 19, 2007, USD(AT&L) memorandum systems- and subsystems-level prototyping must be done to inform Milestone B to reduce technical risk, validate designs, validate cost estimates, evaluate manufacturing processes, and refine requirements. It is a role warfare centers/labs can do by teaming and working with industry.

Naval system commands and warfare centers/labs play a critical role in complex system development. This is particularly the case with open architectures, a principal tenet of new naval systems development. As the Department of the Navy produces future system specifications, in-house engineering teams will need to manage standard interfaces in the reference architectures. And as the Department of the Navy transitions to become its own lead system integrator (as directed by Congress), warfare centers/labs will provide critical engineering expertise to program managers.

Additionally, warfare centers/labs will continue to be called upon to meet emerging needs. When U.S. forces needed to quickly root out Al Qaeda and Taliban fighters in Afghan caves in 2001, it was the naval warfare centers/labs that helped field in 60 days a thermobaric bomb, producing devastating pressures in deep and winding tunnels.

Lastly, the warfare centers/labs must scout the scientific horizon for knowledge that may be translated into future technological advantages. While the previously mentioned thermobaric bomb was fielded in 60 days, the warfare center/lab began its underlying research 35 years before that. The need for labs to anticipate future challenges and needs was recently pointed out in the previously mentioned Center for Naval Analysis study: "The uncertain demands in an era of international terrorism require a focus on intellectual capabilities across the technical infrastructure of the Navy."

We also have some concerns that industry is increasingly less likely to make risky investments in innovation and technology that is applicable to military use. The defense industry will continue to invest, but there has been a steady consolidation of the defense industry, which results in less competition, less risk-taking, and less innovation. We believe we must make an informed and measured investment in our own technical infrastructure to remain a partner and peer of industry that secures our own future.

Q

"The conventional DoD acquisition process is too long and too cumbersome to fit the needs of many systems that require continuous changes and upgrades," according to a recent Defense Science Board report. Lt. Gen. Shackelford, can you discuss processes that are being developed to shorten the acquisition process, and how will the Air Force ensure its people are positioned and trained to improve acquisition processes?

Shackelford

The Air Force is pursuing multiple initiatives to improve the acquisition enterprise. The Acquisition Improvement Plan, recently signed by the secretary of the Air Force and the chief of staff of the Air Force, outlines five broad initiatives and details multiple action items within each initiative.

One AIP action intended to shorten the acquisition process requires program managers to develop incremental acquisition strategies that reduce cost, schedules, and technical risk and produce operational capability earlier. Incremental acquisition strategies that deliver early, if only partial, operational capability will be pursued, rather than strategies that deliver the 100-percent solution; the 100-percent solution is often too costly, takes too long to deliver, or involves schedule and performance risks that are too high. The warfighter and acquisition community must work together to resist the temptation to pursue high-risk requirements that are too costly and take too long to deliver in favor of an incremental acquisition strategy that delivers most of the requirements in the initial increment and additional improvements added as technology matures.

A second AIP initiative freezes program requirements at contract award and requires subsequent changes to be accompanied with adequate funding and schedule considerations that are reviewed and agreed upon by the appropriate requirements authority. Requirements must also be acquisition-friendly and produced in a format that is readily adaptable for use during source selection and throughout the acquisition process. Clearly defined requirements that are developed with the assistance of the acquisition community, and freezing program requirements at contract award (reducing requirements creep) should lead to earlier delivery of capability into the user's hands.

The Air Force is also focusing on improving the quality and sufficiency of early technical planning. The acquisition team must be involved early in the requirements tradeoff decision process, with experienced systems engineers to help guide the requirements community in this complex process. The technical merits (for example, military utility) of candidate solutions are still being evaluated in the analysis



of alternatives. It is important to also recognize that the majority of requirements might be satisfied at a lower cost using alternative approaches, so trade-space options are critical and must be understood. Acquisition involvement earlier in the Air Force requirements development process and systems engineering techniques will be applied to assist in the tradeoffs that

Our acquisition human capital strategic plan includes a focus on initiatives to attract, select, develop, and foster talent with the competencies we need to do the current and future acquisition mission.

occur as part of the process. The Air Force has increased funding for early (pre-program) systems engineering and technical planning in a new program element for requirements analysis and maturation. This activity is also known as development planning and includes comprehending future capability needs, evaluating alternate concepts, assessing technology maturation approaches/risks and life cycle costs, and formulating executable acquisition strategies. By working closely and collaboratively with the requirements stakeholders, we will ensure that the initial risk assessments presented to decision makers clearly detail how an emerging concept improves the ability to perform the operational mission in the desired time horizon. As the concept definition solidifies, the risk assessments will address specific technology maturation and programmatic issues associated with development, integration, and testing of critical technologies and system elements.

The Air Force is establishing an integrated research, development, and engineering policy framework to ensure the accomplishment of this upfront technical planning to initiate programs successfully. We are charging our practitio-

ner community to operate with a total life cycle engineering focus; to identify cost, schedule, and performance risk areas before making program launch decisions; and to communicate cost and schedule confidence levels throughout the early stages of the acquisition process, thereby improving our ability to manage requirements and avoid disconnects. This early effort helps the Air Force reduce program risks, and we will be far more confident that our future programs will deliver more increments of desired capability on shorter and more realistic schedules at closer to expected cost.

Q *Sue Payton, the former Assistant Secretary of the Air Force for Acquisition, has recently redesignated the Air Force Center of Excellence as the Program Management and Acquisition Excellence Office and made it a direct report to the service acquisition executive. Lt. Gen. Shackelford, can you discuss the reasoning behind the decision, and what it means for Air Force acquisitions?*

Shackelford

The Program Management and Acquisition Excellence office was created with the idea of providing both a focus on program management and expanding on Air Force acquisition excellence initiatives. The first efforts of the new PM&AE are to work with the Air Force's acquisition leadership to reset its acquisition processes, ensure adequate and continuous training of its acquisition professionals, and return to a back-to-basics approach in managing programs.

Many independent studies—GAO, RAND, Center for Naval Analysis, and others—have identified problems with unclear guidance, lack of expert advice, lack of tools and adequate processes, and failure to capture lessons learned. To resolve those problems PM&AE will serve as lead agent responsible for identifying, developing, and deploying standardized program management practices—such as source selection training, risk management, integrated baseline development, and schedule development and analysis—across the acquisition enterprise. They will also work to ensure all acquisition guidance is clear, concise, and non-duplicative in nature prior to release by the service acquisition executives or other functional directors. PM&AE provides program managers a single source for expert advice on implementing all acquisition guidance (law, regulation, policy, directives, and mandates) and ensures feedback and recommendations from program managers for revisions and improvements to acquisition guidance and best practices are communicated to the policy makers. This will promote improvements in the acquisition process, help employ lessons learned, reduce cycle time, and aid in crafting effective acquisition strategies.

The Defense Acquisition Performance Assessment Report and Congress in the fiscal year 2007 NDAA indicated the need for enhanced training for program managers and emphasized mentoring of program managers by experienced

senior executives and former program managers. With this goal in mind, PM&AE has also established a working group to develop an approach to train and facilitate program management teams by providing senior advisors who offer hands-on, dedicated subject matter expertise.

PM&AE will continue its job as the secretariat for acquisition strategy panels, Air Force review boards, and configuration steering boards. It will also continue to advise the Air Force SAEs for space and non-space acquisition programs and the acquisition community. In keeping with the department's Acquisition Improvement Program to strengthen acquisition, PM&AE—at the headquarters and at field levels—will continue to leverage their collective talent to provide support to the PEOs, designated acquisition officials, and program managers and their teams.

Q *Are there any other issues you would like to discuss with our readers?*

Thompson

First, we have an emphasis on people. People are our greatest asset. We have designed our acquisition education and training efforts to ensure our people are the best of the best. Our Section 852 programs were designed with emphasis on the recruitment, retention, and recognition of our workforce. A key ASA(ALT) strategic objective is to shape a high-performing acquisition workforce. We do that, as I have discussed previously, through our Acquisition Education, Training and Experience Program opportunities and with the functional training offered by the DAU. The Army, other military services, and DoD agencies support DAU in the development of course curricula and explore and develop training on topics that ensure our acquisition workforce has the best information and tools available. DAU also offers several hundred online continuous learning modules that provide the Army acquisition professional with ready and accurate training on topics that have an immediate impact upon their daily operations. Additionally, DAU's rapid-deployment training initiative quickly pushes important acquisition information and related policy changes out to the workforce. This information is immediately accessible to Army acquisition workforce members located worldwide so that informed business and program decisions can be made around the clock.

The Army acquisition executive strongly encourages recognition of acquisition excellence throughout the community. Each year, we personally recognize Army acquisition workforce individuals and teams whose performance and contributions set them apart from their peers. The awards conveyed each year directly reflect the workforce member's outstanding achievements in support of the soldier and the Army's business transformation efforts. Award categories include the Secretary of the Army Project and Product Manager and Acquisition Director of the Year Awards, the

ASA(ALT) Contracting Noncommissioned Officer Award for Contracting Excellence, the Army Life Cycle Logistician of the Year Award, and the Secretary of the Army Excellence in Contracting Awards. The Army also supports DoD's David Packard Excellence in Acquisition Award, which recognizes groups and teams who have made significant contributions or demonstrated exemplary innovations and best practices in the defense acquisition process.

Regarding acquisition reform and insourcing of the acquisition workforce, the secretary of defense in his Defense Budget Recommendation Statement of April 6, 2009, stated that providing realistic estimates of program costs, providing budget stability for the programs, adequately staffing the government acquisition team, and providing disciplined and constant oversight are critical elements of acquisition reform. His statement also indicated that growth of the workforce would occur through insourcing acquisition services and hiring more government acquisition professionals. The intent is to significantly improve the capability and capacity of the defense acquisition workforce. Bottom line: We need to be smart buyers for the government.

The Army has a plan to grow our workforce, and currently, the exact growth details per acquisition career field are being finalized within our acquisition functional communities.

Lastly, I want to mention that the U.S. Army is considered a great place to work in the federal government in the Best Places to Work in the Federal Government report, a survey document published biennially by the Partnership for Public Service. Specifically, the U.S. Army Acquisition Support Center, where our PEOs as well as the ASA(ALT) headquarters reside, ranked number 32 out of 216 organizations surveyed. Designed to help a broad audience of job seekers, researchers, federal employees, and government leaders, the Partnership for Public Service and the American University's Institute for the Study of Public Policy Implementation obtained responses from more than 212,000 civil servants to produce detailed rankings of employee satisfaction and commitment across 279 federal agencies and subcomponents. They used data from OPM's federal human capital survey to rank agencies and subcomponents. Agencies and subcomponents are ranked on a best-places-to-work index score that measures overall employee satisfaction, an important part of employee engagement. The score is calculated both for the organization as a whole and also for specific demographic groups. The Army is proud to be noted in this publication and, within the Army Acquisition Corps, we strive for success of our programs and processes to ensure we continue to provide a great place to work.

Thomsen

The things I've talked about and other related initiatives have profound implications for the naval services and beyond. The initiatives will improve the naval acquisition workforce's business practices and technical oversight of acquisition.

Moreover, this improved oversight will better ensure that our sailors and Marines on the pointy end get the systems they need and they work when called upon.

But it means more for sailors, Marines, and even their families. Acquisition is about 40 percent of an exceedingly tight Department of the Navy budget. When acquisition programs deliver on time and on budget, that means that we don't have to pull money out of some other already tight account to pay for cost overruns. Thus, funds intended for military facilities, military housing, or health care, for example, are available for just that.

These initiatives are also important to industry. Companies have repeatedly said they want a government acquisition workforce that possesses the business and technical knowledge to help them work through the issues that arise daily. Without that government peer, industry is left to address the tough problems unilaterally. Moreover, companies want to come in on time and on budget. They want to succeed just like we all do. It's good for business.

But above all these initiatives is our responsibility to the American taxpayers. They want us to be good stewards of their tax dollars, especially in these times—and that makes improving our acquisition workforce the right thing to do.

Shackelford

Air Force leadership is constantly looking for ways to alleviate burdens facing our acquisition program offices. Two initiatives to reduce the burden are the Integrated Life Cycle Management Policy effort and the Joint Independent Program Review and Assessment process. The first effort has already collapsed 35 different Air Force policies and guides into three policy documents. The creation of these enterprise policy documents allows understanding of early decisions across the systems life cycle and also has the added benefit of making it faster and easier for program personnel to find the guidance they need by reducing unnecessary, redundant, potentially conflicting information.

The Joint Independent Program Review and Assessment effort works to alleviate burdens associated with the sheer number of program reviews and assessments. Working closely with the Office of the Secretary of Defense, the effort synchronizes parallel review activities under a single framework. It also includes identification of risks, particularly in areas related to the integration of new technologies. The current Joint Independent Program Review and Assessment effort focuses on technical planning, but future initiatives will incorporate cost and schedule activities leading towards a fully integrated program assessment.

Q

Thank you all very much for your time.