

JULY–AUGUST 2001

ARMY A&T



Acquisition Career Management

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- Update on Personnel Demos
- Competitive Development Program
- Army Lessons Learned Center
- Training & Education Facilities

MANAGING YOUR ACQUISITION CAREER

The Army Acquisition Corps' vision, "A Corps of Leaders Willing to Serve Where Needed and Committed to Providing Soldiers the Systems Critical to Decisive Victory Now and in the Future through Development, Integration, Acquisition, Fielding, and Sustainment," continues to be as relevant today as it was 15 years ago. It is a cost-benefit equation. A well-educated, well-trained Army Acquisition and Technology Workforce (A&TWF) is crucial to supporting the Army's current transformation, as well as to sustaining and recapitalizing current weapon systems critical to supporting "Soldiers on Point for the Nation...Persuasive in Peace, Invincible in War."

This is the third issue of *Army AL&T* magazine devoted to acquisition career management. The articles in the first issue (then *Army RD&A*, July-August 1996) focused on initial efforts to revitalize the civilian component of the Army Acquisition Corps and the acquisition workforce. Those early initiatives resulted in what are now well-established policies, programs, and opportunities. A regional support structure, comprising regional directors, acquisition career management advocates, and acquisition career managers, is now in place throughout the country and provides a vital communications network for the entire workforce. Several opportunities are available to ensure the A&TWF is ready for current challenges and poised for the future, including the Acquisition Tuition Assistance Program, Career Development Group Program, and advanced education and training programs. I encourage you to refer to this issue of *Army AL&T* magazine to learn more about managing your acquisition career.

You are the best manager and advocate for your career. Thus, it is important for you to devote the time and effort required to understand what needs to be done to meet your definition of success. Yes, I did say "your definition of success." Each of us has our own personal and professional goals. Your goals drive what we, the Acquisition Career Management Office (ACMO), need to accomplish in terms of providing the "what, where, when, and how" of professional development. Additionally, your supervisors and mentors are available to provide you advice and counseling along the way. In fact, they are the key to merging your career objectives with the mission needs of your organization and those of the Army.

The ACMO is here to help. Indeed, we have put tools in place to assist each of you in implementing, executing, and maintaining your own 5-year individual development plan (IDP). IDPs address a civilian workforce member's education, training, and experience goals while officer record briefs (ORBs) are used for this purpose by Army acquisition officers. The IDP is a critical planning document. It is also a means to track your career goals and objectives.



I also want to note that new minimum education requirements for personnel in the contracting career field were mandated when Section 808 of the *Floyd D. Spence National Defense Authorization Act for FY01* amended 10 U.S.C. §1724, *Contracting positions: qualification requirements*. Section 808 pertains to all new GS-1102 series civilian DOD employees and military personnel

in similar occupational specialties and requires that an individual have a baccalaureate degree. Each individual should strive to be competitive, strive to advance, and realize the importance of broadening their perspectives and the necessity of understanding each of the acquisition career fields.

It is also important to note that supervisors can foster an environment that encourages and accommodates career development and the ability, as the saying goes, "to think outside the box." Supervisors must recognize this and translate it into vigorous support of a versatile, lethal, and sustainable Army. Such support means training, and training may mean that supervisors have to do without employees for short periods. When faced with the decision to let someone train or not, supervisors should take the long view, understanding that a well-trained workforce will shine not only on itself, but on the organization as a whole. We are accustomed to seeing military officers in the acquisition workforce leave for classes while being assigned a 3-year tour. This is accepted practice in the military. It should also apply to civilians in the A&TWF. Again, what may be lost in temporary productivity will be gained in long-term efficiency. Supervisors also have the unique responsibility and privilege of growing successors, providing opportunities to their employees to demonstrate leadership potential, and building strong team players for the future.

I encourage you to strive to be competitive and to advance your own career through appropriate training and experiential opportunities. The Defense Acquisition Workforce Improvement Act (DAWIA) is in place to ensure the overall effectiveness and professionalism of military and civilian personnel in the A&TWF. With the implementation of DAWIA and the tightening of regulations and policies concerning training, it is even more critical to emphasize the importance of training the workforce. It is a cost-benefit equation that encompasses the merging of training and certification to achieve qualifications for critical jobs. A well-educated, well-trained Acquisition and Technology Workforce is crucial to ensure the success of the Army's transformation and its continued designation as the world's most dominant fighting force. Performance counts—yours and ours!

COL Frank C. Davis
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THE ARMY ACQUISITION CAREER MANAGEMENT OFFICE

Craig A. Spisak

Introduction

On April 1, 1996, Gilbert F. Decker, then Assistant Secretary of the Army for Research, Development and Acquisition, and Sara E. Lister, then Assistant Secretary of the Army for Manpower and Reserve Affairs, jointly signed a policy memorandum entitled *Career Development as a Mission*. This memorandum ultimately led to support for the Defense Acquisition Workforce Improvement Act (DAWIA) and the Army's continued recognition that education, training, and career development of the acquisition workforce members is paramount to effectively equipping the warfighter. Although Gilbert Decker and Sara Lister are no longer with HQDA, the goals they established for the Army Acquisition Corps (AAC) are still supported by the AAC leadership. The programs, processes, and policies established to support education, training, and career development have kept pace with the demands of the AAC and the Acquisition and Technology Workforce (A&TWF).

Mission

The Acquisition Career Management Office (ACMO) assists the Director, Acquisition Career Management (DACM) and the Deputy DACM (DDACM) by serving as the Army's single point of contact on all matters pertaining to the implementation of DAWIA. In this capacity, the ACMO has the primary mission of establishing Army policies and procedures

regarding all aspects of DAWIA and ensuring they are implemented throughout the A&TWF. This mission encompasses many responsibilities, one of which is a major effort to ensure that the Army's A&TWF has the proper education, training, and experience to provide soldiers the systems critical to decisive victory now and in the future through development, integration, acquisition, fielding, and sustainment.

As COL John A. Como, Chief of Staff to the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT), recently stated, "We are part of an Army that is strategically responsive and dominant at every point on the spectrum of operations. The Army's acquisition, logistics, and technology programs are critically connected to the Army Chief of Staff's vision to transform the Army in the 21st century."

The ACMO identifies and defines the acquisition education, training and experience (AETE) requirements for the A&TWF; develops high-quality education, training, and experience opportunities; and provides for the overall career development of military and civilian workforce members. The ACMO also develops and implements programs and processes directed by the DACM in support of the ASAALT and the Army Acquisition Executive. The ACMO is also responsible for overseeing AAC membership, workforce certification, and continuous learning; representing the Army on cog-

nizant functional integrated product teams, rapid improvement teams, and workgroups; and identifying and defending funding requirements to support the overall AAC/ACMO mission and AETE programs.

In the past, the composition and size of DOD's acquisition workforce was controversial. Consequently, various definitions were used to identify the workforce, but there was no real consensus by the individual Services or the Office of the Secretary of Defense on what actually constituted the acquisition workforce.

In response to congressional concerns of a lack of uniformity, and in an effort to resolve this issue, the Office of the Under Secretary of Defense for Acquisition and Technology contracted Jefferson Solutions in May 1997 to develop a methodology for defining the various elements of the workforce. Subsequently, a recommendation was made to identify the workforce using an updated and modified version of an approach developed by the 1986 President's Blue Ribbon Commission on Defense Management (the Packard Commission). The methodology builds on the Packard Commission model that uses occupational and organizational data. From December 1997 through March 1998, numerous modifications were made to the model. Any functions that could potentially impact the acquisition life-cycle process were examined to identify which occupational areas and organizations to include in calculating the size of

the workforce. An initial and secondary sizing calculation provided the working group an opportunity to refine both the occupational and organizational lists used in the workforce identification model. The refined algorithms count only key military and civilian A&TWF members, not clerical or support personnel.

On May 13, 1999, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) approved the refined Packard definition as the official identification method for the A&TWF. Using USD(AT&L) guidance provided on April 6, 2001, the Army is now in the process of assimilating the newly identified personnel into the workforce.

Policy

The ACMO is responsible for developing and implementing all policy and procedures affecting the A&TWF. As such, the ACMO issued Department of the Army policies for acquisition career field (ACF) certification (for individuals seeking Army certification in an ACF), Corps Eligible membership, continuous learning, AETE, and the Acquisition Tuition Assistance Program.

The AAC is a group of specially trained military and civilian acquisition professionals within the A&TWF. To become an AAC member, military and civilian personnel at all levels must meet requirements established by DAWIA, DOD, and the Army. Information regarding AAC membership and requirements and other important policies and procedures are located on the AAC home page at <http://dacm.rdaisa.army.mil>.

Processes

The DACM manages and documents all acquisition positions and has established an acquisition position list process to enable acquisition organizations to identify civilian and military position requirements including Active, Reserve, National

Guard, and Army Medical Department components.

An effort has been initiated to identify acquisition branch qualification (ABQ) positions so that Army acquisition professionals can acquire the cross-functional skills needed for critical acquisition positions (CAPs). The ABQ concept enables A&TWF professionals to identify those positions that provide the experience necessary to allow them to become more competitive for assignment to CAPs. For military personnel, these positions are considered equivalent to that of battalion executive officer/S3, and successful performance in a branch-qualified position enhances an applicant's file for selection boards. For civilians, ABQ positions illustrate their functional competencies and performance in key leadership roles. The ABQ process supports the Acquisition Career Development Plan (ACDP) and should be documented in the individual development plan (IDP).

The ACDP was developed in the fall of 1999 to help create a career progression map that guides A&TWF members from a functional expertise level to the competency level required for key leadership positions. The ACDP provides workforce members with the tools necessary to achieve success at all levels. The plan consists of four processes that present a framework for individuals to identify and define their career goals and successfully implement a plan to achieve them. Army workforce members benefit from the ACDP by having a framework to develop a viable career path.

An established DACM policy requires all acquisition personnel to develop and maintain an IDP. The IDP is a planning tool used to outline an individual's specific goals and achievements for the next 1 to 5 years. It is also used as a tracking mechanism for continuous learning activities and earned points. A Web-based IDP was created in September 1998 to aid formal career development of acquisition professionals.

Regional Support

The ACMO is responsible for the oversight and management of those customer support offices (CSOs) throughout the United States that have a high concentration of A&TWF members. Five years ago, the regional support structure was in its infancy—today, CSOs are a reality. They are integral to a successful regional strategy to provide A&TWF members with career development tools, individual assistance, and timely information needed to successfully manage their careers. Each CSO has a regional director who is responsible for overseeing the career development of the region's A&TWF education and training; assisting in the development of policy, procedures, and programs for the management of the A&TWF; and ensuring regional acquisition management requirements are identified and addressed. (Refer to the article titled *Regional Customer Support Offices* on Page 11, which highlights each regional office.)

Ongoing Initiatives

The customer support strategy outlined by the DDACM in 1996 established customer field support elements at selected sites throughout the country. This field support allows the AAC and A&TWF to implement the AAC vision to develop "A Corps of Leaders Willing to Serve Where Needed and Committed to Providing Soldiers the Systems Critical to Decisive Victory Now and in the Future through Development, Integration, Acquisition, Fielding, and Sustainment." Since 1996, the ACMO's focus has evolved from initial revitalization efforts to well-established programs and new initiatives.

The Competitive Development Group (CDG) Program graduated its first class in August 2000. Now in its fourth year, the CDG Program is jointly supported by the ACMO and the U.S. Total Army Personnel Command's (PERSCOM's) Acquisition Management Branch (AMB). This exceptional program provides enhanced education, training, and

Just as the Army is transforming itself into a more responsive, agile, and versatile force to meet future mission needs, so too must the A&TWF broaden itself to meet a rapidly changing acquisition environment.

experiential opportunities. (To learn more about the CDG Program, see the article on Page 29.)

The Acquisition Career Experience (ACE) Program is another new initiative that supports the ACMO's mission and cultivates the next generation of acquisition professionals. The ACE Program recruits college students in their sophomore or junior year to work during the summer in A&TWF positions. "It's a win-win situation for everyone," says Kelly L. Terry, Northeast Regional Director for Acquisition Career Management. "The students gain real work experience while getting paid, and the Army gets superior candidates for the acquisition intern program and potential future top managers." This program has been very popular since its inception in 1998 and is expanding to more colleges and universities.

Because of the influx of new people into the A&TWF, the demand for training and education opportunities will continue to grow. This has necessitated that the ACMO develop unique programs and methods of instruction and delivery to support the workforce. The Naval Postgraduate School (NPS), in conjunction with the ACMO, has developed courses designed to accommodate the needs of acquisition professionals. In 1999, a Master of Science in Program Management (MSPM 836) graduate degree program was piloted through the NPS Distance Learning Program. The advantages of this program are

that students are not required to leave their duty stations, and courses may be completed during both duty and nonduty hours. MSPM 836 and other programs such as the recently added Master of Science in Contract Management (MSCM 835) Program will continue to accommodate today's workforce requirements.

In 1999, 15 Army commands, program executive offices, and various agencies implemented the DOD Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo). The ACMO is responsible for AcqDemo implementation for Army activities and, initially, served as the lead organization. These 15 AcqDemo activities join the 4 Army Science and Technology Laboratory Personnel Demonstration Projects in experiencing new and different personnel management concepts. The lessons learned from these experiences will determine whether changes in personnel policy or procedures would result in improved federal personnel management. All of these projects involve broadbanding, simplified job classification, streamlined hiring processes, a performance or contribution-based compensation and appraisal system, expanded training opportunities, sabbaticals, a voluntary emeritus program, and revised reduction-in-force procedures.

Currently, more than 7,800 employees participate in these personnel demonstration projects. The

goal of these projects is to enhance the quality, professionalism, and management of the acquisition workforce through improvements in the human resources management system.

Conclusion

The ACMO, together with its partners at the Army Acquisition Executive Support Agency; PERSCOM's AMB; and the Army Research, Development and Acquisition Information Systems Activity (RDAISA); strives to support the career management process of the AAC and the A&TWF. As such, the ACMO is committed to ensuring that the A&TWF is offered opportunities that promote the achievement and maintenance of a technical competence and leadership capability that is second to none.

Just as the Army is transforming itself into a more responsive, agile, and versatile force to meet future mission needs, so too must the A&TWF broaden itself to meet a rapidly changing acquisition environment. Ultimately, the ACMO's goal is to continue to provide the best education and career development opportunities available to its acquisition professionals so the soldier in the field is successfully equipped for decisive victory.

CRAIG A. SPISAK is the ACMO Deputy Director. He has a B.S. in mechanical engineering from The George Washington University in Washington, DC, and an M.S. degree in information science and systems management from the University of Southern California. He is a member of the AAC and is Level III certified in both program management and systems planning, research, development, and engineering. In addition, he is Level II certified in test and evaluation.

THE ROLES AND MISSION OF PERSCOM'S ACQUISITION MANAGEMENT BRANCH

MAJ L. Neil Thurgood, MAJ Jeff Gabbert, and Chandra Evans-Mitchell

Introduction

The U.S. Total Army Personnel Command's (PERSCOM's) Acquisition Management Branch (AMB) supports the Army Acquisition Corps (AAC) and Acquisition and Technology Workforce (A&TWF) members, and is one organization that is key to the success of your career.

AMB is responsible for developing and sustaining qualified personnel to execute acquisition programs at tactical, operational, and strategic levels, consistent with Army requirements. AMB achieves this through career management of Army acquisition officers and civilian AAC members.

Development Model

AMB supports both the military and civilian workforce via the Acquisition Career Development Plan (ACDP) Development Model. The ACDP Development Model (Figure 1) has three progressive levels that form the basic career path that acquisition workforce members follow in developing functional and leadership competencies. The first level, Functional Expertise, allows an individual to gain expertise in a single acquisition career field (ACF) and to begin to meet AAC membership requirements. The second level, Broadening Experience, allows an individual to build cross-functional and leadership competencies through education, training, and experience. The third level, Strategic Leadership, is typically considered the critical acquisition position (CAP) level and allows an individual to apply acquired leadership and functional competencies in key leadership positions.

Civilian Career Development

The ACDP was developed to help A&TWF members focus on the skills, knowledge, and competencies needed to be competitive. The plan is composed of four processes: Structure/

Position Management, the Development Model, the Career Management Model, and the Competency Model. Civilians are responsible for understanding the requirements for becoming and staying competitive at all levels to achieve success. It is imperative that civilians contact their acquisition career managers (ACMs) to assist with their career development.

Centralized Management

AMB has two groups of career managers that perform the personnel management responsibilities of the branch. Military assignment officers provide centralized management for officers, including career counseling, selection board preparation assistance (military schools and promotions), and slating for command and service school selections (Figure 2). Military assignment officers are organized by grade and career development needs to support the ACDP Development Model (see the *Army Acquisition Career Management Handbook 2001*).

Civilian ACMs located in AMB are responsible for civilian AAC (GS-14 or equivalent personnel demonstration broadband level) members and members of the Competitive Development Group (CDG). In addition, the ACMs provide centralized management for the civilian workforce, including career counseling, selection board preparation assistance, and slating for command and school selections. ACMs also help place AAC members following key developmental and program manager (PM) assignments. ACMs are assigned duties by region: Northeast region, Central region, Southern region, Western region, and the National Capital Region (which includes areas outside CONUS).

Key Relationships

AMB representatives work with the Acquisition Career Management Office (ACMO) and the Army Acquisition Executive Support Agency (AAESA) (Figure 3) on various acquisition career management projects, including the annual Acquisition

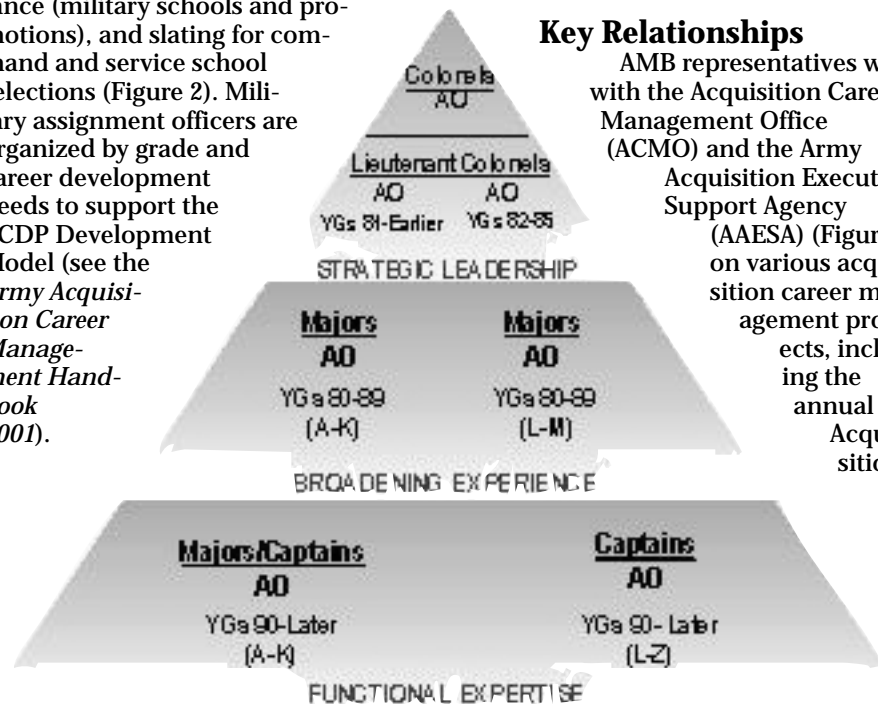


Figure 1.

AMB organization in support of the Acquisition Career Development Plan Development Model

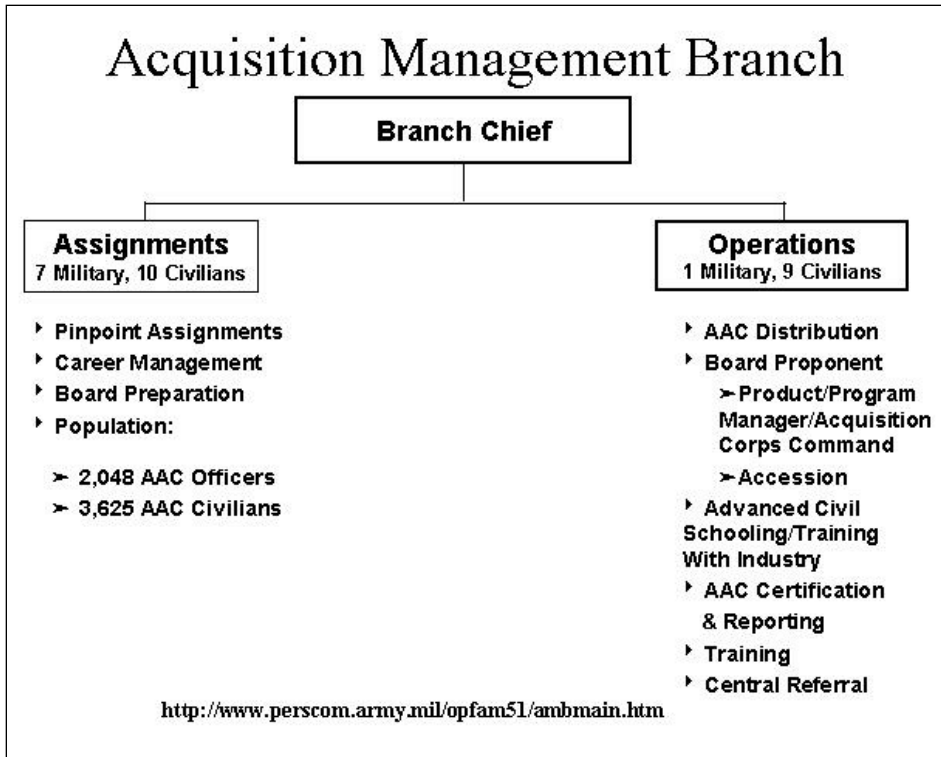


Figure 2.

Career Management Workshop, the CDG Program, and the Acquisition Education, Training and Experience Board. As part of the execution arm of the AAC, AMB balances the various programs established by AAESA and the ACMO to meet current and future Army requirements.

Officer Assignments

Assignments are based on the needs of the Army and an officer's professional development and personal preferences. When planning a move, contact your assignment officer 6-8 months prior to your scheduled rotation date for tentative assignments and options. Then, contact the assignment officer again at 5 months for assignment lock-in.

Generally, captain positions are considered developmental. Captains and recently promoted majors new to the AAC will first serve in a developmental position. After completing a developmental assignment, they will complete the Military Education Level 4 (MEL 4) requirement (Command and General Staff College). When MEL 4 is achieved, the officers will be assigned to positions that normally require Level II certification, such as assistant PM or program integrator. These assignments are typically followed by a Department of the Army (DA) staff position, an

entry-level position in another career field, or another developmental job in an officer's primary career field. Remember, because of the short timeline and variety of experience an acquisition officer must have to be competitive for selection by the PM/Acquisition Command Board, the average time on station for AAC captains and majors is 25 months. However, the average time on station for lieutenant colonels is 34 months because they serve in CAPs that are mandated by law at 36 months (unless a waiver is obtained).

All GS-14 or equivalent personnel demonstration broadband level and lieutenant colonel and above positions are CAPs and require AAC membership.

Civilian AAC Membership

There are four ways to become a member of the AAC:

- Meet all the qualifications for AAC membership and be selected for a CAP (GS-14 or equivalent personnel demonstration broadband level).
- Complete the CDG Program. (CDGs do not have to be selected to a CAP to be accessed into the AAC.)
- Be certified through another process such as the U.S. Army Reserve; i.e., military certifications transfer when seeking civilian positions.

- Transfer certification to the Army from another DOD component.

Staying Competitive

Because most captains in the zone of consideration for major are still in their first acquisition assignment, they are promoted to major based on what they have accomplished in their basic branch rather than what they have done in the AAC. Therefore, what gets a captain promoted in the AAC is no different from the rest of the Army: a strong file with successful company command. Under the Officer Personnel Management System for the 21st Century (OPMS XXI), beginning at the grade of lieutenant colonel, all year groups (YGs) will compete for promotion and schooling within their career field. All AAC officers are operational support career field upon accession into the AAC.

Experience has demonstrated that officers who are most competitive for PM or acquisition command have served in a variety of positions as a major. For example, AAC officers with a primary area of concentration (AOC) of 51A should serve in a PM office. However, to broaden their experience base, they should also serve in combat development positions at the Army Training and Doctrine Command or testing positions at the Army Test and Evaluation Command. Similar broad-based experience is necessary for officers assigned in AOC 51R or AOC 51C. DA Pamphlet 600-3, Chapter 47 states: "During the developmental years, officers should work toward Corps certification and level qualification in at least two AOCs."

IDPs

The individual development plan (IDP) is a 5-year plan that is critical for identifying and tracking an acquisition professional's career objectives in the areas of experience, education, and training. All military and civilian members of the A&TWF are required to complete an IDP regardless of grade, broadband equivalent, or military rank. The IDP must be updated annually during performance evaluation reviews.

Certification

Certification is important to both military and civilian members of the A&TWF because the Defense Acquisition Workforce Improvement Act requires that standards be associated

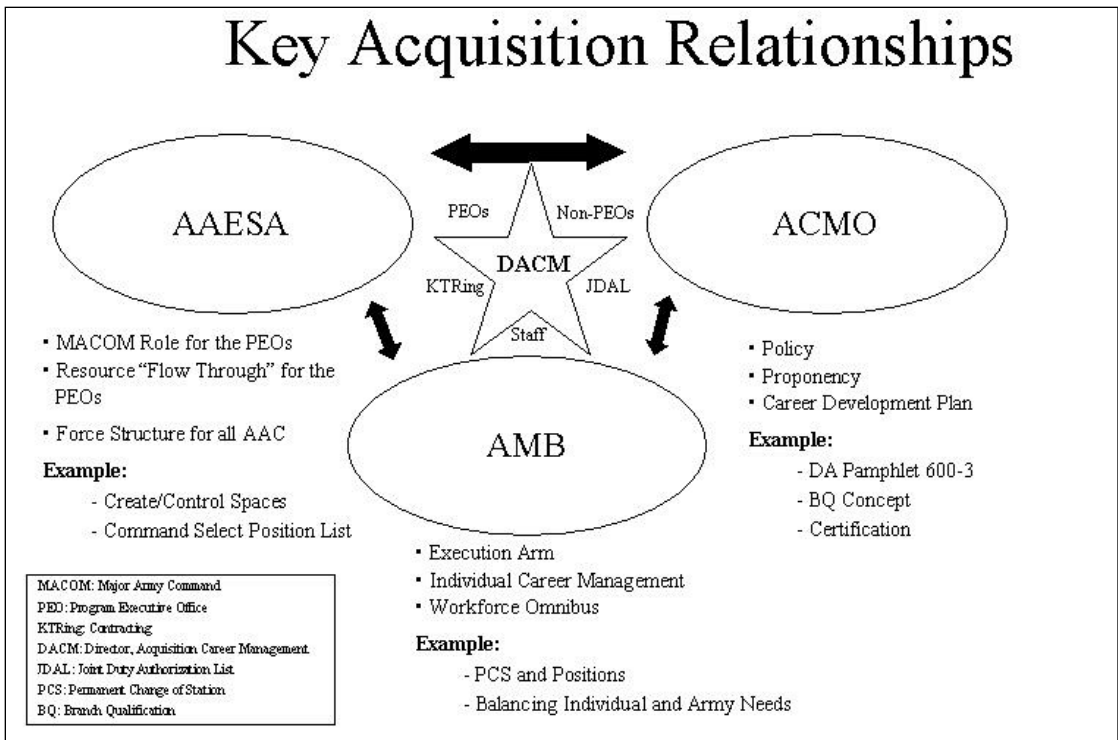


Figure 3.

with all acquisition positions. Generally, each career field requires 12 months for Level I, 24 months for Level II, and 48 months for Level III certification. Requirements and procedures for certification are located online at <http://www.dacm.rdaisa.army.mil> (Click on **Policy/Procedures, Certification**, then **Certification Procedures**.)

Additional Information

Your Official Military Personnel File, which includes officer evaluation reports, school transcripts, and commendatory and disciplinary data, is maintained by AMB, not your basic branch. Bear in mind though, that AAC officers should continue to wear their basic branch insignia on all military uniforms. This is especially important when having your photo taken, which should be done every 3 years. Also, list your basic branch, not AAC, in the administrative data on your photo.

Keep your fiche, officer record brief (ORB), acquisition career record brief, and personnel file current. If you receive an award and the award certificate is not on your fiche, send AMB the certificate and inform us which number award it is. This will ensure a match with your ORB (the award recommendation, DA Form 638-1, is not required). In addition, ensure that the orders number is printed on the left-

hand corner of your certificate. Verify your fiche to ensure that it reflects what is on your ORB.

Keep your career manager or assignment officer informed of your current home address, e-mail address, and work and home phone numbers. Occasionally, they are unable to contact individuals when the need arises. If a great opportunity becomes available and we are unable to reach you, we must go to the next individual on our list. The bottom line: we need current contact information! This is especially important when you PCS to a new assignment or location.

Finally, please don't hesitate to visit AMB. However, we do suggest that you call ahead to schedule an appointment with your career manager or assignment officer. Directions to AMB are on the PERSCOM Web site at <http://www.perscom.army.mil>. We are located in Room 7S33 in Hoffman Building II.

Conclusion

PERSCOM's AMB stands ready to support AAC and A&TWF members as the execution arm of Acquisition Corps directives and policies. Many programs are available to assist you in planning your career, to include position assignments and education. We encourage you to contact your appropriate career manager so that we may work together

for suitable solutions to your career expectations.

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AAESA'S ROLE IN ACQUISITION CAREER MANAGEMENT

Wanda Meisner

Background

In response to the June 1986 Packard Commission Report, the president of the United States, through National Security Decision Directive Number 219, directed the Secretary of Defense and the military secretaries to establish a program executive office (PEO) structure. The Defense Management Review (DMR) outlined how funding and personnel management for PEOs and their assigned project/product managers (PMs) would be managed separately from Service commands. To comply with the DMR, the Army Acquisition Executive Support Agency (AAESA) was established in May 1990 to provide the customer service necessary for total manpower, personnel, and force structure support.

Program executive officers are chartered with the Army's acquisition mission to ensure world-class equipment is provided for the Army's transformation to the objective force—a force that will embody the decisive warfighting capabilities of today's mechanized forces and the strategic responsiveness of today's light forces. Throughout the years, the PEO structure has been streamlined from 22 PEOs in 1987 to the current 7 PEOs.

Introduction

As the Army Acquisition Executive's (AAE's) agent, AAESA is re-

sponsible for achieving military supremacy through acquisition life-cycle management of major and significant nonmajor weapons and information systems and implementation of the Defense Acquisition Workforce Improvement Act (DAWIA). The AAESA Director is the co-chair of the Total Army Analysis (TAA) Acquire, Maintain, and Sustain Equipment Panel. In that capacity, the director captures the total requirements by military, civilian, and contractor categories for the acquisition community. The objectives are to develop allocation rules, standardize unit designs, and achieve horizontal integration. The Personnel Management (PE) and Resource Management (RM) Divisions serve as the major command (MACOM) and acquisition community focal point for all TAA issues related to analysis, input, and rebuttal for potentially adverse decisions during the TAA process.

AAESA provides organizational support to the Acquisition Career Management Office (ACMO); U.S. Total Army Personnel Command's (PERSCOM's) Acquisition Management Branch (AMB); Combined Arms Support Command; Center for Army Lessons Learned; Command and General Staff College; Contract Support Agency; Defense Advanced Research Projects Agency; Defense Systems Management College Army

Chair; Future Combat Systems Task Force; Research, Development and Acquisition Information Systems Activity (RDAISA); Office of the Secretary of Defense (OSD); Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT); Director of Information Systems for Command, Control, Communications, and Computers; Special Operations Command; and Total Ownership Cost Reduction.

Force Structures (FS) Division

The FS Division has overall management responsibility for the General Officer Steering Committee (GOSC), which enables the Army to continuously review programs in the PEO structure and all other PM and acquisition command positions. The GOSC makes recommendations to the AAE on revalidating, establishing, disestablishing, merging, downgrading, and upgrading acquisition programs and commands. The end product is the Command Selection List (CSL), which identifies positions in the category of "best qualified" or "military only" for fill by HQDA Centralized PM and Acquisition Command Selection Boards. An integrated process team—consisting of members from the ACMO, AMB, and AAESA's PE and RM Divisions—reviews, validates, and develops positions for review by the Director, Acquisition Career Management

(DACM). Once approved by the DACM, the recommended positions are forwarded to the GOSC.

The FS Division is also responsible for the following:

- Planning the annual Army Acquisition Workshop and Executive Sessions and Program Executive Officer/Deputy for Systems Acquisition (DSA) Day, which are forums that allow open discussions and interactions between PMs, Army acquisition commanders, and senior Army leadership.

- Leading the research, analysis, and coordination of all Senior Executive Service (SES) actions under the purview of the ASAALT. The PE Division supports the SES evaluation program, and the FS Division serves as the lead in responding to congressional inquiries relating to organizational structure changes.

- Maintaining the accuracy of the Acquisition Commanders and Senior Managers Directory, which is available online at <http://aaesa.rdaisa.army.mil>. This directory provides contact information for key personnel throughout the acquisition commands. The FS Division also maintains a similar, yet unique, acquisition database to that of AMB. These databases track the status of PMs and CSL positions with data pertinent to each organization's mission. Both organizations share data that impact PM assignments, rotation dates, and force structure issues.

- Preparing charters for program executive officers, DSAs, and board-select PMs that reflect the duties and responsibilities assigned to them by the AAE. Additionally, the FS Division assists in processing and coordinating critical acquisition position tenure waivers submitted to the Military Deputy (MILDEP) to the AAE for approval.

PE Division

The PE Division is responsible for overseeing agency civilian and military personnel management and

supporting the ACMO, AMB, and the FS Division in military and civilian acquisition career management, acquisition organization structure, and DAWIA implementation. The PE Division designs and executes all AAESA personnel management programs and provides staff-level personnel policy advice and guidance to the AAE, HQDA, PEOs, and other senior leaders. The division serves as the OSD and HQDA point of contact (POC) for military and civilian personnel reporting requirements. The division also implements AAE personnel management policies and decisions to maximize the effectiveness of AAESA civilian and military personnel.

The PE Division's military personnel management functions include:

- Provide staff-level advice and guidance to all AAESA elements;
- Formulate, execute, and evaluate the AAESA Acquisition Position List (APL);
- Provide monthly military personnel database requisition information;
- Work with AMB to maintain AAESA's operating strength;
- Identify, defend, and coordinate AAESA's Officer Distribution Plan requirements;
- Ensure that HQDA Centralized Selection Board lists are distributed to program executive officers and PMs;
- Maintain Officer Evaluation Report System Management Plan data for the MILDEP; and
- Provide oversight for AAESA's personnel tempo implementation.

The PE Division's civilian personnel management functions include:

- Provide staff-level advice and guidance to all AAESA elements;
- Serve as lead for the annual AAESA Civilian Execution Plan identifying projected strength levels and potential reductions-in-force;

- Serve as command POC for the APL;

- Manage the AAE delegation of classification authority program;
- Maintain position requirement documents and position descriptions;
- Manage the Voluntary Early Retirement Authority and Voluntary Separation Incentive Pay Programs;
- Issue a quarterly civilian personnel database report; and
- Provide recruitment and placement, management-employee relations support, and position management support.

The PE Division assists the Competitive Development Group (CDG) Program by working with the ACMO, regional offices, and Civilian Personnel Advisory Centers (CPACs) throughout the country to ensure that every CDG participant is adequately supported.

The division also assists the Acquisition Education, Training and Experience (AETE) Program. When a rotating PM or another employee is selected for long-term training (LTT), the individual is placed on the AAESA Table of Distribution and Allowances (TDA). The employee remains on the AAESA TDA until the LTT has been successfully completed.

The PE Division works closely with AMB when the PM Board has selected a civilian and coordinates with AMB, the PEO or MACOM, and the servicing CPAC to establish the position as a civilian slot. Additional assistance is provided to the gaining organization in clearing the Priority Placement Program stopper list.

The PE Division currently serves as a civilian personnel consultant on matters concerning the Acquisition Workforce Demonstration Project for both the HQDA Acquisition Demonstration Project Office and the Deputy Director for Acquisition Career Management/AAESA pay pool. As such, division personnel provide expert guidance on

recruitment processes, classification issues, and Contribution-based Compensation and Appraisal System (CCAS) procedures and maintain the CCAS pay pool database.

RM Division

The RM Division is responsible for resourcing, financial management, and oversight of manpower for PEOs and PMs. HQDA approves one TDA for all AAESA elements, which allows AAESA leadership to effectively manage all programs. These include planning, programming, and defending the organization's manpower resources by carefully scrutinizing requirements and authorizations.

The RM Division acts as financial advisor, budget POC, banker, funds certifier, and accountant. It supports the ACMO by preparing permanent change of station orders, certifying training and travel requests for AETE (including the Army Tuition Assistance Program), and certifying funding requests for CDGs.

In addition to the above, the RM Division is responsible for:

- Planning and programming funds for AAESA and its customers, including the Acquisition Information Management Office, RDAISA, and ACMO; receiving and interpreting directives concerning preparation, planning, programming, formulation, justification, presentation, and execution of appropriated fund budgets; instructing customers on the preparation and submission of Program Objective Memorandums; and providing information for the budget estimate submission and president's budget.

- Executing and managing military-specific allotment, Joint Tactical Radio Systems, Future Combat Systems, and Civilian Acquisition Demonstration Project dollars; and assisting Office of the ASAALT personnel in processing financial documents relative to contractual services, travel, and training.

AAESA frequently interfaces with the acquisition community to identify future requirements, which ultimately impact the acquisition force structure.

- Managing and distributing operations and maintenance and other Army funds to PEOs and PMs and serving as PEO POCs for the Army's Joint Reconciliation Program (JRP). (JRP entails identifying the Army's dollar obligation and disbursement problems, which stem from erroneous posting of financial documents and cause backlogs of negative unliquidated obligations.) Additionally, AAESA interfaces with HQDA and the PEOs to ensure that PEOs are meeting Army goals.

The RM Division is responsible for the Army Materiel Systems Analysis Activity (AMSAA) manpower studies. The studies, using the Army's 12-step process, validated and documented AAESA's organizational requirements and tied workload to the "total" required staffing resources. Also, the AMSAA studies became and will continue to be a valuable tool during AAESA's annual TDA review. The AMSAA studies identified Army baseline manpower requirements for FY99 as the first phase in the study process. The next phase is the development of Predictive Staffing Models (PSMs) for all Army PMs. Labor consumption indicators and data will be collected from the PMs and used to develop PSMs. Once developed, the PSMs will help

justify future manpower requirements during the TAA process.

To accomplish AAESA's diversified mission, formal and informal communications are crucial. Each division keeps open lines of communication to the acquisition community. Annual staff assistance visits to PEOs are a prime example of open communications and are designed to learn how to best serve our customer—an excellent forum to exchange information. The monthly AAESA newsletter provides information on current and upcoming events within the acquisition community and may be viewed on the AAESA home page at <http://aaesa.rdaisa.army.mil>. (Click on News, then click on AAESA News.)

Conclusion

AAESA's primary mission is life-cycle management of Defense acquisition programs. These programs are a directed and funded effort that is designed to provide a new, improved, or continuing weapons system or automated information system capability in response to a validated operational need. AAESA frequently interfaces with the acquisition community to identify future requirements, which ultimately impact the acquisition force structure. AAESA is an integrated team focused on the Army's transformation goal—the objective force.

WANDA MEISNER is the Program Executive Officer/PM Support Manager at AAESA. She has a B.S. in business studies from the University of Maryland and is Level III certified in both program management and acquisition logistics.

Introduction

The Army's most important resource is its people. As such, the development of a competent Acquisition and Technology Workforce (A&TWF) is critical to the future Army. It is one of the top priorities of the Deputy Director for Acquisition Career Management (DDACM) and the Acquisition Career Management Office (ACMO), both of which report to the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology. The need for top-quality A&TWF members has become more important as the Army reshapes and streamlines its forces and becomes more technologically advanced and culturally diverse. To aid workforce members in maintaining continued professional competence, the ACMO continues to develop and execute career development programs and acquisition workforce policy.

In 1996, the ACMO established customer support offices (CSOs) at locations that had a large population of workforce members. At that time, the CSOs were staffed with acquisition workforce support specialists (AWSSs) (now known as acquisition career managers (ACMs)) to provide individual career management assistance. The DDACM expanded the CSOs to encompass five major regions across the United States: Northeast, Central, National Capital, Southern, and Western. Today, the CSOs are led by three regional directors (located in the Northeast, National Capital, and Southern regions) and are supported by a team of acquisition career management advocates (ACMAs), ACMs, and ACM assistants. The CSOs in these areas are a part of a successful regional strategy to meet the career development needs of the workforce.

Regional Team Players

Regional directors are senior-level acquisition civilians within designated areas who are responsible for assisting the DDACM and the ACMO in establishing and implementing acquisition policy in support of Army goals and objectives to help develop a highly qualified A&TWF. They sup-

REGIONAL CUSTOMER SUPPORT OFFICES

Kelly L. Terry, Maxine H. Maples,
and Sandra Long

port development, implementation, and execution of A&TWF policy and procedures. They also ensure that the workforce routinely receives consistent, timely information on acquisition programs, education, training, and competitive opportunities. In addition to being responsible for acquisition career development and career management issues in their region, they ensure that acquisition workforce members are trained in accordance with the Defense Acquisition Workforce Improvement Act (DAWIA), while maintaining consistency with Army objective policies and programs. Regional directors also serve as the main source of guidance for the regional A&TWF members and senior leadership on issues relevant to career development and management.

ACMAs are senior-level civilian acquisition leaders located in organizations having a high concentration of A&TWF members. ACMAs are recommended by an authorized individual at an acquisition organization and appointed by the DDACM. They are responsible for command-specific issues. ACMAs serve to enhance the communication of information routinely routed through functional and command channels and the ACMs; they are the conduits for the flow of information to and from their organization. As a link to the Director for Acquisition Career

Management (DACM) from the field, ACMAs offer commands an opportunity to express concerns and register issues. ACMAs have become one of the most valuable sources for information exchange and for the development and implementation of acquisition policy. They work closely with the regional ACMs and regional directors to ensure all members of their workforce have equal and timely access to opportunities and information on DDACM policies, programs, and initiatives.

ACMs are key components of the DDACM's customer support strategy. They are the first source of information in the career development and management process. ACMs use the Acquisition Career Development Plan and their knowledge of the Army's acquisition environment to assist workforce members in assessing the skills needed as well as the education experience, training, and competencies required for success. They provide timely and accurate information to their regional workforce on DDACM policies, programs, and initiatives; ensure compliance with acquisition education, training and experience (AETE) requirements for certification; and establish and maintain the Acquisition Career Record Brief (ACRB). It is also their responsibility to facilitate the career management process and serve as an objective source for assisting

workforce members. Each member of the A&TWF has an ACM, as outlined below:

- Competitive Development Group members and civilian members of the Army Acquisition Corps (AAC) are served by ACMs (formerly known as functional acquisition specialists) in the Acquisition Management Branch (AMB) at the U.S. Total Army Personnel Command (PERSCOM).

- Other civilian members of the A&TWF are served by regionally located ACMs (formerly AWSSs).

- Officers are served by an assignment officer in the AMB at PERSCOM.

- Army Reserve officers are served by an ACM at Army Reserve-PERSCOM, St. Louis, MO.

- Army National Guard officers are served by the Army National Guard Career Management Branch, Arlington, VA.

Upon assignment to an acquisition position, you should first contact your ACM. Your ACM will assist you with career development and help you understand and prepare the documents discussed in the *Army Acquisition Career Management Handbook 2001* and *AETE Catalog*. For a complete list of regional directors, ACMAs, ACMs, and ACM assistants, refer to the AAC home page at <http://dacm.rdaisa.army.mil> and click on **Your Acquisition Management Team**. You can also log on to the AMB home page at <http://www-perscom.army.mil> for PERSCOM contact information.

Regional Initiatives

The regional offices have been instrumental in providing several training and career development initiatives for the A&TWF. These initiatives include the Naval Postgraduate School (NPS) Distance Learning Master Programs in Program Management (MSPM 836) and Contract Management (MSCM 835); the Acquisition Career Experience (ACE)

Program, which recruits students from local universities for paid summer internships; and the Rotational Developmental Assignment Program (RDAP), which affords acquisition workforce members the opportunity to rotate through assignments in other directorates/commands and develop and enhance technical and leadership competencies. The support of supervisors and senior leaders throughout the regions has contributed to A&TWF members being able to benefit from these initiatives. The various programs typically are piloted in one region. Based on the success of the program, pilots are then expanded to other regions.

Distance Learning Programs

MSCM 835 and MSPM 836 are 27-month-long regional distance learning programs sponsored by the AAC and offered by NPS. The curriculum consists of 50 credit hours completed in 9 quarters through a predetermined series of courses. For the first eight quarters, classes are held onsite during duty and nonduty hours via a video teleconferencing link to an NPS classroom in Monterey, CA. The last quarter of the program is completed through an accelerated 8-week residence session at NPS.

Linda College, a current MSCM student from the U.S. Army Communications-Electronics Command (CECOM), Fort Monmouth, NJ, says, "NPS offers a wonderful opportunity to earn a master's degree designed for your specific career field. Distance learning allows you to juggle your career, education, and family."

MSCM 835 is currently being piloted at Fort Monmouth, NJ, with 10 students and at Huntsville, AL, with 5 students. The MSCM Program satisfies Defense Acquisition University (DAU) mandatory training requirements for Level III certification in contracting, meets the DAWIA requirement for 24 hours of business subjects, and fulfills 40 hours of continuous learning.

MSPM 836 is being piloted in Huntsville, AL, with 28 students and at Fort Monmouth, NJ, with 5 students. The MSPM Program degree provides equivalency for both the 14-week Defense Systems Management College Advanced Program Management Course (PMT-302) and the Software Acquisition Management Course. It also satisfies DAU mandatory Level III training requirements in both acquisition logistics and program management and Level II training in manufacturing, production and quality assurance (MP&QA); systems planning, research, development and engineering (SPRDE); and test and evaluation (T&E).

ACE Program

The ACE Program, sponsored by the ACMO, is a program for students in their sophomore and junior years of college. The ACE Program is a paid, 2-year academic/government joint collaboration where students from a multifunctional academic background learn the issues and challenges surrounding the development, procurement, and deployment of state-of-the-art equipment. Students team with an academic advisor from their university and an Army acquisition mentor to collaborate on challenging projects, oftentimes culminating in a senior thesis project. The program began last spring as a partnership among James Madison University in Harrisonburg, VA; the ACMO; Headquarters, Army Materiel Command; and the CECOM Acquisition Center.

The ACE Program had a very auspicious beginning, with students working in several organizations in the Washington, DC, area and at Fort Monmouth, NJ. Because of the successes of the small pilot group, the ACMO is expanding the program and partnering with many other schools across the five regions. ACE students applying for the next session will have the opportunity to work anywhere in CONUS.

Through the ACE Program, the ACMO offers students a tremendous

opportunity to work in a fast-paced, technological environment with career potential. For more information, including instructions for applying, please visit the ACE Web site at <http://dacm.sarda.army.mil/Acepage/index.htm> or contact the ACM in your region. In addition, refer to the ACE Program article on Page 44 of this issue.

RDAP

"The Rotational Development Assignment Program is a fantastic way to obtain the cross training the Army desires for its future leaders," says Kari A. Elliott, Program Executive Office for Air and Missile Defense (PEO, AMD), on an RDAP assignment in the Project Management Office, Lower Tier. "Because of the variety of work performed by Team Redstone, RDAP is able to offer numerous assignments in many functional areas; e.g., program management, testing, logistics, and contracts. I highly recommend the regional developmental program in the Redstone community because of the diverse opportunities it affords," concludes Elliott.

Regional Training

The AAC Regional Training Program is the result of the DDACM's desire to provide ACMAs the chance to offer onsite training and experience opportunities geared specifically to the needs of their region. The DDACM and ACMO continue to support education, training, and experience opportunities for the A&TWF as an essential part of career development. The A&TWF has responded favorably in the past to these AAC opportunities, and anticipates that interest in career-enhancing programs will increase. To that end, the CSOs are offering several leadership training courses in FY01, one of which is described below.

Leadership for Critical Times is one of the exciting new leadership training opportunities. It was initiated in the Southern Region and jointly developed in partnership with

the Office of Personnel Management and the U.S. Space and Rocket Center. This course promotes leadership and the importance of teamwork in a unique learning environment. It embraces seven of the AAC competencies that impact leadership: problem solving, decisiveness, accountability, interpersonal skills, oral communication, resilience, and human resource management.

The Leadership for Critical Times pilot course is a 2-day session with students from numerous Army organizations in the Huntsville/Redstone community. The first day covers didactics on the seven competencies and includes several physically interactive team-building exercises. The second day is a simulated shuttle mission launch with time-critical performance requirements. Following each exercise, students are required to evaluate themselves as well as their team on the characteristics of each of the seven competencies, assess their strengths and limitations, provide insights from the experience, and relate their experiences to their work environment.

Leadership for Critical Times is an excellent venue for addressing teamwork and conflict resolution for those organizations that recently merged or are facing mergers. Organizations interested in future offerings for this course should contact their ACMs.

Conclusion

Regional CSOs are in place to provide assistance to workforce members as they pursue career goals while working for the Department of the Army (DA), and to support the development of a competent A&TWF. Many excellent educational and experiential programs are available to the A&TWF. Any of the regional team members listed in the accompanying charts may be contacted regarding questions, concerns, ACMO products, policies, and career management services or ongoing initiatives. A list of contacts may be found on the AAC home page. Also

visit the regional Web sites at <http://www.monmouth.army.mil/cecom/ac/train/aac.html> and <http://SouthernRegion.redstone.army.mil/southernregion/> regarding the many outstanding ACMO programs available to workforce members. These Web sites also contain policy information, information unique to the region, and useful links to other Web sites of interest.

KELLY L. TERRY, a member of the AAC, is the Regional Director for the Northeast and Central regions. She holds a master's degree in business administration from Monmouth University. She is certified in contracting, program management, and logistics and is a recent graduate of the Personnel Management for Executives Course sponsored by the Army Management Staff College.

MAXINE H. MAPLES, a member of the AAC, is the Regional Director for the Southern and Western regions. She previously served as the Program Operations Director for PEO, AMD and is a recipient of the DA Exceptional Civilian Service Award. She has a B.S. degree in business administration from Athens State University. She is certified in program management and business, cost estimating, and financial management.

SANDRA LONG, a member of the AAC, is the Regional Director for the National Capital, Central, and OCONUS regions. She holds a master's degree in management information from the University of Maryland. She is certified in both information technology and program management.

Frequently Asked Questions (FAQs)

Q: How do I apply for Corps Eligible (CE) status?

A: Complete the application form; include transcripts, ACRB, and assignment history, and forward to the National Capital Region (NCR) Office for review. Find policy/procedures and application form on the AAC home page at <http://dacm.rdaisa.army.mil>.

Q: What is the Army Tuition Assistance Program (ATAP) and how do I apply?

A: ATAP is tuition assistance for civilian Acquisition and Technology Workforce members. Funds can be used by CE or AAC members for completion of business hours, bachelor's degrees, or master's degrees. Find the application and policy on the AAC home page at <http://dacm.rdaisa.army.mil>.

Q: When will the RDAP come to the NCR?

A: The NCR CSO is currently working to bring this opportunity to the NCR and anticipates having it in place by the end of 2001.

Q: Who should I call when I need an ACRB updated, have a question about my individual development plan (IDP), or want to obtain a certification?

A: Contact your ACM.

Northeast And Central Regions

Regional Director: *Kelly L. Terry*
 Phone: 732-532-1406
 e-mail: Kelly.Terry@mail1.monmouth.army.mil

Northeast

HQ Office and Customer Support Offices
 Acquisition Career Management Office-NE
 ATTN: SFAE-AC-CEC
 Bldg. 1208E, Room G-35, Rittko Avenue
 Fort Monmouth, NJ 07703-5008

ACMA

Edward G. Elgart 732-532-5601
Edward.Elgart@mail1.monmouth.army.mil

ACMs

Matthew Savare 732-532-3955
Matthew.Savare@mail1.monmouth.army.mil

James McCarthy 732-427-1695
James.McCarthy@mail1.monmouth.army.mil

ACM Asst.

Janice Kurry 732-427-1692
Janice.Kurry@mail1.monmouth.army.mil

Natick

Acquisition Career Management Office-NE
 USA Soldier and Biological Chemical Command
 ATTN: AMSSB-RTP-A (N)
 Building 3, Room R-141
 15 Kansas St.
 Natick, MA 01760-5000

ACMA

Philip Brandler 508-233-4700
Philip.Brandler@natick.army.mil

ACM

Mary Berg 508-233-4899
Mary.Berg@natick.army.mil

Picatinny

Acquisition Career Management Office-NE
 ATTN: SFAE-AC-PIC
 Bldg. 65, 4th Avenue
 Picatinny Arsenal, Dover, NJ 07806-5000

ACMA

Kevin Fahey 973-724-5349
kfahey@pica.army.mil

ACM

Celeste Goodhart 973-724-6202
goodhart@pica.army.mil

ACM Asst. TBD

Central

Customer Support Office
 Acquisition Career Management Office-CENTRAL
 ATTN: SFAE-AC-TAC
 Building 231, Room E180

TACOM

Warren, MI 48397-5000

ACMA

Arthur D. Siirila 810-574-7097
siirila@tacom.army.mil

ACM

Fred Andriaschko 810-574-5424
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ACM Asst.

Deborah Buysse 810-574-8042
buysse@tacom.army.mil

CALENDAR OF EVENTS

Acquisition Site Visits—2001

COE, NY	TBD
Tobyhanna Army Depot, PA	TBD
Benet WPN Lab, NY	TBD
Watervliet Arsenal, NY	TBD

Please contact any of the ACMs in the Northeast or Central regions if you are interested in participating in an acquisition site visit.

Regional Training Course Schedule

Please consult the AAC home page at <http://dacm.rdaisa.army.mil>. Click on **Northeast/Central Region**, then on **Training Opportunities**.

Frequently Asked Questions (FAQS)

Q: How do I apply for a DAU class?

A: Acquisition members submit applications by applying directly at <https://www.atrrs.army.mil/channels/aitas>. The desired class must be on their approved automated IDP before they apply.

Q: I have completed all of the training required for certification. What do I do next?

A: Annotate your education, training, and experience on your ACRB. Sign and have your supervisor initial next to your signature. Provide your signed ACRB along with a DA Form 2302 or résumé to your organizational point of contact, who will forward your package to the appropriate ACM.

Southern And Western Regions

Regional Director: *Maxine Maples*
Phone: 256-955-2764
e-mail: Maxine.Maples@md.redstone.army.mil

Southern

HQ Office and Customer Support Offices
Acquisition Career Management Office - S
ATTN: SFAE-AC-RED-S, Room 1E1200
SMDC Bldg., 106 Wynn Drive
Huntsville, AL 35806

ACMAs

Marlene Cruze 256-876-7161
Marlene.Cruze@redstone.army.mil

Glen Buttrey 256-313-4007

Buttreyg@peoavn.redstone.army.mil

Kay Ward 256-955-3069

Wardk@smdc.army.mil

Dr. Shelba Proffitt 256-313-3405

Shelba.Proffitt@md.redstone.army.mil

Toni Gaines 404-464-5530

Gainest@forscom.army.mil

James Skurka 407-384-3502

Skurkaj@stricom.army.mil

TBD

PEO, Tactical Missiles

ACM

Alexis Holden 256-955-2554

Alexis.Holden@md.redstone.army.mil

ACM Asst.

Jeanne Berry 256-955-2786

Jeanne.Berry@md.redstone.army.mil

Redstone

Acquisition Career Management Office - S
ATTN: SFAE-AC-RED-M
Building 5303, Room 3138
Redstone Arsenal, AL 35898

ACMs

Sharon Clodfelter 256-842-8677

Sharon.Clodfelter@redstone.army.mil

Bonnie Stewart 256-876-7305

Bonnie.Stewart@redstone.army.mil

Western

Customer Support Office
Acquisition Career Management Office - W
ATTN: SFAE-AC-WSMR
Building 1504, Room 208
White Sands Missile Range, NM 88002-5157

ACMA

John Jensen 505-678-1241

jensenj@wsmr.army.mil

ACMs

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porrasl@wsmr.army.mil

Edna Chavez 505-678-2041

chavezea@mt.wsmr.army.mil

ACM Asst.

Patricia Villalobos 505-678-1718

villalop@mt.wsmr.army.mil

CALENDAR OF EVENTS

(Subject to Change)

Check Web site for other locations and confirmed dates

Acquisition Site Visits—2001

Huntsville, AL	July (TBD)
Anniston, AL	September 18
Fort Rucker, AL	September 19
Tulsa, OK	November 5

Regional Training Schedule (Subject to Change)

<i>Movers & Shakespeare</i>	RSA	July 18
<i>Leadership Seminar</i>		
<i>Marketing Yourself</i>	RSA	September 4
<i>Sr Rater Potential Eval</i>	RSA	September 5
<i>Management</i>	WSMR	July 16 and August 13
<i>Team Building</i>	WSMR	July 18
	Fort Huachuca	August 21
<i>Learning Teams</i>	WSMR	July 19
	Fort Huachuca	August 22
<i>Leadership</i>	WSMR	July 17 and August 14

HELPFUL LINKS

New Location!
The ACRB and the IDP sites have merged and can now be found at <https://rda.rdaisa.army.mil/cappmis/>.

ATRRS Internet Training Application System (AITAS): <https://www.atrrs.army.mil/channels/aitas/>

DAU:
<http://www.dau.mil/>

AAC home page:
<http://dacm.rdaisa.army.mil> (includes information on policy, career development, ATAP, continuous learning points, and senior rater potential evaluations)

ACMO And The National Capital, Central, And OCONUS Regions

Regional Director: *Sandy Long*
Phone: 703-805-1094
e-mail: sandy.long@aaesa.belvoir.army.mil

National Capital

Acquisition Career Management Office–NCR
Customer Support Office
ATTN: SFAE-AC-NCR
9900 Belvoir Road
Fort Belvoir, VA 22060-5567

ACMAs

Robert Hardiman 703-428-2440
hardimanb@mtmc.army.mil

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CALENDAR OF EVENTS

Acquisition Site Visits—2001 (Dates Subject to Change)

Fort Leavenworth	TBD
Fort Bragg	TBD
Hawaii	TBD
Forts Monroe/Lee/Eustis	TBD
National Capital Region	September 2001

Regional Training Course Schedule

Consult the AAC home page for the most current course schedule.

An Update . . .

DOD CIVILIAN ACQUISITION WORKFORCE PERSONNEL DEMONSTRATION PROJECT

Jerry Lee

Introduction

On Feb. 10, 1999, the U.S. Army Contracting Command, Korea, became the first Army acquisition activity to implement the DOD Civilian Acquisition Workforce Personnel Demonstration (AcqDemo) Project. Another 14 activities executed their implementation plan on March 28, 1999, and converted their workforce to the AcqDemo Project. Now 2 years old, the AcqDemo Project has provided an opportunity to enhance the quality, professionalism, and management of the acquisition workforce through improvements in the human resources management system.

Where does the AcqDemo stand today? The short answer is that with only two data points (FYs 99 and 00), it is difficult to determine any reliable trends. This article, however, will compare the AcqDemo Project with other Army personnel demonstration projects, provide the results from the first two rating periods under the Contribution-based Compensation

and Appraisal System (CCAS), and provide the results of the recently completed attitude survey.

Background

In September 1996, the Secretary of Defense established a process action team (PAT) in response to Section 4308 of the *National Defense Authorization Act for FY96* (Public

Law 104-106; 10 U.S.C. §1701, Notes). This legislation provided the impetus for the PAT, via its charter, to resolve DOD acquisition workforce personnel issues. It is important to note that the AcqDemo Project is different from the demonstration project formed under Section 342 of the *National Defense Authorization Act for FY95* (Public Law 103-337). The

Now 2 years old, the AcqDemo Project has provided an opportunity to enhance the quality, professionalism, and management of the acquisition workforce through improvements in the human resources management system.

latter project, formally designated the Science and Technology (S&T) Reinvention Laboratory Demonstration Project, includes specific organizations. In contrast, the AcqDemo Project includes Army, Navy, Air Force, Marine Corps, and Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) activities at 64 locations. The 64 AcqDemo locations are dispersed throughout the United States and Korea. Further, as of Sept. 30, 2000, the AcqDemo was comprised of 5,083 employees (280 from the USD(AT&L), 1,069 from the Army, 593 from the Navy, 606 from the Marine Corps, and 1,995 from the Air Force).

The PAT included acquisition managers from each of the Services and DOD agencies as well as subject matter experts in the civilian personnel and manpower areas. The PAT developed 11 initiatives that collectively represent sweeping changes to the spectrum of human resource management for the DOD acquisition workforce. Several of these initiatives were designed to enable DOD acquisition activities to hire and place the best people to fulfill mission requirements. Other initiatives focus on developing, motivating, and equitably compensating employees based on their contribution to the

mission. Additional initiatives were developed to allow effective management of workforce realignment and maintenance of organizational excellence. These initiatives were endorsed and accepted by the acquisition leadership and are similar to the initiatives in the S&T laboratory personnel demonstration projects.

Implementation

Only one AcqDemo initiative has not been implemented. It is the one on the extended probationary period, and it has not been used primarily because there have been few new hires in the business management and technical management professional career path. Based on the 2001 attitude survey, the perceived effectiveness of these initiatives is 76 percent, and the perceived customer satisfaction is 70 percent.

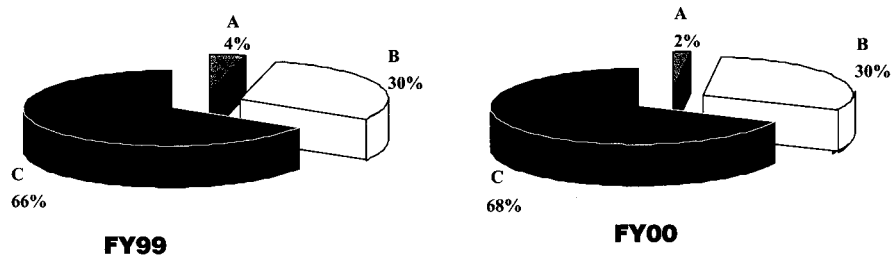
Particularly noteworthy was the use of the AcqDemo's Academic Degree and Certificate Training, Sabbatical, and Voluntary Emeritus Program initiatives. The Academic Degree and Certificate Training initiative facilitates employee training and development. Nineteen Defense Supply Service-Washington (DSS-W) employees in nonacquisition-coded positions attended degree training in 1999, and another 14 nonacquisition-coded demo employees completed a

semester of college-credit training. For the second year, this training was conducted onsite by instructors from Northern Virginia Community College. Tuition is funded by DSS-W. Sixteen DSS-W employees, some of whom are acquisition-coded, took two college-level courses. For some employees, the course(s) satisfied their 24-credit hour requirement in the business discipline. For others, the courses put them "two steps closer" to a baccalaureate degree.

Sabbaticals

This initiative enables employees to engage in study or work experience that contributes to the mission of their organization and the goals of the acquisition community. In 2000, the Program Executive Officer for Command, Control and Communications Systems (C3S) approved the first sabbatical under this acquisition demonstration project for Arthur Santo-Donato, Project Manager (PM) for Field Artillery Tactical Data Systems, so that he could attend the Naval Postgraduate School (NPS) in Monterey, CA. The objective of his sabbatical included developing curriculum for the first-ever doctorate-level degree program in systems acquisition, teaching graduate-level classes in systems management and systems acquisition, and instructing

CCAS Rating Cycle Comparisons



Fort Monmouth, NJ, personnel enrolled in the NPS distance learning program.

In 2001, the Program Executive Officer, C3S also approved a sabbatical for Wanda Wohlin, Chief of Human Resources. The objective of her sabbatical is to complete a degree in management science with a specialization in organizational theory. The acquisition community will be facing major changes in the next 5-10 years and will require greater management skills of individuals in leadership positions. As Manager of the Program Executive Office, C3S Human Resources Division, Wohlin will complete this degree program and be provided with valuable skills, knowledge, and abilities to contribute to the reshaping of the workforce. Wohlin also plans to write a thesis devoted to reshaping the workforce to effectively deal with problems caused by an aging workforce.

Voluntary Emeritus Program

This initiative provides a commander or director the means to temporarily retain the services of retired or separated individuals to work on a specific project, to provide on-the-job training, or to mentor less experienced employees. On May 8, 1999, the Program Executive Officer, Ground Combat Support Systems approved Dave Latson, former Deputy Project Manager (DPM), Abrams Tank Systems, for this program. Latson provides his expertise to current DPM John Neff on a weekly basis. In particular, Latson provided assistance with the new Abrams Crusader Common Engine Program. He helped determine what problems might occur in the input module of the current Abrams transmission when the new engine is integrated into the tank system.

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On Jan. 6, 2000, the Army Test and Evaluation Command approved Fred McCoy for a Voluntary Emeritus Program position to help complete the development and the initial instruction of the new Test and Evaluation Basic Course (TEBC). For many years, McCoy worked on all aspects of the Army training program for test and evaluation, especially the TEBC. At the time of his retirement, the new TEBC, which would have a computer-based training segment for new employees and a resident seminar for selected personnel, was near completion. Normally, McCoy volunteers his time 1 day a week, except when a 5-day seminar or 3- or 4-day Technical Review Committee meeting is in progress.

The continuing involvement by Latson and McCoy has definitely added value to their programs, and it has been a mutually beneficial arrangement for their commands.

CCAS

CCAS is the initiative used most often and provides an equitable and flexible method for appraising and compensating the acquisition workforce. Additionally, CCAS provides managers (at the lowest practical level) the authority, control, and flexibility needed to achieve quality acquisition processes and products while developing a highly competent, motivated, and productive workforce. CCAS also allows for more employee involvement in the contribution appraisal process, increases communication between supervisors and employees, promotes a clear accountability of each employee's contribution, facilitates employee pay progression tied to organizational contribution, and provides an understandable basis for salary changes.

However, CCAS is not a system that is easy to understand. In FY00, a major training effort was initiated to inform the workforce of the basic CCAS concept. The training module *An Introduction to CCAS* was sent to all participating Army activities and was posted to the Army AcqDemo Web page at <http://dacm.rdaisa.army.mil> (click on the **ACQ Demo Project** icon, then click on **CCAS**, and then click on **Introduction**). More training is forthcoming in 2001 based on the lessons learned from the FY00 CCAS rating cycle and from the attitude survey.

Two CCAS rating cycles have been completed (see figure on Page 18). In FY00, 2 percent of the CCAS-eligible employees (compared to 4 percent in FY99) were rated "Inappropriately Compensated" (A), faced the potential of not receiving the general pay increase (GPI), and were not eligible for a contribution rating increase (CRI) and contribution award (CA). Also in FY00, 68 percent of the employees were rated

Expansion of the AcqDemo Project is scheduled for FY02 and calendar year 2003. Successful expansion is dependent on training the workforce on the project's initiatives and, most critical, CCAS training.

“Appropriately Compensated” (C) and received the full GPI, CRI up to 6 percent, and a CA (a 2 percent increase from FY99). The remaining 30 percent were rated “Inappropriately Compensated” (B) (the same as in FY99), received the full GPI, CRI up to 20 percent, and a CA.

The CRI is a salary adjustment, and nearly 79 percent of the Army AcqDemo workforce received a CRI in 1999 compared to approximately 82 percent in 2000. The average CRI in 1999 was \$1,484 (a 2.7 percent increase of the 1999 base salary). In 2000, the average CRI was \$1,529 (a 2.57 percent increase). This CRI is in addition to the GPI of 3.8 percent in 2000 and 2.7 percent in 2001.

The average CA in 1999 was \$863, and \$1,253 in 2000. The average total award in 1999 was \$1,213, and \$1,610 in 2000. These total awards are especially important to AcqDemo employees whose salaries are capped at the upper limit of their broadband. Policy states that any CRI that cannot be distributed to an employee will be added to an individual's CA.

AcqDemo Survey

In February 2001, 5,126 AcqDemo employees had the opportunity to complete a 60-question electronic survey. The survey had a 38-percent response rate, and the results were posted to the AcqDemo Web site at https://apps.rdaisa.army.mil/acqdemo/new_site/whatshot/default.html. Relative to the Army, 640 of 1,644 employees completed the survey. Results indicated that 73 percent of the respondents understand how CCAS is being used in their organization. However, only 30 percent believe that pay pool panels are fair in recognizing individual contributions. More than 55 percent of the respondents understand that pay raises and cash awards depend

on their contribution to the organization's mission. Fifty-three percent of the respondents were satisfied with their pay and believed that the demonstration project is an improvement over the previous performance and compensation system. More than 44 percent of the Army respondents agree or strongly agree with the statement, “I am in favor of the demonstration project for my organization.” The positive response to this question after 18 months is comparable to the 40 percent positive response to this question for the China Lake, CA, project and to the 37 percent positive response to this question for the Army Aviation and Missile Research, Development and Engineering Center project.

Conclusion

Expansion of the AcqDemo Project is scheduled for FY02 and calendar year 2003. Successful expansion is dependent on training the workforce on the project's initiatives and, most critical, CCAS training. The Army Acquisition Career Management Office (ACMO) and the DOD Program Office will work in partnership with future activities for an equally successful transition to AcqDemo.

JERRY LEE is a Senior Analyst with Science Applications International Corp., supporting the ACMO with the AcqDemo Project. He has a bachelor's degree in accounting from the University of San Francisco and a master's degree in general administration from Central Michigan University.

PLANNING YOUR ACQUISITION CAREER

Patricia Hopson

Introduction

The Acquisition Career Management Office (ACMO), which reports to the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology, has developed numerous career program opportunities to ensure there is an adequate pool of future military and civilian acquisition leaders. To optimize your ability to take advantage of these valuable career-enhancing opportunities, the ACMO suggests that you refer to the following guidelines.

Civilian Guidelines

1. *Determine if you are in an Army Acquisition and Technology Workforce (A&TWF) position.* If you are uncertain, your supervisor should be able to tell you if you are in an acquisition position. Recruitment announcements, position descriptions, and some position requirements documents will also indicate if a position is an acquisition one.

2. *Be aware of how your acquisition career field (ACF) fits into the workforce.* The A&TWF provides cradle-to-grave life-cycle support. The A&TWF has 10 functional career fields: Program Management; Contracting; Industrial/Contract Property Management; Purchasing; Manufacturing, Production, and Quality Assurance; Business, Cost Estimating, and Financial Management; Acquisition Logistics; Information Technology;

Systems Planning, Research, Development and Engineering; and Test and Evaluation.

3. *Contact your acquisition career manager (ACM).* Following placement in an acquisition position, you should first contact your ACM, who will advise and assist you in planning your career development. Your status and location determine which ACM you contact. The Total Army Personnel Command (PERSCOM) ACMs support military officers, Army Acquisition Corps (AAC) members (GS-14 or equivalent personnel demonstration broadband level and above), and members of the Competitive Development Group (CDG). Regional ACMs support all others.

4. *Prepare an acquisition career record brief (ACRB).* Work with your ACM to develop an ACRB, which is an automated, authenticated, official record of your education, training, and acquisition assignment history. Initiating changes and ensuring your ACRB is kept updated is your responsibility.

5. *Refer to the Development Model in the Acquisition Career Development Plan (ACDP).* This model provides a career-planning framework. Request that your ACM and/or supervisor assist you in determining where you are on the model and in planning your career progression strategy. Upon recommendation by your ACM, you may also wish to obtain advice

from your Acquisition Career Management Advocate (ACMA). ACMAs are senior civilian AAC members in organizations that have a high concentration of A&TWF employees.

6. *Prepare an individual development plan (IDP).* The IDP is a 5-year plan outlining your education, training, and experience goals. An IDP helps you determine and define your career goals and objectives in concrete terms; i.e., where you are in your career (on the ACDP Development Model) and where you want to be, both in the short and long term. Work with your supervisor and agree on a plan that is consistent with the model and your goals. Document the desired education, training, or experience on your IDP and obtain your supervisor's approval.

7. *Become certified in your ACF (the foundation and bottom level of the ACDP Development Model).* Attaining Level III certification is the mark of proficiency in your ACF. The requirements by ACF may be found in Appendix B of the *Defense Acquisition University (DAU) Catalog* (<http://www.dau.mil/catalog/catalog.htm>). If you do not understand any of the requirements, you should contact your ACM for clarification.

8. *Commence career-broadening activities (the intermediate level of the ACDP Development Model).* When you have become Level III certified in

your career field, you should broaden your career by doing the following:

- Apply for learning opportunities offered in the *Acquisition Education, Training and Experience (AETE) Catalog*. These opportunities range from leadership development courses to degree completion/master's degree programs.

- Ask your ACM about courses offered in your area through the Regional AETE Program.

- Seek developmental/on-the-job training opportunities that provide broadening/cross-training experience.

- Become certified at least at Level II in one or more other career fields.

- Look into the availability of rotational/developmental assignments in other organizations.

9. *Obtain an individual assessment of your strengths and weaknesses in terms of leadership competencies.*

An assessment instrument, the Acquisition Leadership Effectiveness Inventory (ALEI), will assist you in planning your leadership development needs, particularly as you become proficient in your acquisition career field (attain Level I, II, or III certification) and start your broadening experience.

10. *Be aware that various boards and competitive development programs will require submission of a Senior Rater Potential Evaluation (SRPE) for GS-13, -14, and -15 applicants (or equivalent personnel demonstration broadband level).* The purpose of the SRPE is to rate the leadership potential of workforce members. Along with the ALEI above, ratings will also assist you in identifying your leadership development needs.

11. *Obtain Acquisition Corps Eligible (CE) status.* CE membership provides opportunities to prepare for critical acquisition positions (CAPs). CEs with Level III certification are given competitive and noncompetitive career-enhancing opportunities. CE membership is open to all civilians who are not in CAPs but meet qualifications.

12. *Apply for the CDG Program.* Members with CE status and Level III certification who are GS-12 or GS-13 or equivalent personnel demonstration broadband level may apply for the CDG Program. This 3-year developmental training program offers high-potential, board-selected personnel expanded training, leadership, and other career-development opportunities.

13. *Apply for AAC membership (Strategic Leadership level of the ACDP Development Model).* The AAC is a subset of the Army A&TWF.

14. *Apply for acquisition command and product manager positions (LTC/GS-14 or equivalent personnel demonstration broadband level) and acquisition command and project manager positions (COL/GS-15 or equivalent personnel demonstration broadband level).* Best-qualified boards are held annually.

15. *Apply for the Senior Service College Program.* The Industrial College of the Armed Forces offers the Senior Acquisition Management Course (ACQ 401). This is the preeminent course for members of the Acquisition Corps and, as such, is an important step in your career. The University of Texas offers its equivalent, the Senior Service College Fellowship.

16. *Participate in continuous learning (CL) activities.* Throughout your career, you should participate in CL activities. Once you are certified in the position you encumber, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) Policy on Continuous Learning for the acquisition workforce requires that you complete a minimum of 80 continuous learning points (CLPs) every 2 years. Attainment of CLPs is not limited to the traditional classroom setting but may be earned in numerous ways. Work with your supervisor to ensure attainment of CLPs is considered when developing your IDP and ensure points earned are captured on your IDP, which is used to document CL.

Military Guidelines

1. *Contact your acquisition career manager (ACM).* Upon accession into the AAC, you should first contact your ACM, an assignments officer from PERSCOM's Acquisition Management Branch (AMB), who will assist you in planning your career development. The list of ACMs and contact information may be found at <http://www.perscom.army.mil/OPfam51/ambmain.htm>. Click on **AMB Staff**.

2. *Determine career objectives. Discuss your preferred areas of concentration (AOCs) with your assignment officer.* The A&TWF is made up of officers and civilians who perform work throughout the system's life cycle. The A&TWF has five military AOCs: 51A-Systems Development (Program Management); 51C-Contracting and Industrial Management (Contracting); 51R-Systems Automation Engineering and Acquisition (Communication-Computer Systems); 51S-Research and Engineering (Systems Planning, RD&E); and 51T-Test & Evaluation. A more detailed description of these career fields is located in DA Pamphlet 600-3, *Commissioned Officer Development and Career Management*, Chapter 47, and at http://books.usapa.belvoir.army.mil/cgi-bin/bookmgr/BOOKS/P600_3/47.0.

3. *Prepare your officer record brief (ORB).* Work with your ACM to establish a correct ORB, which is an automated, authenticated, official record of your education, training, and acquisition assignment history. You are responsible for changing and updating your ORB.

4. *Refer to the Development Model in the Acquisition Career Development Plan (ACDP).* This model provides a career-planning framework. Request that your ACM assist you in determining where you are on the model and in planning your career progression strategy.

5. *Prepare an individual development plan (IDP).* The IDP is a 5-year plan that outlines your education, training, and experience goals. Determine and define your career goals and objectives in concrete terms; i.e.,

where you are in your career (on the ACDP Development Model) and where you want to be in both the short and long term. Using guidance provided by your ACM, work with your supervisor and agree upon a plan that is consistent with the model and your goals. Document the desired education, training, or experience on your IDP. For detailed information on completing the IDP, go to <http://dacm.rdaisa.army.mil>. Click on **Your Acquisition Career File**, then on **Individual Development Plan (IDP)**.

a. *Evaluate advanced civil schooling (ACS) opportunities.* There are many opportunities for the AAC officer to attend ACS. However, career timelines and type of degree sought will influence which program fits your career. Contact your ACM for a detailed discussion of the opportunities for your specific goals. The AMB home page outlines the available programs.

b. *Participate in long-term training opportunities.* Several long-term training programs are available to military officers. These opportunities include the Army's Training With Industry Program, the White House Fellowship Program, and the Army Congressional Fellowship Program. Detailed information on these programs is located online at <http://www-perscom.army.mil/opmd/opmd.htm>. Click on **Functional Areas**, then click on **Advanced Civilian Schooling**, and then click on **Scholarships and Fellowships**.

c. *Apply for leadership development courses offered in the AETE Catalog.*

d. *Participate in continuous learning (CL) activities.* When you are certified in your position, the USD(AT&L) Policy on Continuous Learning for the acquisition workforce requires that you earn a minimum of 80 CLPs every 2 years. Attainment of CLPs is not limited to the traditional classroom setting but may be earned in numerous ways. Work with your supervisor to ensure attainment of CLPs is considered when developing your IDP and ensure points

earned are captured on your IDP. The CLP policy and Army implementing instructions may be found at <http://dacm.rdaisa.army.mil/>. Click on **Policy/Procedures**, then on **Continuous Learning Information**, then on **USD(AT&L) Cont. Learning Policy**.

6. *Become certified in your primary area of concentration.* The goal for proficiency in your AOC is attainment of Level III certification. The certification requirements, by acquisition career field, may also be found in Appendix B of the *DAU 2001 Catalog* at <http://www.dau.mi/catalog/catalog.htm>. If you do not understand any of the requirements, contact your ACM for clarification.

Some ways to obtain the training necessary to meet the certification training standards are as follows: attend DAU resident/onsite courses, take DAU distance learning (Web-based) courses via the Internet, obtain credit for equivalent courses, and obtain credit through the Fulfillment Program. Go to <http://dacm.rdaisa.army.mil>. Click on **Policy/Procedures**, then **Fulfillment Information** for DOD fulfillment policy and Army implementing instructions for fulfillment. (All Level III DAU courses and those offered through distance learning may not be fulfilled.)

DAU course listings and schedules are online at <http://www.dau.mil/course/courseinfo-catalog.htm>.

7. *Commence career-broadening activities.* When you have become proficient in your primary career field, you should broaden your career activities by doing the following: pursue functional assignments in your secondary career field, become at least Level II certified in one or more other career fields, and apply for learning opportunities offered in the *AETE Catalog*. For information on acquisition-funded opportunities as well as other opportunities and application instructions, go to <http://dacm.rdaisa.army.mil/> and click on the Acquisition Education, Training & Experience Catalog icon.

8. *Apply for Acquisition Corps membership.* Membership is a

requirement for assignment to a CAP (lieutenant colonels and above).

9. *Complete the Army Command and General Staff College (CGSC).* AAC officers should attain Military Education Level (MEL) 4 certification, either through resident or nonresident completion of CGSC, prior to primary zone consideration for selection to lieutenant colonel rank. AAC officers compete for selection to attend resident CGSC just like the officers in all other Officer Personnel Management System (OPMS) XXI career fields.

10. *Compete for acquisition command and product manager positions (lieutenant colonel).* Best-qualified boards are held annually. Information on available positions, eligibility, and application requirements may be found at <http://www.perscom.army.mil/OPfam51/ambmain.htm>.

11. *Compete for Senior Service College (lieutenant colonel/colonel).* Best-qualified boards are held annually. Information on available positions, eligibility, and application requirements may be found at <http://www.perscom.army.mil/OPfam51/ambmain.htm>.

12. *Compete for acquisition command and project manager positions (colonel).* Best-qualified boards are held annually. Information on available positions, eligibility, and application requirements may be found at <http://www.perscom.army.mil/OPfam51/ambmain.htm>.

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ACQUISITION EDUCATION, TRAINING AND EXPERIENCE OPPORTUNITIES

Ann Kelsey

Introduction

The Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) Policy on Continuous Learning directs that civilian and military acquisition professionals participate in learning activities that augment the minimum standards required for certification in certain acquisition career fields (ACFs). The Director for Acquisition Career Management (DACM) also places strong emphasis on continuous development through quality education, leadership training, and career-broadening opportunities to enhance technical and functional competencies. This article describes some of the key acquisition education, training, and experience opportunities available to acquisition workforce members to enhance their professional development. Many of these opportunities are also outlined in the *Acquisition Education, Training and Experience (AETE) Catalog*.

Civilian Selection Process

An AETE Board meets biannually to consider eligible Army Acquisition and Technology Workforce (A&TWF) members for various education, training, and experience opportunities. Specifically, the board reviews and approves civilian applications for the Naval Postgraduate School (NPS), the School of Choice Program, leadership-training courses offered by numerous educational institutions, and other experiential and developmental opportunities. Civilians must apply to the Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs (ASA(M&RA)) to be considered for selection to the Senior Service College (SSC) Fellowship Program, which is offered at both the Industrial College of the Armed Forces (ICAF) and the University of Texas at Austin.

The Army War College and the National War College are also available as civilian SSC options. A selection

board convened by the ASA(M&RA) reviews civilian applications for these opportunities (see Section VII of the AETE Catalog).

Military Selection Process

Military officers pursuing full-time educational programs are governed by AR 621-1, *Training of Military Personnel at Civilian Institutions*. Application and selection procedures for Acquisition Corps officers are available online at <http://www-perscom.army.mil/Opfam51/ambmain.htm>.

Based on their individual year group, military officers are automatically considered for SSC options by a Department of the Army board.

AETE Catalog

The AETE Catalog describes many of the opportunities needed to meet the standards established by the Policy on Continuous Learning and categorizes learning activities based on those outlined in the policy. For educational opportunities in the AETE Catalog, acquisition workforce members must pursue disciplines that underpin the acquisition functions as described in the Department of Defense (DoD) Directive 5000.52-M, *Acquisition Career Development Program*. The AETE Catalog is available online at <http://dacm.rdaisa.army.mil/careerdevelopment>.

Educational Opportunities

The Educational/Academic section of the AETE Catalog includes degree-producing programs at institutions of higher education. Listed in this section are several career development opportunities that enable A&TWF members to earn a bachelor's or master's degree or to obtain the 12 or 24 semester hours in business disciplines required for membership in the Army Acquisition Corps (AAC). Details of these educational/academic opportunities follow.

Senior Service College. The SSC Program offers an opportunity for civilian and military members of the AAC to gain advanced training and experience specifically geared to leadership positions.

- The ICAF, located at Fort McNair in Washington, DC, was designed by the USD(AT&L) to present the Senior Acquisition Management Course (PMT 401) as part of the Defense Acquisition University (DAU). Completion of the course fulfills the Office of Personnel Management (OPM) educational requirement for Senior Executive Service status.

- The University of Texas SSC Fellowship Program, managed by the University of Texas Center for Strategic Analysis in Austin, TX, is a resident program affiliated with the Army War College. This is a structured program with trilateral focus on the relationships among national security policy and process, emerging critical technologies, and the industrial base. Fellows are given the opportunity to complete a graduate degree while attending the program.

Naval Postgraduate School. Located in Monterey, CA, NPS is an academic institution that emphasizes study and research programs relevant to the interests of the Navy and other DOD agencies. Presently, there are four graduate degree programs available to members of the A&TWF.

- The Acquisition and Contract Management (815) Program leads to an M.S. degree in management. The curriculum is designed to provide the skills necessary to manage the field contracting, system acquisition, and contracting administration process. This program is in residence at NPS.

- The Systems Acquisition Management (816) Program also leads to an M.S. degree in management. The curriculum is designed to provide the skills necessary to manage the systems acqui-

sition process. This program is in residence at NPS.

- Master of Science in Contract Management (MSCM 835).
- Master of Science in Program Management (MSPM 836).

The latter two programs are regional distance learning programs. For the first eight quarters, classes are held onsite during both duty and non-duty hours through a video teleconferencing link to an NPS classroom in Monterey. The last quarter of the degree program is completed through an accelerated 8-week residence session at NPS.

School Of Choice Program. This program provides AAC and Corps Eligible (CE) members an opportunity to complete a graduate degree during duty hours. It also provides an opportunity for A&TWF members to complete an undergraduate degree. Applications for the School of Choice Program must be submitted to the AETE Board for approval.

Acquisition Tuition Assistance Program (ATAP). This program is available for civilian A&TWF members who wish to complete a baccalaureate degree or fulfill the business-hour requirement cited in Public Law 101-510, *National Defense Authorization Act for FY91, Title XII Defense Acquisition Workforce Improvement Act*, dated Nov. 5, 1990. ATAP may be used to complete either 24 semester credit hours (or equivalent) from among the following disciplines: accounting, business finance, law contracts, quantitative methods, and organization and management; or 24 semester credit hours (or equivalent) in the member's career field and 12 semester hours in the disciplines cited above.

ATAP is also available for civilian AAC and CE members interested in pursuing graduate study in a business, scientific, or technical specialty as cited in Public Law 101-510 and outlined in DoD Directive 5000.52-M. Participants take classes during nonduty hours, unless the organization approves class attendance during duty hours. ATAP applications may be submitted to the National Capital Region Customer Support Office.

Both the School of Choice Program and ATAP are restricted to accredited colleges and universities within the applicant's local commuting area offering degree programs in disciplines that

underpin the acquisition functions described in DoD 5000.52-M.

Training Opportunities

The Training Opportunities section of the AETE Catalog addresses functional/technical training and leadership training.

Functional/Technical. This training is designed to assist A&TWF members in completing mandatory certification training, participating in cross training specific to one ACF to become familiar with or certified in multiple ACFs, or staying current in their career functional areas. This training is depicted on the first level of the Acquisition Career Development Plan (ACDP) Development Model (described later in this article) and is provided primarily by the DAU.

The DAU is a consortium of DOD education and training institutions that provides mandatory, assignment-specific courses for A&TWF members serving in the 11 ACFs. (Refer to article on DAU Internet/hybrid courses on Page 57.)

Leadership Training After A&TWF members have established a firm functional/technical base, training should focus on enabling workforce members to have continuous exposure to leadership skills throughout their careers. Leadership training supports this philosophy by providing numerous Acquisition Corps-funded courses. The training in the AETE Board-selected leadership and executive management seminars focuses on building the OPM competencies essential to career progression and broadening.

Developmental Opportunities

The training opportunities listed in the Experiential and Developmental Opportunities section of the AETE Catalog continue to be a significant component in the A&TWF member's career path. The most prestigious developmental opportunity is the Competitive Development Group (CDG) Program, which allows high-potential professionals to participate in a 3-year program of specialized cross-functional training and advanced developmental assignments in various acquisition fields. (Refer to CDG article on Page 29.)

Other opportunities that provide civilians career-broadening experience within a private-industry environment

are the Training with Industry Program and the Master of Science/Industry Work Study (MS/IWS) Program at the University of Texas at Austin. The MS/IWS Program combines completion of a master's degree with a part-time internship with industry.

In addition to developmental assignments, the AAC affords professionals the opportunity to participate in a tour of duty at locations such as the National Training Center at Fort Irwin, CA, and in Korea. These operational experiences provide A&TWF members the opportunity to gain first-hand experience and insight on how the Army fights and knowledge about the Army's Table of Organization and Equipment.

ACDP

The AAC developed the ACDP to provide the acquisition workforce with a framework for conducting career planning. The ACDP provides the information and tools necessary to assist A&TWF members in developing their individual career plans. With the assistance of an Acquisition Career Manager, acquisition career professionals can ensure that achievements outlined in the Acquisition Career Record Brief and opportunities addressed in the Individual Development Plan support the methodology outlined in the ACDP.

Conclusion

A highly trained workforce is a prerequisite to providing the best possible support to our warfighters and for success in today's ever-changing competitive business environment. As such, the AAC provides quality education, training, and career-broadening opportunities to develop a workforce of leaders committed to supporting our soldiers now and in the future.

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WRITING AN EFFECTIVE SENIOR RATER POTENTIAL EVALUATION

Catheryn L. Johnston

Introduction

The Senior Rater Potential Evaluation (SRPE) is a document that directly supports an acquisition workforce individual's application to a selection board. The SRPE is mandatory for individuals in the

grade of GS-13 and above or equivalent personnel demonstration broadband level who apply for consideration by a selection board for opportunities including an assignment as a product or project manager; membership in the Competitive Develop-

ment Group; and acquisition, education, training, and experience. Employees in the grade of GS-12 and below or equivalent personnel demonstration broadband level may request that their senior rater complete an SRPE. Senior raters should, when possible, complete the SRPE when such a request is made.

Many senior raters do not recognize the importance and value of the SRPE to an applicant's package. Feedback from recent boards indicates that the SRPE comments and rating have a greater influence on the board's decisionmaking process than any other document, including the individual's annual performance evaluation.

Rating Factors Form

While detailed instructions are available with the forms, the process of completing the forms is really quite simple. When completing an applicant's SRPE, senior raters also consider the potential of *all* acquisition workforce employees in the same grade as the applicant they are evaluating. The potential of the rated individual is evaluated against nine factors (AAC FORM 1A) (Figure 1). After all factors are evaluated, the total score is obtained and averaged, resulting in the overall score. This number is brought forward to the evaluation itself, Block R, Overall Potential Rating, on AAC Form 1 (Figure 2). (The conversion chart is detailed in the online instructions.)

What The Profile Says

The Senior Rater Profile, also in Block R of AAC Form 1 (Figure 2), is a

LEADERSHIP EFFECTIVENESS COMPETENCIES	LEADERSHIP EFFECTIVENESS COMPETENCY DEFINITIONS	SCORE
1 Oral Communication	Listens to others. Makes clear and effective oral presentations to individuals and groups. (Note: Use of a sign language interpreter may be appropriate for people who are deaf or hard-of-hearing.)	
2 Written Communication	Communicates effectively in writing. Reviews and critiques others' writings.	
3 Problem Solving	Recognizes and defines problems, analyzes relevant information, and encourages alternative solutions and plans to solve problems.	
4 Leadership	Demonstrates and encourages high standards of behavior. Adapts leadership style to situations and people. Empowers, motivates, and guides others.	
5 Interpersonal Skills	Considers and appropriately responds to the needs, feelings, capabilities, and interests of others. Provides feedback and treats others equitably.	
6 Self-Direction	Realistically assesses own strengths, weaknesses, and impact on others. Seeks feedback from others. Works persistently toward a goal. Demonstrates self-confidence, invests in self-development, and manages own time efficiently.	
7 Flexibility	Adapts to changes in the work environment. Effectively copes with stress.	
8 Decisiveness	Takes action and risks when needed. Makes difficult decisions when necessary.	
9 Technical Competence	Demonstrates technical proficiency and understanding of its impact in areas of responsibility.	
TOTAL POINTS DIVIDED BY NUMBER OF ITEMS RATED =		

Figure 1.

Figure 2.

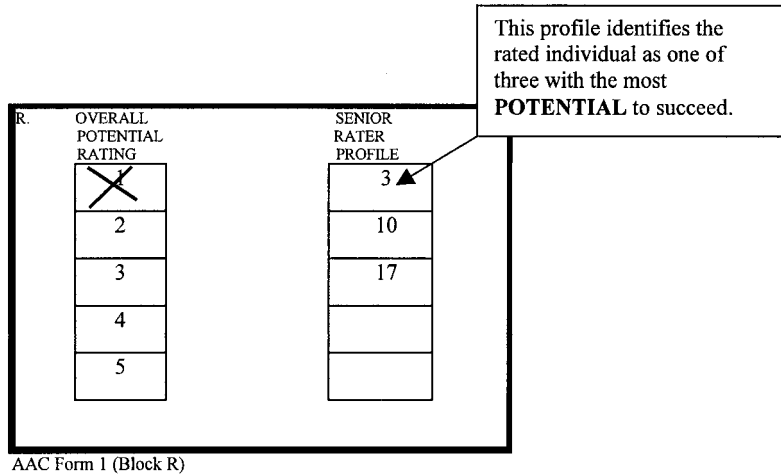


Figure 3.

critical element of the rating. This information tells the board where, among all the employees evaluated by the senior rater, the rated individual fits. A common problem is a Senior Rater Profile where all employees are rated in the 1 Block, which indicates to the board the rated individual is one of many, all with potential at the same level. It says there is nothing extraordinary

about this specific individual; he/she is just one of the crowd. With a profile like the one in Figure 2, the senior rater has lost the ability to make his/her evaluation count.

However, a Senior Rater Profile with 3 individuals in the 1 Block (1 of them being the applicant), 10 in the 2 Block, and 17 in the 3 Block (Figure 3), shows the rated individual is 1 of the 3 individuals who shows the

most potential. Another way to look at it is an individual in the top block is in the top 10 percent (3 of 30) of all the individuals this senior rater has evaluated. This rating provides the board with critical information about the applicant's potential for positions of increasing responsibility.

Bullet Comments

The Bullet Comments section (Block S of AAC Form 1) is the senior rater's opportunity to support the overall potential rating with comments that substantiate the evaluation (Figure 4).

Sending Mixed Signals

Senior raters who fail to provide boards with a clear message on an individual's potential for increased responsibilities force board members to interpret the senior rater's intent. Several examples follow.

While specific comments are at the discretion of the senior rater, the Acquisition Management Branch (AMB) at the U.S. Total Army Personnel Command (PERSCOM)

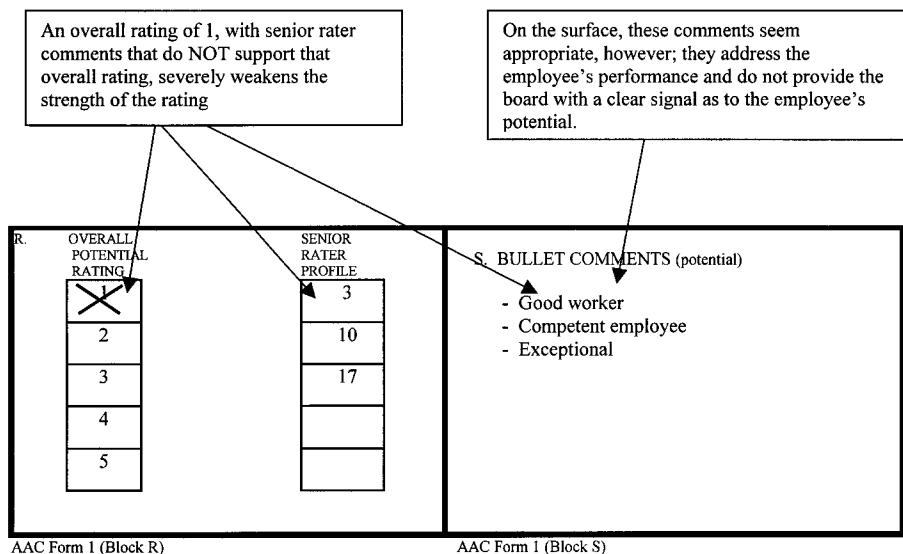


Figure 4.

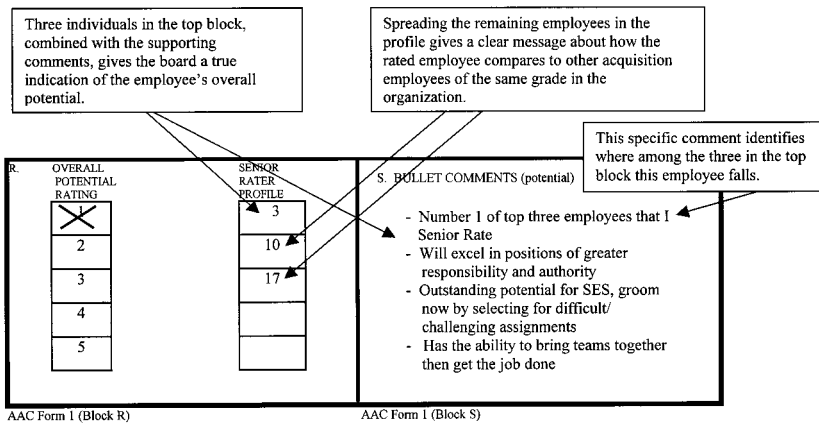


Figure 5.

recommends that at a minimum, senior raters quantify (Figure 5) where the individual ranks in the organization and address their potential for selection to the next board-selected schooling, promotion, or product/project manager or acquisition command.

A rating of 2 to 5 (Figure 6), with outstanding comments, causes the board to question the senior rater's

objective. Lack of clear intent by the senior rater allows the board the opportunity to interpret the senior rater's meaning. It is imperative that the senior rater use the Bullet Comments section to clearly address the applicant's potential. Although senior raters will take performance issues into consideration, it is important to note it is potential they are addressing.

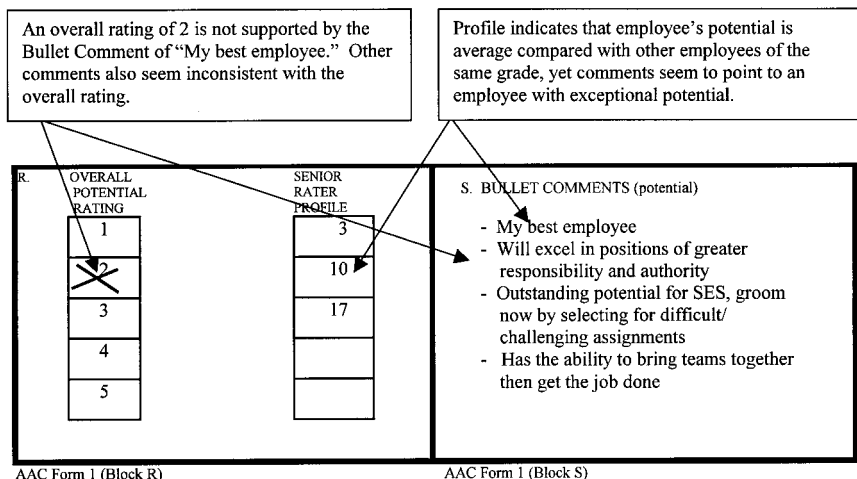


Figure 6.

Conclusion

While both performance evaluations and SRPEs have Senior Rater Profiles, generally speaking, the senior rater's profile may not match on these documents. This is entirely appropriate as (again) the SRPE is addressing potential, not performance. The profiles of senior raters completing SRPEs for civilians are not tracked; however, senior raters need to be aware of the profile when preparing SRPEs for multiple employees. The same profile should be reflected on all SRPEs completed for the same grade. A senior rater who has multiple profiles at the same grade may lose credibility with board members.

Finally, senior raters should discuss the rating with the employee and give the original SRPE (both forms) to the employee for inclusion in their application. Original signatures are required on the SRPE. While some people feel that handwritten comments add to the value of the SRPE, senior raters should avoid the temptation to handwrite SRPEs.

To review the entire AAC Form 1, visit <http://dacm.rdaisa.army.mil/policy/srpeevaluation.pdf>. For detailed instructions, visit <http://dacm.rdaisa.army.mil>, click on Policy/Procedures, then Senior Rater Potential Evaluation (SRPE), then SRPE Instructions.

CATHERYN L. JOHNSTON is a Personnel Management Specialist working in AMB at PERSCOM, responsible for overseeing selection boards for the civilian acquisition workforce.

THE COMPETITIVE DEVELOPMENT GROUP PROGRAM

Maria Holmes

Introduction

Now in its fourth year, the Competitive Development (CDG) Program is still going strong, and the promotion rate of CDG selectees has been exceptional! Although a promotion is not guaranteed as part of the CDG Program, a large percentage of CDG members have a competitive edge when competing for vacant positions. Currently, 18 CDG members of year group (YG) 97 (75 percent), 15 members of YG98 (65 percent), 4 members of YG00 (44 percent), and 5 members of YG01 (20 percent) have been promoted to GS-14 or equivalent personnel demonstration broadband level positions. What is this exceptional program all about? Let's go back to the basics.

What Is The CDG Program?

An initiative of the Army Acquisition Corps (AAC), the CDG Program was established as a 3-year professional and developmental training program. Offering expanded leadership training and experience opportunities for competitively selected GS-12 and -13 (or equivalent personnel demonstration broadband level) Corp Eligible (CE) and AAC members, the CDG Program is designed to develop civilian acquisition leaders for the Army of the future.

To support the concept of "One Integrated Corps," officers were included in the CDG Program for the first time in 2001. However, the policy of including officers in the CDG Program is currently being

re-evaluated. In addition to broadening and reinforcing leadership and management skills, the CDG Program seeks to develop leaders representing a broad cross section of acquisition career fields (ACFs) and to expand acquisition experience in one or more ACFs, organizations, or command elements.

Who Can Apply And How?

To be eligible for the CDG Program, an applicant must be CE or an AAC member who is Level III certified in his or her primary ACF. The announcement soliciting applications to the program is posted on the U.S. Total Army Personnel Command (PERSCOM) Web page at <http://www.perscom.army.mil/opfam51/ambmain.htm>. The complete CDG Program solicitation for applications is located at <http://dacm.rdaisa.army.mil/>.

The following documents are required to apply:

- Signed Acquisition Civilian Record Brief (ACRB),
- Senior Rater Potential Evaluation (SRPE),
- Three most recent performance appraisals and associated support forms,
- Résumé,
- Signed mobility statement,
- Data Self-Certification Form, and
- Most recent Standard Form 50.

Non-AAC members can obtain ACRB update support by contacting their local Acquisition Career Manager (ACM). AAC members, however, obtain ACRB support by contacting their ACM at PERSCOM. The SRPE is a valuable tool used by the senior rater to identify the applicant's potential ability. The mobility statement is required for accession into the AAC, which occurs at the completion of the 3-year period. To date, all geographical moves have been voluntary.

In an effort to streamline the application process, the Army Acquisition Career Management Office (ACMO) has standardized the application packets for all AAC selection boards. Applicants need only submit the documents listed above. Additional information will not be considered. If an application for the CDG Program was submitted the previous year, a complete new package is not necessary; only updates to the package are required.

CDG Members

CDG members are best-qualified applicants who are selected through a competitive selection board process. They are assigned to a centrally funded position on the Army Acquisition Executive Support Agency Table of Distribution and Allowances for a 3-year period. In addition, CDG members are provided centrally managed education, experience, and training opportunities designed to provide career and

leadership development opportunities in a structured, highly visible program.

Below are paraphrased excerpts of CDG member comments regarding their experiences in the program:

The CDG Program provides me with the opportunity to demonstrate and hone leadership and acquisition skills necessary to become one of the Army's leaders of tomorrow. Through a three-faceted planned program of developmental assignments, education, and training, the Army is ensuring that a supply of acquisition-experienced civilian employees and military officers will be available to provide the leadership needed to serve the warfighters of the 21st century. Opportunities for CDG members to develop their careers are only limited by each CDG's imagination.—Bernie Gajkowski, YG01

I was selected for the CDG YG00 class and placed into the office of the most exciting program, the Future Combat Systems (FCS). The Program Manager, LTC Marion Van Fosson (the most powerful lieutenant colonel in the Army, in my opinion), was hand-picked for this job, and having worked for him more than a year, it is clear why. I started as Director for Modeling and Simulation on Aug. 1, 1999, and received a temporary promotion on Oct. 1, 2000, to Director of Systems Integration. The FCS Program is extremely challenging and complex. A program like FCS is a once-in-a-lifetime opportunity, and if it were not for the CDG Program, I would have been watching from the sidelines.—Daniel Pierson, YG00, promoted 2001

When people realize that I participated in the CDG Program, the first thing they say is that they were planning to apply but just haven't gotten around to it. Then they ask if the CDG Program is beneficial and worth the effort. I answer that it is definitely worth the effort and, if they need it, I'll help them start their package. The bottom line is that it is your career, and you need to take control of it and take advantage of any opportunity that stretches your abilities.—Rusty Weiger, YG97, promoted 1998

The CDG Program is awesome. During my first 4 weeks in the program, I enhanced my human resource management skills working with the FCS Task Force. I developed position descriptions and determined the staffing level for each position, thus ensuring civilians would have career progression opportunities within the task force. My second assignment was Acting Executive Officer for the Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT). In this capacity, I interfaced with senior leaders on acquisition policies and coordinated acquisition-related staff actions within the Office of the ASAALT. Currently, I am reviewing and comparing forms for the Council of Colonel Reviews. In addition, I am scheduled to attend two Harvard Leadership Courses, the Congressional Operations Class, the National Training Center (NTC), and the Army War College. The CDG Program has allowed me to do something different and to "think outside the box." This is an excellent program to enhance your managerial and leadership skills and to network with senior leaders in the Army, the Office of the Secretary of Defense, and industry.—Kenneth Wright, YG01, selected for Army War College

As evidenced by these comments, the CDG Program benefits the Army and the individual, and the program provides a true return on investment! By educating and training its future leaders today, we will have a better Army tomorrow.

Developmental Assignments

The ACMO solicits developmental assignments from the acquisition community worldwide. As a result, CDG members participate in various and multiple developmental assignments in program management offices, program executive offices, and director, systems acquisition offices.

CDG members may also attend various leadership courses and conferences. Recently, CDG members completed courses at Harvard and the Congressional Briefing Conference on Capitol Hill. Afterward, one

YG01 member stated that the briefing provided in-depth knowledge on how Congress operates—information that would support and improve the working environment.

Operational Experience Training has also been scheduled at NTC, Fort Irwin, CA. The training includes a force-on-force observation tour of the Operations Center, an instrumentation orientation at the Star Wars Building, a Multiple Integrated Laser Engagement System (MILES) demonstration, and an opposing force (OPFOR) mission "sandtable" field rehearsal. Additionally, NTC command briefings, OPFOR briefings, and foreign weapons intelligence briefings are provided.

Conclusion

The AAC and the Deputy Director, Acquisition Career Management are fully committed to the growth and success of the CDG Program. As such, adjustments will be made to the CDG Program to ensure the continual selection of high-quality personnel. Selection to the CDG Program is an outstanding opportunity for all CE and AAC members. Supervisors and senior raters should encourage their eligible subordinates to compete and take advantage of this exceptional program. The CDG Program is intended not only to benefit those selected, but the future AAC and the Army.

MARIA HOLMES, a member of the AAC, is the Systems Planning, Research, Development and Engineering and Test and Evaluation Proponency Officer as well as the CDG Program Manager in the ACMO. She holds a B.S. degree in engineering from the University of Missouri-Rolla, an M.S. degree in business from East Texas State University, and an M.B.A. from Webster University.



AAC PARTNERS WITH ARMY LESSONS LEARNED CENTER

MAJ(P) Cris J. Boyd and MAJ Daniel Clemons

Introduction

The program manager (PM) was silent for a moment as he inquisitively looked at his staff. The PM Office had just been organized, and the PM was concluding his introductory remarks. The staff appeared eager and confident. Though some of them had not previously worked together, they appeared to be a cohesive team. The PM finally commented, "There's one more thing before I cut everyone loose to get on with the day's work. This is not the first PM shop challenged with developing a new product, and it won't be the last. I don't want to reinvent the wheel. This might be a new product, but I guarantee that we'll be using most of the same processes as other PM shops to meet our objective. I want to leverage the experiences and lessons learned from other offices. Let's avoid the minefields." Then, the PM turned to his Deputy, "Bob, I want you to get with the other PM shops in this PEO [program executive office] and collect their lessons learned on everything from requirements determination to source selection. Package the lessons learned in such a way that we can distribute this information to our staff. Okay, thanks again everyone;

have a good day, and let's get out there."

As Bob walked out the door, he only thought that he was busy enough with his other responsibilities. Now, he had to figure out how he was going to go about capturing lessons learned.

The above is a fictional account, but if Bob were a real Deputy Program Manager, he would be reinventing the wheel himself trying to go out and collect lessons learned.

The Army Acquisition Corps (AAC) leadership recognized some time ago that it did not have the benefit of a truly centralized and accessible repository for acquisition lessons learned. The great news is that all that has now changed! The AAC has partnered with the Center for Army Lessons Learned (CALL) to provide this opportunity to the acquisition community. People like Bob will now be able to access a database to retrieve the information they need.

History of CALL

CALL was founded in 1985 to capture relevant lessons learned from the National Training Center to benefit the total Army. CALL's analysis role grew in the late 1980s with the expansion of

the Combat Training Center (CTC) Program; and with the establishment of the Joint Readiness Training Center at Fort Chaffee, AR (now at Fort Polk, LA); the Combat Maneuver Training Center at Hohenfels, Germany (for U.S. Army, Europe forces); and the Battle Command Training Program at Fort Leavenworth, KS.

In 1989, as a result of Operation Just Cause, CALL began the Wartime Lessons Learned Program to capture and disseminate lessons learned from contingency operations. During Operations Desert Shield and Desert Storm, CALL undertook a test-bed automated archiving effort in support of Gulf War lessons learned. Building on these efforts, the Commander of the U.S. Army Training and Doctrine Command directed the Combined Arms Center (CAC) History Office and the Fort Leavenworth Directorate of Information Management to establish the Automated Historical Archives System for the electronic archiving and Army-wide dissemination of historical and lessons-learned documents from the Gulf War.

In 1994, the CAC Commander recast the CAC History Office as the Army Knowledge Network (AKN)

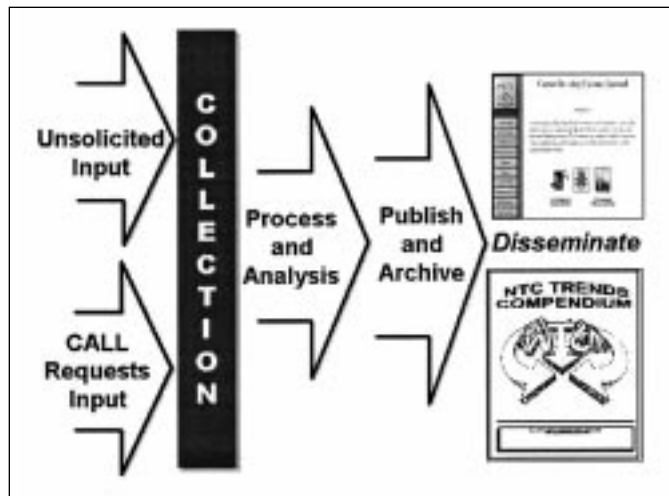
Directorate to meet the expanding mission of capturing the Army's record of contingency and CTC collective training operations. Then, in April 1996, the CAC Commander merged the AKN and CALL to focus collection, archiving, and analysis efforts on ensuring the Army receives timely and relevant feedback required for victory in the information age. In conjunction with a federal information technology test bed sponsored by the National Media Laboratory, CALL expanded its automation capabilities to include the capture, archiving, and digital dissemination of photo, video, and audio media to allow the Army to profit from the full spectrum of multimedia information.

On Oct. 16, 2000, the first AAC officer reported for duty at the CALL. His mission is to assist the Army acquisition community in increasing its knowledge and ability to accomplish its mission the first time and to capture acquisition lessons learned. This acquisition cell at CALL will provide successful lessons as templates for future actions and identify unsuccessful lessons as a way to avoid problems.

The AAC is completely committed to this program. It has established one military Officer Distribution Plan-supported position and one Department of the Army civilian position at the CALL. These individuals are assigned to the CALL, but remain in the Army Acquisition Executive Support Agency Table of Distribution and Allowances. The Acquisition Career Management Office (ACMO) is the proponent office assigned to this program by the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology. The ACMO is responsible for providing funding and administrative guidance to the CALL acquisition cell. The partnership between the AAC and the CALL, and CALL's 15-year experience as an organization focused on capturing lessons learned from training centers and actual operations, provides a truly beneficial capability to the AAC and the Army.

CALL Today

This brings us up-to-date with the establishment of the CALL acquisition



Passive collection process

cell. The cell has two immediate goals: the collection of lessons learned and the collection of academic research products. In the area of lessons learned, the cell is working to collect historical lessons learned through passive and active processes.

Passive Process

Through a passive process, lessons learned are gathered from regularly planned events such as after action reviews, end-of-tour reports, or trigger events within the PEO/PM business area, or by unsolicited input through CALL's Web interface or other submission formats.

Active Process

Articles, documents, and observations submitted through this process are reviewed, edited, and published using set procedures established by CALL. This process includes making sure that the submission meets the "so what" sanity check as well as presents lessons learned without undue emphasis on the organization or specific individuals.

An active collection always begins with a request for a focused Combined Arms Assessment Team (CAAT) to collect observations on a specific process or event. All CAAT taskings are requested by the ACMO in coordination with various Army acquisition organizations. Once approved and funded, a tasking is assigned to the acquisition cell within CALL by the ACMO for coordination, monitoring, and execution.

The AAC is already planning the first active lessons-learned collection

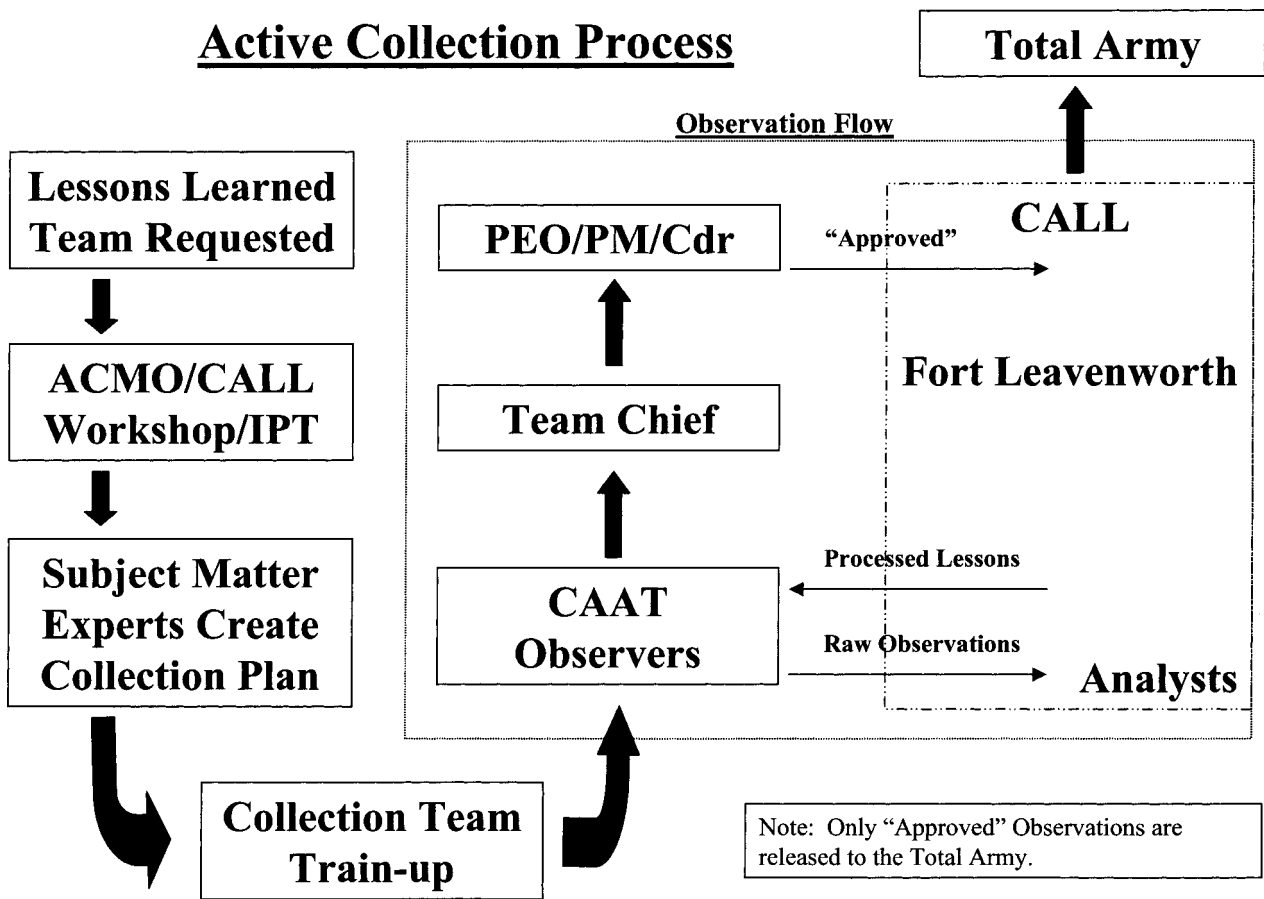
mission. This effort will focus on the acquisition processes associated with the development of the Brigade Combat Team (BCT). Phase 1 of this collection will include all activities between requirements determination and contract award. Other phases encompassing the remainder of the acquisition life-cycle model are planned. To accommodate this new mission, CALL is actively modifying its current lessons learned database software to include AAC tasks that fall under the acquisition life-cycle model.

In December 2000, CALL presided over the first BCT workshop/integrated product team (IPT) to identify topic areas that would most likely provide lessons learned. The IPT identified the subject matter expert (SME) requirements necessary to perform these collection efforts during Phase 1. Based on these requirements, the ACMO submitted tasking letters to various acquisition organizations requesting SMEs.

Collecting Academic Research

The second immediate goal of the CALL acquisition cell is the collection and publication of academic research papers and products. The AAC sends many of its members to advanced civil schooling and can benefit from collecting and publishing the products of their work. To that end, the CALL acquisition cell operates and maintains a Web server that will eventually house these products. The AAC is currently working with several academic institutions (e.g., the Army War College, University of Texas-Austin, and the Naval Postgraduate School) to

Active Collection Process



have them submit completed academic research reports to CALL. CALL will make the full report downloadable in PDF format and the executive summary available online and searchable.

What is available right now? The CALL database is online and available for searching at <http://call.army.mil>. AAC members can use the CALL Web site as a source to enhance the Army's knowledge base.

What does CALL need from you? The acquisition cell is operational and ready to accept your products. Send the following:

- Best examples of a Mission Needs Statement; Operational Requirements Document; an Acquisition Strategy Baseline; or any other acquisition-related management document that can serve as a model to others given the same challenge;

- Copies of end-of-tour reports from previous project/program management offices;

- Copies of after action reports that are stored in your organizational library; and
- Good and bad lessons learned.

As philosopher George Santayana said, "Those who cannot remember the past are condemned to repeat it." Accept the challenge to provide lessons to our future AAC community and don't make them relearn a lesson already accomplished.

If you would like to contact CALL, submit either an article on AAC lessons learned or a life-cycle document, or if you need help finding something on the CALL Web site, call MAJ Dan Clemons at (913) 684-9582, DSN 552-9582, or e-mail him at call@leavenworth.army.mil. You can mail hard-copy correspondence to Center for Army Lessons Learned, Lessons Learned Division, Actual Operations Branch, 10 Meade Avenue, Bldg 50, Fort Leavenworth, KS 66027.

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MAJ DANIEL CLEMONS, a member of the AAC, is assigned to the Center for Army Lessons Learned. He has an M.A. in computers, resources, and information management from Webster University, St. Louis, MO, and an M.S. in industrial technology from Northeastern Oklahoma State University, Tahlequah, OK.

ARMY S&T LABORATORY PERSONNEL DEMONSTRATIONS

Dr. C.H. Pennington, Richard J. Maitz,
and Dr. Robert S. Rohde

Introduction

The Army Science and Technology (S&T) Reinvention Laboratories have implemented four personnel demonstration projects and are within a few months of adding two additional demonstration projects. This article provides the Army acquisition, logistics, and technology community a status report on these Army personnel demonstration projects.

Army S&T Demos

Section 342 of the *National Defense Authorization Act (NDAA) for FY95* (Public Law 103-337) authorized the Secretary of Defense, with the approval of the Director of the Office of Personnel Management (OPM), to undertake personnel demonstration projects at DOD laboratories that were designated as S&T Reinvention Laboratories. This authority differed from other Title 5 demonstration projects in two respects: the Secretary of Defense, with the approval of the OPM Director, had the authority to conduct the demonstration projects, and there were no limits on the number of employees covered or the duration of the project.

With passage of Section 1114 of the NDAA for FY01 (Public Law 106-398), approval authority for demonstration projects now resides with the Secretary of Defense. OPM does, however, retain oversight authority to ensure that the demonstration projects comply with civil service laws, rules, and regulations. The Army proponent for this effort is the Deputy Assistant Secretary of the Army for Research and Technology who is also the Army Chief Scientist.

Under the authority of the NDAA for FY95, DOD S&T Reinvention Laboratories were authorized to develop alternatives and waivers to certain Title 5 laws, rules, and regulations relating to recruitment and appointment of personnel; classification; compensation; assignment, reassignment, and promotions; discipline; incentives; hours of work; and methods of reducing staff and grade levels. This authority did not allow the laboratories to waive any Title 5 laws, rules, and regulations pertaining to leave, employee benefits, equal employment opportunity, limits on political activities, and merit system and prohibited personnel practices. The Air Force, Army, and Navy had research and development organizations so designated, and each organization was given the opportunity to develop new concepts to improve the personnel system.

Currently, the Army has four active personnel demonstration projects, and two other projects are being developed and are within a few months of the first *Federal Register* announcement. The four active projects are at the Army Research Laboratory (which merged with the Army Research Office); the Medical Research and Materiel Command; the Aviation and Missile Research, Development and Engineering Center (consolidation of the Aviation Research Development and Engineering Center and the Missile Research Development and Engineering Center); and the Engineer Research and Development Center (ERDC) (consolidation of the four U.S. Army Corps of Engineer laboratories). These four projects have been designated as

wave 1. The Communications-Electronics Command and the Tank-automotive and Armaments Command are both approaching *Federal Register* publication and project implementation. They are designated as wave 2.

There are approximately 6,300 employees in wave 1, and about 13,565 additional employees may be included in the personnel demonstration project under wave 2. The employees included are not only scientists, but also technicians and administrative personnel.

Two laboratories, the Soldier and Biological Chemical Command and the Simulation, Training and Instrumentation Command, are developing projects and have been designated as wave 3. Approximately 1,400 employees will be included in wave 3.

Every 6 months, the laboratories participate in an all-day round-table review to openly discuss the personnel demonstration projects. The wave 2 and 3 projects have benefited significantly from these sessions and the experiences of wave 1 laboratories.

Personnel Initiatives

Although the wave 1 projects are similar in that they address the same personnel challenges, each varies in its solutions. Each project is the product of management's partnership with its local unions, extensive involvement of the laboratory's own workforce, support by its servicing civilian personnel center, and the advice of Army, DOD, and OPM experts. The projects have initiated hiring and assignment flexibilities, established broad "paybanding" systems, simplified job descriptions, streamlined classification,

replaced the standard Army performance appraisal system with local performance appraisal and pay-for-performance systems, and expanded developmental opportunities. Each feature was designed with the objectives of increasing management's authority over the personnel process, benefiting employees, reducing the administrative burden, and improving organizational effectiveness.

Major thrusts of the wave 1 projects are to simplify personnel procedures for employees, managers, and the civilian personnel community; attract and retain the best employees; reward employees through salary increases based on performance; and increase flexibility in adjusting the workforce for future work and missions. A major feature of the personnel demonstration projects is paybanding.

Paybanding involves the consolidation of two or more General Schedule (GS) paygrades into broad paybands. The consolidation results in wider pay ranges and simplified job classifications because of fewer distinctions between levels of work. Within a payband, occupational families generally correspond to occupational groups (e.g., engineers and scientists; technical, business, and administrative support), with separate paybanding schemes for each occupational family or career path. Paybands increase organizational flexibility by reducing paperwork for classification and promotion actions, increase an employee's pay potential, and provide the opportunity for employees to reach that potential based on performance rather than tenure.

Job performance serves as the basis for salary increases for those employees in the demonstration projects. Pay increases are determined annually and are based on an employee's performance. Funds for pay increases are from money that would have been spent for within-grade and quality step increases and for promotions between grades that are now within a payband.

One of the objectives of the demonstration projects has been to recruit, develop, motivate, and retain a quality workforce. The demonstration projects have implemented programs to promote use of sabbaticals and to increase available training and devel-

opment opportunities that will increase employee skill levels.

As part of the laboratories' efforts to improve recruitment and staffing, several changes to personnel procedures have been made. These changes include extending probationary periods for new hires and eliminating the "rule of three" in the sorting of applicants in quality groups for referral. (The rule of three stipulates that employees hired into competitive service jobs must be selected from among the three most eligible candidates.) Other changes include use of the Distinguished Scholastic Achievement Appointment Authority, modified term appointment for potentially longer periods and possible conversion to career conditional status, and the Voluntary Emeritus Program.

The demonstration projects are being evaluated to determine both the effectiveness of the personnel system changes and the salary costs of paybanding and to assess the contribution of the projects to organizational outcome. The evaluation of DOD S&T demonstrations is being conducted under contract through DOD's Directorate of Defense Research and Engineering and OPM's Personnel Resources and Development Center. The evaluation is focused on the overall impact of similar initiatives across the different projects rather than on the individual demonstration projects themselves.

Conclusion

These demonstrations are the first major changes to improve the personnel systems specifically tailored to the Army laboratories. These changes to Title 5, DOD, and Department of the Army personnel policies allow Army laboratories greater flexibility and authority to manage and improve laboratory staffs.

The demonstrations go far in answering criticisms from the Defense Science Board and others that the current GS system is too slow, puts up administrative barriers, and is impossible to change. The demonstration projects are attempting to overcome these difficulties by streamlining processes and introducing new flexibilities. They provide the Army S&T Reinvention Laboratories with new innovations and efficiencies to sustain a laboratory

workforce capable of solving the technical challenges facing the warfighter in an era of downsizing and declining resources.

Preliminary results of OPM surveys and internal reviews indicate that managers and civilian personnel specialists perceive demonstration projects as being more flexible and responsive. Survey respondents have indicated that paybanding and simplified classification procedures are increasing the laboratories' abilities to attract the best candidates and are changing the organizational culture from one of entitlement to one of performance.

Finally, the Army, DOD, and OPM Team winning the coveted National Performance Review Hammer Award in 1997 for the Army S&T Personnel Demonstrations is evidence of the success of these endeavors.

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Introduction

For more than a decade, the Army had a hiring freeze or was downsizing through reductions in force. Numerous surveys indicated that there were shortages of scientific and engineering (S&E) personnel Armywide. These surveys also indicated that the workforce was aging and that without new hires, the Army could lose its capability to keep up with new technology in the future. As a result, in December 1998, the U.S. Army Armament Research, Development and Engineering Center (ARDEC) at Picatinny Arsenal, NJ, was given the green light to begin recruiting interns. The goal was to hire the "best and the brightest" to serve as tomorrow's leaders.

Since March 1999, through a carefully thought-out and well-orchestrated plan of action, Picatinny Arsenal has hired 153 new interns with a median grade point average (GPA) of 2.8. More than 56 percent of these new employees have superior academic achievements and/or master's degrees in complex academic disciplines including computer science, mathematics, physics, metallurgy, and engineering.

Background

The work performed at Picatinny is very specialized. Because of this, locating candidates at the journeyman level is difficult, if not impossible. Therefore, it is important for Picatinny to successfully recruit entry-level personnel and cultivate their own S&E workforce.

Historically, our most successful recruitment campaigns required years of developing relationships

with colleges and universities and having individual managers stay in touch with their alma mater and with graduating seniors to keep the workforce replenished. Picatinny, as with most Army installations, had been out of the intern business since the late 1980s; therefore, all alliances

PICATINNY ARSENAL'S MODEL FOR INTERN RECRUITMENT

Sandra L. Gibson, Marian Bellis,
and Pamela Lucchese

with local colleges and universities had to be re-established.

Plan Of Action

The recruiting process began with senior management establishing a plan of action that involved the Civilian Personnel Advisory Center (CPAC), the Civilian Personnel Operations Center (CPOC), and Picatinny's technical managers. This effort was made a priority for their research and development (R&D) management and CPAC team and, as a result, the effort also became a priority for CPOC. Senior management also ensured that ample funding was available for all facets of the pro-

gram. Because of the high cost of living in the New Jersey/New York area, planning, commitment, and funding were all key to the success of the campaign.

CPAC held numerous planning sessions with the Northeast CPOC, including members of the Delegated Examining Unit (DEU) and the Customer Focus Branch (CFB) who provide classification and recruitment service to Picatinny Arsenal. The extensive planning and coordination between Picatinny and CPOC contributed to the very successful outcome.

The next step for Picatinny's senior management was to enlist talented and personable managers and make them effective recruiters. CPAC put this elite group of prospective recruiters through a rigorous training program to teach them the personnel aspect of the federal hiring process. Simultaneously, CPAC designed an aggressive advertising campaign. Strategies included cable TV and news media coverage, paid radio and newspaper advertising, Internet recruitment, mass mailings to college placement offices and minority organizations, and an employee awareness campaign. Additionally, CPAC developed recruitment brochures and displays to help publicize the arsenal at job fairs and other career events.

Recruitment Process

Since 1999, Picatinny Arsenal has hosted three job fairs. Additionally, Picatinny personnel attend career expos and recruit year-round at local colleges and universities. Their presence at recognized engineering schools such as New Jersey Institute of Technology, Stevens Institute of Technology, Penn State, Rutgers, and

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Lehigh University ensures that future graduates are aware that Picatinny Arsenal is a desirable employer. Additionally, recently hired interns are becoming valuable members of the recruitment team.

Held at the Officer's Club, Picatinny's job fairs have played a significant role in the success of the recruiting endeavor. Job fairs include a tour of Picatinny Arsenal so potential applicants can learn about the varied programs and associated opportunities at the arsenal. Additionally, various ARDEC organizations have visual displays that describe Picatinny's R&D mission.

Trained recruiters from various technical organizations interview applicants, and representatives from the personnel community are onsite to pre-screen candidates for basic qualifications. Tentative job offers are made the day of the job fair, and final offers are made within 3 weeks following the fair—a time considered on par with industry.

Because potential candidates often interview with several companies at the same time, there is a strong correlation between finding talented candidates and being able to make timely, firm job offers. Players in the recruitment process have agreed to make job offers a priority. This requires a great deal of team-

work and coordination among the Picatinny CPAC, the CPOC's DEU, and members of the CFB who service Picatinny. Because of these efforts, formal commitments are normally made to candidates within 3 weeks of their initial application. Everyone knows the importance of having applicants submit the proper forms (e.g., transcripts to verify GPA) within the required timeframe, and everyone works together to accomplish this task. This process succeeds because of the excellent working relationship between CPAC and CPOC.

Diversity in the S&E field is a goal for Picatinny. As such, Picatinny actively recruits from historically black colleges and the University of Puerto Rico. Additionally, Picatinny recruiters attend on-campus minority job fairs. To date, 19 women and 45 minority scientists and engineers have been hired.

Hiring Incentives

Interns are hired at grade levels ranging from GS-05 to -09 depending on their qualifications. As an additional enticement, all eligible interns are given a recruitment bonus. In most cases, the bonus is as much as 25 percent of their starting base salary. Engineers hired at the GS-05 and -07 levels also receive a one-time

accelerated promotion after 6 months of training, and all interns receive noncompetitive promotions to the full-performance grade of GS-12. Each new intern is assigned a mentor to help ease him or her into a new career field.

Summary

Picatinny Arsenal's management is very excited about the prospect of rejuvenating its workforce. All personnel involved are pleased with the number of high-quality, talented candidates being recruited. The hiring of 153 interns, 56 percent of whom have superior academic achievement or master's degrees, is evidence that the recruiting effort at Picatinny Arsenal is paying off.

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AMRDEC PERSONNEL DEMONSTRATION PROJECT

Dr. William H. Leonard and David E. Knepper

Introduction

Section 342 of the National Defense Authorization Act (NDAA) for FY95 (Public Law 103-337) authorized science and technology reinvention laboratories to experiment with innovative personnel demonstrations to attract and retain quality engineers and scientists. These demonstrations were required to be similar in nature to the China Lake, CA, demonstration project. This requirement allows demonstration project laboratory directors to have more control of the personnel function.

The Aviation and Missile Research, Development and Engineering Center (AMRDEC) implemented the Personnel Demonstration Project in September 1997. This article summarizes the major features of this demonstration project as well as the benefits derived from 3 years of experimentation.

Background

During the past 30 years, studies have documented the plight of DOD laboratories in achieving their mission objectives. These studies generally indicate that DOD laboratory directors do not have adequate decision authority over critical processes that impact the quality of laboratory products. These critical processes are typically inherent in systems associated with procurement, financial, personnel, and facility efforts.

Most of the past studies of DOD laboratories addressed a narrowly defined problem area. However, the report of the 1987 DOD Summer Science Board on Technology Base Management led to a broad spectrum of actions to significantly reduce the

plight of DOD laboratories. One such action was the 1989 establishment of the DOD Laboratory Quality Improvement Program (LQIP), which led to revolutionary management changes in selected laboratories. Efforts of the LQIP have resulted in at least five successful legislative initiatives to improve the overall decision authority of laboratory directors. One of these initiatives, Section 342 of the NDAA for FY95 (Public Law 103-337), provides the authority for AMRDEC to conduct its personnel demonstration, which was approved by a *Federal Register* process.

Major Modifications

The Personnel Demonstration Project introduced major modifications to established personnel policies and procedures. These modifications were designed to develop the best workforce to carry out AMRDEC's mission, to adjust the workforce to changing circumstances, and to improve workforce quality. The experimental project is chartered to demonstrate that allowing greater managerial control over personnel functions can enhance the effectiveness of AMRDEC. Expectations include increased retention of high-quality employees and increased customer satisfaction with AMRDEC and its products. The key modifications to the project and their expected benefits are listed below.

- *Broadbanding.* Reduce the number of classification decisions and promotion actions required during an employee's career, provide a broader range of performance-related pay for each level, and extend the range of the General Schedule (GS) system beyond

the GS-15 level for a senior scientific technical manager.

- *Pay-For-Performance System.* Link compensation to performance through annual performance appraisals and scores, guarantee pay increases and/or performance bonuses in proportion to performance scores, and permit discretionary compensation for extraordinary employees.

- *Simplified Classification System.* Transform the supporting personnel system from a classification-driven system to a performance-driven system, increase flexibility to assign employees (without pay change) according to the needs of AMRDEC, and provide delegated classification authority to line supervisors.

- *Hiring And Appointment.* Make timely offers to highly qualified candidates, reduce appointment authorities to four, make job offers with starting salaries anywhere within a payband, extend probationary periods up to 2 years, and provide a voluntary (emeritus) employee category of retired or separated engineers and scientists.

- *Employee Development.* Complement existing developmental opportunities (e.g., long-term training) with employee sabbaticals, and provide training that may lead to an advanced degree for critical skills (shortage or nonshortage categories).

- *Personnel Management Board.* Provide credible oversight of the project via partnership among AMRDEC management, employee representatives, and Equal Employment Opportunity Office representatives; provide quick resolution to atypical employee pay issues; and expedite employee retention pay offers.

Program Benefits

After several years in the demonstration project, both AMRDEC employees and managers have realized a broad range of benefits. For instance, a simplified pay-for-performance system eases the burden of employees and managers. This system uses a standard formula to determine compensation that is linked to an employee's individual performance. Performance compensation is usually paid in the form of an annual base-pay increase and/or a performance bonus. Approximately 82 percent of AMRDEC employees have received both a base-pay increase and

a bonus during the past three performance periods. In addition, managers have identified approximately 5 percent of demonstration employees as extraordinary performers. For these employees, the AMRDEC Personnel Management Board awarded additional compensation of up to 18 percent of base pay, which is in addition to the formula-derived compensation.

Prior to the demonstration, engineering and scientific employees could experience many managerial promotion decisions (seven or eight) during their progression to the top of their career ladders. The broadbanding feature of the demonstration has reduced these critical decision points to less than three. Another benefit to employees is the simplified assignment process—a written memorandum between two managers. This process enhances achievement of employee career goals by allowing employees to quickly move to more challenging work assignments.

Another benefit of the demonstration is that two AMRDEC employees have been approved for paid sabbaticals to conduct onsite research in collaboration with university professors. Additionally, the Voluntary Emeritus Program has allowed seven retired federal employees to continue their research work in support of AMRDEC's mission. These emeritus employees provide essential mentoring to newly hired employees at no cost to the government.

Managers have also accrued significant benefits from the demonstration project. Through the use of 24 benchmark position descriptions, which apply to more than 2,000 AMRDEC employees, managers have shifted their focus from a classification-driven personnel system to a business-driven process that emphasizes employee development and performance. Official personnel actions have been dramatically reduced, providing managers more time to focus on employee development, performance, and customer support. Managers are now able to more easily identify top performers, and tools are in place to provide relevant compensation to those employees. Additionally, managers may recommend to AMRDEC's Director additional compensation for supervisors with base-pay adjustments and/or differentials up to 10 percent of base

salary. Approximately 70 supervisory differentials have been approved to date.

Managers also now have the flexibility to set the starting salary of new employees anywhere within the salary range of a payband, commensurate with qualifications. This flexibility has been particularly useful in the recent hiring of more than 200 high-quality employees from within and outside of government. Demonstration managers have also benefited from elimination of the "rule of three" for external hiring. This change allows managers to select from large lists of quality candidates, constrained only by the priority given to veterans on the selection list. Additionally, potential employees with a grade point average of 3.5 or greater have been offered a broader salary range in negotiating entrance salaries.

Implementation of demonstration projects across DOD has resulted in several waivers and legislative initiatives that reduced some external controls on AMRDEC's Director. These actions eliminated high-grade controls and supervisory ratios, altered the DOD priority placement process, and provided a laboratory grace period prior to implementing hiring freezes. And, because this demonstration project partners closely with the bargaining unit representative (American Federation of Government Employees Local 1858), laboratory management and the union enjoy a more productive relationship.

Environment

AMRDEC implemented and carried out this project during a turbulent period for federal employees, which resulted from the following actions:

- *Base Realignment And Closure (BRAC) 95.* BRAC 95 led to a merger in 1997 of the Army Aviation Systems Command and the Army Missile Command with associated program budget guidance personnel reductions of approximately 527.

- *National Performance Review.* Reducing high grades from the Oct. 1, 1992, level, doubling of employee-to-supervisor ratios, and downsizing by at least 30 percent.

- *Defense Reform Initiative Directive 20.* This directive designated many

positions (at least 35 percent) as subject to review for contracting out.

The environment described above was probably the worst one possible for implementing a personnel demonstration. Employees knew there were many constraints on their career development opportunities and that their future employment was under review. For the most part, employees cited the demonstration project as the reason for the uncertainty and turbulence in their lives. This reasoning impacted employee acceptance of the project because after 2 years, the acceptance rate was only 37 percent.

Conclusion

Although the AMRDEC personnel demonstration has no congressional constraints, it does have a self-imposed review scheduled at the end of 5 years using an impact model developed by the Office of Personnel Management and DOD. A specific evaluation criterion, which was not used in the China Lake experiment, deals with whether AMRDEC has improved its organizational performance. This assessment is subjective, at best. Various indicators of laboratory "health" are being recorded, however, including turnover rate, external recognition, and customer satisfaction. One such indicator determined that with 33 percent fewer employees today than in FY90, AMRDEC has achieved a 46-percent improvement in its customer satisfaction rating. The operating premise in the demonstration is that quality employees produce quality products and services.

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NEW INITIATIVES FOR DEVELOPING A MULTISKILLED AMC WORKFORCE

Introduction

To meet the challenges of the Army's transformation—particularly in view of the recent loss of significant numbers of talented and experienced personnel—the U.S. Army Materiel Command (AMC) urgently needs to maintain a highly knowledgeable and multiskilled workforce. AMC has responded to this challenge with multidimensional initiatives for developing and retaining a flexible workforce with the necessary expertise. These initiatives are designed to rejuvenate our human resources in the areas of acquisition, logistics, science, technology, and the skilled trades.

Workforce Challenges

AMC's workforce is still composed of skilled, experienced, and highly capable civilians who have dedicated their careers to the Army. However, during the last 12 years, base closures and infrastructure reductions have significantly reduced resources. Furthermore, by the year 2005, more than 53 percent of AMC's civilians will be eligible for retirement. The median employee age has increased to 49 years; in the trades and crafts area, 45 percent of workers are over age 50, well within reach of retirement.

These statistics highlight a workforce imbalance that began in FY89. Successive years of downsizing have reduced AMC's civilian strength to just over half its former size. A downsizing of this magnitude relied on

Carolyn L. Baker

reduction-in-force (RIF) procedures, which typically retain employees based on years of service. Also, AMC initiated a hiring freeze so that current employees could be placed in vacancies. Usually, the more senior employees were placed. This minimized the RIF impact significantly, but essentially cut off the pipeline of new and younger talent.

While AMC downsized, its mission requirements continued to change and its workforce skills did not keep pace. AMC's goal was to downsize in a humane manner by minimizing the adverse impact on employees rather than wholesale restructuring and reshaping. Despite these efforts, significant workforce imbalances resulted.

In 1998, AMC initiated Work Force 2010, an aggressive study that identified the command's past employment trends and future workforce needs, and developed strategies to balance them. The charter for the General Officer/Senior Executive Service Steering Committee stated that AMC must have "the work force and skill balance needed to meet our mission requirements." The study highlighted two primary courses of action to enable AMC to shape the future: legislative changes and training of the workforce.

Legislative changes were needed to deal with skill imbalances and to

attract new, high-quality employees. AMC has championed several such legislative changes that were adopted by Congress in the *National Defense Authorization Act for FY01*. One change allows repayment of student loans for new employees. This will be an excellent incentive for attracting recent college graduates to the federal workforce. The act also expands AMC's ability to pay civilian employee tuition for academic degrees, including advanced degrees. This incentive will also make federal employment more attractive.

Another change allows the use of Voluntary Separation Incentive Pay (VSIP) authority to provide a monetary incentive to eligible employees to retire without reducing the workforce. This restructuring VSIP is a useful tool to deal with skill imbalances and to ensure that AMC retains employees with the right skill mix for the future. Currently, AMC is urging HQDA to continue to seek legislation to allow hiring flexibility and compensation.

Training was the second course of action identified in the Work Force 2010 study. Revitalization efforts within all segments of AMC's workforce are strong, according to the study. However, AMC needs to accelerate its efforts to bring in new talent, new ideas, and new skills. AMC has several recruiting and training initiatives to accomplish these goals. A discussion of several of these initiatives follows.

Recruiting And Training

The Student Temporary Employment Program (STEP). This program is being used to hire apprentices through high school and post-secondary school cooperative education programs at Tobyhanna, Aniston, and Corpus Christi Army Depots. STEP helps foster relationships with state agencies as well as with local technical schools. Young students are provided an on-the-job training experience while completing their education. The goal of the program is for the students to obtain the skills and abilities necessary to move into the workforce with the potential of promotion to the journeyman level as mechanics, machinists, and welders. STEP effectively markets America's Army as an employer of choice.

AMC Apprentice Program. This program involves training a successor workforce in the trades and crafts areas at our depots. A skill assessment was conducted in critical areas such as ammunition, aircraft overhaul, and armament work; and a comprehensive training and orientation program was developed. The apprentices learn from the professionals and receive hands-on experience with the experts before they retire. The apprentices sign an agreement to remain with the federal government for 3 years after they receive 4 years of training. The apprentices also sign a mobility agreement so that AMC can place them where needed within the command after the training is completed. Congress provided \$3 million for this program in the *National Defense Authorization Act for FY01*. AMC is hiring 82 new apprentices. Some began training at six locations throughout the command in FY01.

AMC Fellows Program. This 5-year fellowship is targeted at the professional, management, and technically oriented occupations. Again, AMC assessed critical shortfalls and imbalances in our core competency areas of logistics power projection, acquisition excellence, and technology generation. Subsequently, a program was developed to train future AMC leaders who will be multiskilled

and multifunctional in two or more program areas. During the 5-year fellowship, employees move from entry-level to senior-level positions in a program that offers training in various functional specialties supporting AMC core competencies. Participants work toward an advanced academic degree while participating in rotational assignments in specific career fields at various levels in the command. AMC fellows will get Army field experience, leadership training, and core curriculum training in resource management, information technology, contracting, acquisition, and human resources. Approximately 50 fellows will start the inaugural program this year.

The Acquisition Career Experience (ACE) Program. This is a summer program that focuses on revitalizing the acquisition workforce. College students with business backgrounds are recruited on a cooperative basis during their final 2 years of college. The concept for the ACE Program was developed by the AMC Assistant Deputy Chief of Staff for Research, Development and Acquisition, and the U.S. Army Communications-Electronics Command Acquisition Center, along with the Headquarters AMC Deputy Chief of Staff for Personnel. They established a partnership with the Acquisition Career Management Office, which reports to the Assistant Secretary of the Army for Acquisition, Logistics and Technology, who agreed to provide the seed money to start the program.

During its pilot year in summer 2000, the ACE Program was initially partnered with the Integrated Science and Technology Program (ISAT) at James Madison University in Harrisonburg, VA. The ISAT Program focuses on developing students with multifunctional and business training. Following a successful first summer, the ACE Program was expanded nationwide to schools in every region of the country. This summer, approximately 40 students are working cooperatively with mentors to learn about specific acquisition issues and challenges. Students who successfully complete the program will have the opportunity to noncompetitively

enter an intern program in one of the acquisition career fields or the AMC Fellows Program. (For more information on the ACE Program, see the article on Page 44 of this issue.)

The Career Related Experience in Science and Technology (CREST). This initiative focuses on recruiting undergraduate and graduate students who are pursuing an engineering and related science degree in an area in which the Army is recruiting. Like the ACE Program, CREST provides summer and/or part-time employment for a minimum of 640 hours per student. The training and experience qualify students for an appointment to a civilian engineer or scientist position in the Army Intern Program following completion of their degree. As of April 2001, the CREST Program has 83 active participants and has already contributed 59 recruits to the Army's Intern Program.

Conclusion

The initiatives discussed in this article are only the first steps in recruiting and maintaining a highly proficient AMC workforce. AMC's challenge is to create a continuous learning environment for employees in all career stages. In today's Army, new strategies must be created for all job categories and programs must be in place to continuously revitalize and balance the workforce. Clearly, the belief that learning is a life-long endeavor has never been more true for AMC than it is today. AMC realizes the challenge is great, but AMC's aggressive and organized efforts are equal to the task.

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An Unparalleled Experience . . .

UT AUSTIN'S SENIOR SERVICE COLLEGE FELLOWSHIP PROGRAM

COL Sharon L. Holmes and LTC Kenneth D. Polczynski

Introduction

The Army Fellowship Program is governed by Army Regulation (AR) 621-7, *Army Fellowships and Scholarships*. This AR requires that fellowships be offered at educationally superior agencies and institutions and senior officers be provided with a Military Education Level 1 (MEL 1) experience, as well as exposure to subject matter areas they would not otherwise receive at a traditional senior service college (SSC). The Senior Service College Fellowship Program (SSCFP) at the University of Texas (UT) at Austin meets the educational requirements of both the Army and the Army Acquisition Corps (AAC) by mirroring certain blocks of the Army War College (AWC) curriculum and leveraging the wealth of research, science, and technology at UT Austin.

The fellowship program consists of an acquisition track sponsored by the Assistant Secretary of the Army for Acquisition, Logistics and Technology and a modeling and simulation (M&S) track (live, virtual, and constructive) sponsored by the Army Deputy Chief of Staff for Operations and Plans. These two tracks are integrated and run concurrently, providing the fellows with instruction on both acquisition and M&S-related topics and their applicability to doctrine, training, leader development, organization, materiel and soldiers as well as the Army's transformation to an objective force. Fellows reside in Austin for approximately 10 months and, upon completion of the program and graduation, are awarded a MEL 1 designation.

Selection Process

Annually, a centralized Department of the Army (DA) selection board designates Active duty military officers for SSC attendance. When the results are released, the U.S. Total Army Personnel Command slates designated attendees to war colleges and fellowship programs.

Reserve component (RC) officers (U.S. Army Reserve (USAR) and Army Reserve National Guard (ARNG)) are chosen much the same way as Active duty officers—by selection board. To qualify, RC officers must be an O-5 or an O-6, possess a master's degree, and have at least 2 years remaining prior to a mandatory removal date.

Civilian AAC personnel apply for attendance to the AWC or an SSCFP in accordance with Chapter 2 of *The Army Civilian Training, Education and Development System (ACTEDS) Training Catalog*. This catalog can be accessed online at <http://www.cpol.army.mil/train/catalog>.

The UT's Center for Strategic Analysis (CSA), formerly known as The Center for Professional Development and Training, manages the UT Austin fellowship program. Fellows attend classes focused on the development and implications of public policy, as well as in their particular areas of interest. CSA provides numerous short seminars and tours throughout the year on issues relevant to national security, acquisition, future technology, and M&S.

The 2000-2001 UT Austin SSCFP is totally representative of "One Army." The class consists of five Active duty military officers, two USAR officers, two

ARNG officers, and one DA civilian. Seven fellows comprise the acquisition track, two make up the M&S fellowship, and the DA civilian is pursuing a master's of science degree in science and technology commercialization at the Innovation Creativity Capital (IC2) Institute.

UT Austin

UT Austin is a Tier-1 school, ranked among the top 50 schools in the Nation, and is world renowned for the quality of its faculty, research expertise, and excellent academic programs. The UT faculty is distinguished both nationally and internationally and includes Nobel laureates and leaders and former leaders of government, business, and academia. A recent addition to UT is the very high-tech Applied Computational and Engineering Science Building designed specifically for faculty and graduate students to interface while conducting research.

UT Austin provides unparalleled opportunities for fellows to experience world-class instruction and exposure to public policy, business, acquisition, and engineering experts—experiences few could replicate.

SSCFP

The UT SSCFP consists of a trilateral approach addressing the relationships among national security policy and processes, critical technologies and applications on the future battlefield, and the industrial base. While these modules represent the core components of the program, each fellow is able to audit graduate-level courses at UT that enhance their particular areas of expertise. The courses most often pursued are in the fields of engineering, communications, computing, negotiations, business, and leadership.

National Security

The national security module commences with a comprehensive presentation by MG David Goodrich (USAF, Ret.), former Commandant of the Industrial College of the Armed Forces and a current Naval War College Professor. This presentation introduces the elements of national power and the organizational structure and processes for the Office of the President, Congress, the National Security Agency

(NSA), DOD, and the Department of State.

These components are expanded on at UT's Lyndon B. Johnson (LBJ) School of Public Affairs. Fellows audit two courses during the year: Policy Development taught by Professor Elspeth Rostow and Perspectives in Public Policy taught by ADM Bobby Inman (USN, Ret.). Both Rostow and Inman have extensive experience in national security strategy formulation and execution and, through classroom instruction, are able to share their tremendous insight and knowledge with the fellows.

Augmenting this module are additional guest speakers from DOD, other Services, the State Department, and other national agencies. For example, Dr. Edwin Dorn, former Under Secretary of Defense (Personnel and Readiness) and current Dean of the LBJ School of Public Affairs, provides insights relative to education, technology, defense, and the Executive Branch. In small discussion groups, fellows spend 2 to 6 hours with each speaker. Also scheduled are symposiums such as the San Antonio World Affairs Council.

Critical Technologies

The critical technologies module introduces fellows to new technologies and applications that are pertinent to the future battlefield and developed by industry and academia. Scientists and engineers employed by UT centers and laboratories or local industry present a myriad of special survey courses, technical seminars, and guest lectures. Topics include microelectronics, robotics, electric guns, hybrid vehicles (electric), electric storage devices, directed energy, biological and chemical defense, biotechnology, networking, and advanced computing. Reinforcing these offerings are seminars presented by the IC2 Institute addressing technology issues relative to the rapid development, transfer, and commercialization of emerging technologies. Finally, fellows visit and tour Division XXI at Fort Hood, TX, approximately 65 miles northwest of Austin, to familiarize themselves with the technology in the digitized division.

Industrial Base

The industrial base module features tours and briefings at local industries, the University's Quality Manage-

ment Consortia (QMC), and guest speakers to round out the UT fellowship experience. Fellows also get a rare opportunity to gain exposure to the "dot.com" industry and established computer companies. During these visits, corporate executives and program managers discuss their company structure, mission, programs, and innovative technologies, as well as conduct tours of the facilities and laboratories. The QMC also conducts semimonthly executive-level leadership seminars on a broad range of topics. Each class also visits Stewart Stevenson Corp., the company that manufactures the Army's Family of Medium Tactical Vehicles. This visit includes a briefing about the company, the challenges of manufacturing and testing, and contracting issues.

In October 2000, the General Officer Steering Committee, providing oversight to CSA, recommended that the fellowship program also incorporate presentations from and visits to small, entrepreneurial businesses. This will allow fellows insight and understanding of how these enterprises rapidly develop and commercialize new business, improve manufacturing processes, and incorporate innovative technological approaches.

Culminating Event

The fellowship culminates with a strategic-level crisis reaction exercise designed around three separate scenarios involving Korea, the Baltics, and Russia. This exercise provides capstone training in developing strategic direction for U.S. foreign and military policy. Fellows role-play senior leadership positions and choose either a political or military solution depending on the circumstances of the crisis. They also develop strategies, force structure, and resource allocations, and present courses of action to NSA and Vice Chairman Joint Chiefs of Staff. A retired Army lieutenant general leads the exercise.

Program Enhancements

Future program changes include increasing emphasis on strategic studies and analysis dedicated to acquisition issues, enhancing the emerging critical technologies and industrial base modules, synergizing with Fort Hood and Division XXI, and incorporating more "jointness." To accomplish this,

CSA intends to extend relationships with the acquisition community, expand linkages to the LBJ School of Public Affairs and the School of Business, and initiate relationships with entrepreneurial businesses to understand the "venture-capital" business and market process. Additionally, other Service and government agency fellows and speakers will be included in the class structure and curriculum.

CSA is establishing a 2-year fellowship position. The individual will attend the UT SSCFP for the first year, followed by a year as the Program Director for CSA's Strategic Studies Cell. This initiative is supported by the Director of the Army Acquisition Corps and is scheduled for implementation in 2002.

Conclusion

SSCFP provides a distinctive MEL 1 experience unparalleled by any other SSC program. It is highly regarded and supported by Army senior leaders (active and retired), distinguished guest speakers, and university professors. UT Austin and the local vicinity accords a tremendous opportunity for Service personnel to enhance their expertise in national policy, strategic acquisition issues, emerging technologies, and both Defense and high-tech industrial base organizations. This is an experience not to be missed!

For more information on the SSCFP at UT Austin, contact Jim Pollard, (512) 232-4560, Jim_Pollard@iat.utexas.edu; or Dr. Jerry Davis, (512) 232-4554, Jerry_Davis@iat.utexas.edu at CSA. Additional information is also available on the UT Web site at <http://www.utexas.edu/research/cpdt>.

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Introduction

During the last several years, DOD has published numerous reports that indicate the enormous challenges facing its acquisition workforce. In its October 2000 final report, *Shaping the Civilian Acquisition Workforce of the Future*, the Acquisition 2005 Task Force highlighted two particularly alarming trends. First, it is becoming increasingly difficult to attract, retain, and develop "the best and brightest" college students for civilian acquisition positions. Second, and equally significant, approximately half of the acquisition workforce will be eligible to retire by 2005. Taken individually, these problems seem manageable. However, when considered together, these problems provide evidence that DOD is at the threshold of dire circumstances regarding its civilian force structure.

As civilian job opportunities become more technological in nature, government agencies must now compete with private industry to hire new employees from a highly competitive, tight labor market. With the larger economic incentives afforded by private companies and the myriad of personnel rules and regulations propagated by the government, it seems evident why the government is challenged to recruit exceptional talent. Faced with the twin dilemmas of a retiring workforce and a difficult recruiting environment, the Army Acquisition Corps has engineered several innovative solutions to attract talented students into its fold. One successful cooperative initiative spearheaded by the Army Acquisition Career Management Office (ACMO), the Army

Developing Our Future Workforce . . .

THE ACQUISITION CAREER EXPERIENCE PROGRAM

Matthew Savare

Acquisition Executive Support Agency (AAESA), the Army Materiel Command Headquarters (HQ AMC), and the Communications-Electronics Command (CECOM) Acquisition Center is the Acquisition Career Experience (ACE) Program.

Birth Of A Program

In February 2000, the ACMO, AAESA, HQ AMC, the CECOM Acquisition Center, and James Madison University signed a Memorandum Of Agreement (MOA) that established the foundation of the program. The MOA established ACE as a paid, 2-year academic and government joint program where college sophomores and juniors from multifunctional academic backgrounds learn the issues and challenges surrounding the development, procurement, and deployment of state-of-the-art equipment. Students partner with a university academic advisor and an Army mentor to collaborate on challenging projects. These collaborations often culminate in a senior thesis project.

The ACE Program is based on the Student Educational Employment Program (SEEP). The regulations guiding the current SEEP were pub-

lished in the *Federal Register* on Dec. 16, 1994, and were codified into the 1995 *Code of Federal Regulations*, citation 5 CFR 213.3202.

The first year group commenced in the summer of 2000 when seven students from James Madison University's Integrated Science and Technology Program and Business Program signed up to inaugurate the ACE Program. During their summer and winter breaks, these seven students worked in a variety of organizations and contributed their best efforts

to the mission and goals of the Army. Based on the students' strong performance and the positive feedback received from them and their sponsoring organizations, the ACMO decided to expand its efforts in 2001. While the ACE Program was restricted to James Madison students in the first year and placed these students in the National Capitol Region (NCR) and Fort Monmouth, NJ, the ACMO planned to increase its recruitment efforts in 2001 and market to many different schools in a variety of regions.

Expansion

During the last several months, the ACMO has proceeded with these ambitious plans for expansion. First, the ACMO authorized and centrally funded 40 new ACE positions for 2001. Second, acquisition career managers (ACMs) from all five regions (Northeast, NCR, Central, Southern, and Western) participated in local college career fairs to broaden the scope of their recruiting efforts. Third, the ACMs used the power and cost effectiveness of the Internet to target their search for qualified applicants. Finally, several organizational leaders from Warren,

MI, and the NCR were so impressed with the program that they funded additional slots with their own local funds.

The results of these efforts were impressive. The ACMs were able to recruit the 40 centrally funded students and the additional locally funded students. More important, the students are from a wide variety of backgrounds and schools, and unlike last year's group—which was comprised of all young men—this year's group contains many young women as well. All the applicants were board-selected by the U.S. Total Army Personnel Command, which ensured that the students selected to participate in the program embodied the strong values, intellectual aptitude, willingness to learn, and commitment to excellence that the Army is seeking.

The ACMO is dedicated to constantly improving the processes and elements of the ACE Program. To learn lessons from its first year group, the ACMO solicited feedback from the initial seven ACE students. After carefully considering and analyzing the data, the ACMO made some important changes to improve the program. For example, the students resoundingly stated that their mentors were the most important aspect of the program. The ACMO listened to this feedback and tasked the regional ACMs to conduct more formal training with the mentors than they had received in the previous year. In addition, the regional ACMs also conducted a more formal orientation for the students.

To facilitate the students' learning and provide them an appreciation and understanding that what they are doing is important, the ACMs and mentors were encouraged to describe the missions and functions of DOD, the Army, and the organizations in which the students work. Without an awareness of the "big picture" or the context of their jobs, students may feel that they are

The ultimate goal of the ACE Program is to recruit students and demonstrate to them that the Army is a challenging, interesting, and rewarding organization for which to work.

just pushing paper. The ACMO worked diligently to avoid this misconception and instill a sense of importance and pride in the students.

When programs are expanded, there is usually a concomitant decrease in personal contact with the participants. The ACMO, aware of this potential adverse impact, took extra steps to maintain the high level of personal involvement not only with the students, but also with the mentors. During the mentor and orientation sessions, the ACMs stressed the value of continual feedback from all the stakeholders. By encouraging honest and timely communication among mentors, students, and ACMs, the ACMO hopes to make the ACE Program a more effective and worthwhile experience now and in the future.

Conclusion

The ultimate goal of the ACE Program is to recruit students and demonstrate to them that the Army is a challenging, interesting, and rewarding organization for which to work. The program is structured to noncompetitively access ACE graduates into an Army intern program by using the Outstanding Scholar Program—provided they complete

640 hours of ACE Program work prior to graduation and accept the Army's job offer within 120 days of graduation.

All parties involved benefit from the ACE Program. First, the Army will attract and groom acquisition leaders of the future. By recruiting exceptional students during their sophomore and junior years as opposed to waiting until they graduate, the Army has a better chance of competing with private industry. Second, the students will learn the issues and challenges facing the acquisition field while simultaneously earning money and, where applicable, receiving college credit and completing their senior thesis. Finally, the participating colleges and universities will collaborate with several technologically advanced organizations, enabling the university to offer students additional career opportunities.

The ACE Program represents a cost-effective opportunity to infuse new ideas into Army programs and processes, while recruiting and training our leaders of tomorrow.

To learn more about this wonderful opportunity, contact your regional ACM. A listing of ACMs is located online at <http://dacm.rdaisa.army.mil>. A more detailed description of the ACE Program is located on the ACE home page at <http://dacm.rdaisa.army.mil/Acepage/index.htm>. This Web site was created, designed, and developed by an ACE student.

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ACHIEVING QUALITY IN DISTANCE LEARNING

LTC Paulette A. Mittelstedt

Introduction

Distance learning provides training and educational opportunities to military personnel who must be available to deploy anytime and anywhere. Distance learning is an adjunct to traditional educational delivery that offers a proliferation of choices. Course content can be packaged and distributed more efficiently to a wider audience and in a variety of geographic locations, and information can be tailored to meet the needs of individual learners.

Army Distance Learning

The significant force and resource reductions following the Cold War and Persian Gulf conflict precipitated a reevaluation of the Army's training management system. The Army was supporting deployments worldwide, with an increasing reliance on Reserve components. To meet training challenges, the Army is implementing a distance learning system consisting of a network of information architectures and linkages to support individuals, schools, and units. There are four primary distance-learning initiatives: the Army Distance Learning Program (ADLP), Classroom XXI (CRXXI), the Army Doctrine and Training Digital Library (ADTDL), and the Army University Access Online.

In April 1996, the Army Distance Learning Plan was published. The objective of the plan was to increase and sustain force and unit readiness by offering a broad range of training options for unit operational needs and individual soldiers.

In 1999, the distance learning program was examined for ways to improve training, enhance readiness, and support the Army transformation. The ADLP, in collaboration with the

National Guard Bureau's Distributive Training Technology Project and the U.S. Army Reserve Education and Learning Program, will provide standardized training and educational opportunities to soldiers and civilians anytime and anywhere by exploiting current and emerging distance learning technologies.

CRXXI focuses on leveraging technology to use information in a variety of ways to increase the Army's war-fighting capability. ADTDL, the information foundation for CRXXI, provides an interactive library for trainers, training and combat developers, resource managers, and Active and Reserve component soldiers worldwide.

In July 2000, Secretary of the Army Louis Caldera introduced Army University Access Online. The subsequent contract awarded in December 2000 will provide distance education to an estimated 80,000 soldiers during the next 5 years. This initiative prepares information age-savvy soldiers for the digital challenges of the 21st century and enhances recruiting incentives for young adults who may otherwise be inclined to move directly from high school to post-secondary education. Online education offers soldiers an opportunity to serve the Nation while achieving their personal educational goals.

Technologies

Distance learning is defined in many ways, but all the definitions focus on the use of technology to support innovations in teaching and learning. Technology is not a substitute for solid teaching but rather a tool for helping teachers teach and for helping students learn. There are a significant number of technologies available for the delivery of distance learning, and

selecting the medium is an important part of the efficiency and effectiveness of the course. The chart on Page 47 depicts the evolutionary development of distance learning technologies.

High-Quality Standards

Distance learning has a viable role in assisting the Army achieve its training and educational objectives; however, ensuring high-quality standards is paramount. Distance learning must be concerned with legitimacy and accountability, hence it is important to differentiate between quality assessment and quality assurance. Quality assessment systems are tools or mechanisms (such as examinations) that assess program outcomes. Quality assurance systems are concerned with creating and maintaining conditions by which students can achieve the desired outcome.

Classroom Comparison

Is technology-assisted distance learning as effective as traditional face-to-face classroom instruction? Thomas L. Russell, author of *The No Significant Difference Phenomenon*, compiled a summary of 355 research reports, summaries, and papers written between 1928-1998. Russell concluded that there is no significant difference in the effectiveness of the two media.

A similar review of distance education studies released by The Institute for Higher Education Policy suggests that existing research leaves too many questions unanswered or inconclusive. Its 1999 report entitled *What's the Difference?* examined the written material published during the 1990s. The report provided three broad implications on the proliferation of distance learning in the areas of quality of the access, technological replacement of the human factor, and focus on learner characteristics and student motivation rather than on technology.

Good distance teaching practices are fundamentally the same as good traditional teaching practices, focusing on the way in which information is communicated to a student and the manner in which the student learns the material and constructs new knowledge from the information presented.

The following discusses two characteristics of the learner that should be considered.

Cognitive Considerations Of The Learner. Cognitive learning styles of an

Timeframe	Media	Communication Features
1800s to 1960	<ul style="list-style-type: none"> • Print (1800s) • Radio (1930s) • Television (1950s/1960s) 	<ul style="list-style-type: none"> • Primarily one-way communication • Interaction between student and faculty by telephone and mail
1960 to 1985	<ul style="list-style-type: none"> • Audio/video cassettes • Television • Fax • Print 	<ul style="list-style-type: none"> • Primarily one-way communication • Interaction between faculty and student by phone, fax, and mail • Occasional face-to-face meetings
1985 to 1995	<ul style="list-style-type: none"> • E-mail/chat sessions/bulletin boards • Computer/CDs/Internet • Audio/video conferencing • Fax • Print 	<ul style="list-style-type: none"> • Broadband communications from faculty to student via print, computer, and videoconferencing • Two-way interactive capabilities for asynchronous and synchronous communication • Internet for text/graphics/video snippets
1995 to 2005 (est.)	<ul style="list-style-type: none"> • E-mail/chat sessions/bulletin boards • Computer/CDs/Internet • Audioconferencing • Fax • Print 	<ul style="list-style-type: none"> • Two-way interactive real-time audio and video • Asynchronous and synchronous communications • Digital video transmission with databases available via Internet and World Wide Web

Evolution of distance learning activities

individual include the predispositions of perceiving, remembering, organizing, processing, thinking, and problem solving. To optimize these characteristics, instructional design and development considerations should include the following:

- Analyzing the cognitive characteristics of students and matching the cognitive styles to the instructional content;
- Maintaining supportive online assistance;
- Aligning teaching style and instructional materials to the various cognitive styles of students; and
- Assessing what the students learned in the areas of knowledge, comprehension, application, analysis, synthesis, and evaluation.

Psychological Considerations Of The Learner. Motivation is an important psychological element that refers to factors regulating an individual's readiness or commitment to expend energy on a particular task at a particular time. In the traditional classroom setting, it is natural to engage in learning activities. Conversely, distance learning is usually in a different physical environment such as home, where television or children playing may be a distraction, and where there is a lower degree of social motivation. However, the learning experience can be positive because students learn without fear of being embarrassed in a classroom.

Another important psychological factor is the organization of learning. In a traditional classroom environment, learning occurs at a scheduled time, duration, and location and focuses on specific subject matter—all of which provide a degree of rigidity. In a distance learning environment, learners engage in learning activities at their convenience, for the most part, and the material can be reviewed repeatedly until the information is understood rather than going at the pace of the teacher and classmates.

Guidelines For Success

Media is the vehicle that delivers instruction, but it is the content of the vehicle that influences achievement. The materials should present the content in ways that make it understandable for learners of widely differing ability, background and knowledge, and previous experience. The key to improving learning is determined by how effectively a medium is exploited in the teaching-learning situation. Effective distance learning can take place by applying five important criteria: provide courses that are interactive, provide courses that allow for reflection and practice, provide courses that offer variety in presentation, provide course material that is relevant, and provide course information that is accurate and appropriate.

The Institute for Higher Education Policy published a report in March 2000 entitled *Quality On the Line: Benchmarks for Success in Internet-Based Distance Education*. The report

examined the public debate on the merits of Internet-based learning and provided tangible measures of quality in distance learning, identifying 24 benchmarks within 7 categories: institutional support, course development, teaching and learning benchmarks, course structure, student support, faculty support, and evaluation and assessment.

The Regional Accrediting Commissions, which ensure the quality of most degree-granting institutions of higher learning in the United States, also drafted guidelines for the evaluation of electronically offered degree and certificate programs. Its guidelines are divided into five components: institutional context and commitment, curriculum and instruction, faculty support, student support, and evaluation and assessment.

Conclusion

Distance learning provides access to training and education for a greater audience because course content can be packaged and distributed more efficiently. There is no single "best way" to deliver distance learning simply because learning is an individual process. Student success in a distance learning environment is largely dependent on the individual's cognitive and psychological characteristics. No medium in and of itself will improve learning in a significant way. However, the key to improving learning is determined by how effectively a medium or delivery technology is exploited in the teaching-learning situation.

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Introduction

The mission of the U.S. Army Research Office (ARO) is to seed scientific and far-reaching technological discoveries that enhance Army capabilities. As such, during the past 20 years, ARO has addressed a broad spectrum of challenges at the basic research level including aspects of corrosion, refractory materials erosion, novel electroplating, adhesion, analytical methods for determining hydrogen concentrations in materials, corrosion prevention with novel coatings, and composite laminates. This research was driven by concerns about higher-temperature pressure-explosive effects on gun tubes, increased resistance to pitting, general corrosion, and hydrogen embrittlement of Army equipment. Overall objectives are for increased reliability and maintainability in addition to improved performance and new capabilities.

SBIR Program

Gun tube requirements for longer range and more rapid fire have provided severe challenges to current and planned systems. As the 21st century commences, new technology beyond thin coatings is required to help gun tubes survive expected conditions. In response to this challenge, in July 1996, the Army Research Laboratory (ARL) sponsored a Sagamore Workshop on Gun Barrel Wear and Erosion. In September 1996, ARO cosponsored with the University of Michigan a small industrial, academic, and government workshop to assess the future direction of short- and long-term gun tube research and development. Concurrently, explosive bonding of tantalum (Ta) liners was recognized as a short-term solution to foreseeable gun tube needs and was an excellent adjunct for other existing

NEW DIRECTIONS FOR ADVANCED GUN TUBES

Robert F. Lowey, Thomas J. Schilling,
and Dr. Robert R. Reeber

and planned Army efforts. With that information in hand, ARO justified a small business innovative research (SBIR) program.

In response to this initiative, in January 1998, TPL Inc. of Albuquerque, NM, became involved because of its role in demilitarization of propellants, pyrotechnics, and other energetic materials for the U.S. Army and Navy with a Phase I SBIR. Using several byproducts of various demil projects, TPL had already developed a unique explosive where the detonation velocity could be raised or lowered depending on the need.

Development of this explosive formulation provided the incentive for TPL to respond to the ARO-sponsored SBIR Phase I solicitation with a unique approach for explosively bonding thick clads of erosion-resistant metals to the bore of simulated 120mm gun tube sections. The explosive detonation rate was tailored to the velocity requirements of the two metals being clad. A ring of explosive was positioned around the tube of material to be bonded to the gun bore. This led to the first successful explosive bonding of two dissimilar metals inside the bore of a gun tube. These clads were done with sheets of pure Ta and Ta alloys that were rolled into cylinders of the desired length and then welded. Except for the weld seam, these pro-

duced a very good surface on the bore of the 8-inch tube.

Phase II SBIR

The success of Phase I was carried over into a Phase II SBIR in late 1998. In this phase, the focal point was switched from 120mm smoothbore gun tubes to 25mm rapid-fire rifled barrels. The goal of this phase was to produce a specimen that could be test fired on a range to validate the erosion resist-

ance of Ta and the strength of the explosive bond.

For the 25mm diameter, it was possible to obtain seamless tubing made of Ta and Ta alloys. The alloy material was manufactured by a powder metallurgy process and, in all probability, contained detrimental interstitial elements known to severely impact mechanical properties. A good clad was never achieved with the alloy. Although harder and significantly less ductile than the pure Ta, the Ta alloy was not subjected to an amount of strain that should have caused it to fail as it did.

To stay on schedule and minimize further costs, the effort was refocused on using pure Ta tubing from a different source. Here, successful clads were immediately achieved. It was also found that Ta could be clad over existing clean rifling with a good bond observed on all surfaces. A good bond was not possible over "shot-out" rifling where poor surface and excessive contaminants prohibited metallurgical bonding.

During the course of these investigations, several interesting capabilities of explosive bonding were developed. In general, one of the desirable attributes of this process is the ability to bond relatively thick layers (when compared with alternative processes such as ion-sputtering) of one metal to another. It was found, however,

that one can clad any number of layers over each other so that nearly any desired thickness can be obtained. Furthermore, within the constraints of the sound speeds of the materials, dissimilar metals can be bonded together, creating many possible combinations—each tailored for a specific purpose. The quality of the bond can be determined microscopically via mechanical tests. Microscopically, the interface on a polished specimen illustrates a wave-form pattern between the metals. Bend tests and pull tests used to examine the Ta-to-steel bonds indicate exceptional strength at the bond.

Production Method

The production method for using this technology in a barrel program could occur early in the barrel-making process, before anything other than the specified bore to be clad has been machined into the barrel blank. For larger rifled artillery pieces, a steel “substrate” rifling would be introduced to the bore, which would accommodate the extra thickness of the cladding material. After cladding, the barrels could then be turned down to their tapered configuration, chambers bored, etc. Depending on the location of the barrel-making facility, this could either occur on-site or by routing the barrel blanks to facilities at TPL, followed by final preparation at an Army facility equipped to handle such final machining. For prototype testing in this Phase II SBIR, however, existing barrels will be used.

Future Tests

Arrangements are being made to test a truncated Bushmaster barrel at ARL in Aberdeen, MD, with funding help from the Naval Surface Warfare Center. The Team Small Arms group at Aberdeen Test Center will conduct these tests. The test gun will be a smoothbore version that will fire the very energetic M919 ammunition.

Gun tube requirements for longer range and more rapid fire have provided severe challenges to current and planned systems. As the 21st century commences, new technology beyond thin coatings is required to help gun tubes survive expected conditions.

The purpose is to demonstrate the value of thermochemical resistance of thicker clads of Ta for extending barrel service life, not to present a final gun design.

Because pure Ta is a relatively soft material, researchers did not know if it could withstand the stresses associated with rifling in a firing sequence. This eliminates other avenues of possible test failure that could obfuscate the real questions being evaluated. Similarly, the barrel is truncated to reduce the chance of down-bore failures cutting short the testing cycle. The accuracy of this test gun is not an issue in these tests. This technology could be applicable for several smoothbore candidates such as the 120mm gun tubes investigated in Phase I of the SBIR. In the longer term, the technology may also have significant commercial applications in the chemical and refining industry where the cost of refractory metal processing vessels and piping is high.

Conclusion

For gun tube applications, the issue of material hardness can be addressed in later efforts. There are

several options to be explored, including the use of specifically designed substrate rifling cited above and employing various Ta alloys, other refractory metals, and hardness-enhancing surface treatments such as nitriding.

While TPL has not yet field-tested these experimental barrels, tests should be complete by the time this article is published. Information garnered in this program will advance the military knowledge base of extending barrel service.

Note: Just before this issue went to press, the Army AL&T staff was informed that testing was concluded at Aberdeen Proving Ground, MD, during the final week of March. The results were successful and can be obtained by contacting the authors.

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BUILT-IN VEHICLE DIAGNOSTICS SYSTEMS

Russel L. O'Neal and William K. Emerson

Introduction

A major goal of the Army Chief of Staff's transformation effort is to reduce the logistics footprint. The United States can no longer afford the luxury of building up a large stockpile of spare parts, many of which are stored "just in case." Ground forces must have the ability to be quickly deployed into a region and be sustained with minimum support.

Previously, if an electronic component in a vehicle went bad, the entire component was removed and sent to the rear where it was replaced with a spare from the "iron mountain" that was moved in theater to support the deployed force. Usually the nonfunctioning part was repaired and ultimately returned to stock. Often during this process, however, the repair person discovered that the "failed" unit was functioning properly and showed no evidence of failure. Reduction or elimination of these false failures must be accomplished if the Army expects to reduce the number of spare parts transported to an active theater.

One of the best ways to reduce false failure is to improve the on-vehicle system testing capabilities. New systems are being designed with built-in diagnostics as an integral part of the equipment, but what about older systems such as the Abrams tank or the Bradley Fighting

Vehicle System (BFVS) that essentially have no on-vehicle fault isolation?

Currently, vehicle line replaceable units (LRUs) are diagnosed using symptom-based technical manual procedures. Test equipment, including a large number of interface boxes, cables, and adapters and their supporting manuals, must be carried to the vehicle being tested, adding to the mass of equipment that must be moved to a theater of operations. Once the test equipment is at the vehicle site, the test procedures are

The United States can no longer afford the luxury of building up a large stockpile of spare parts, many of which are stored "just in case." Ground forces must have the ability to be quickly deployed into a region and be sustained with minimum support.

labor-intensive, error-prone, and time-consuming. Additionally, the STE-M1/FVS Test Set currently used (simplified test equipment—M1 Series vehicle and M2/M3 FVS) is becoming obsolete. Newer vehicles such as the Bradley A3 have a system 1553 data bus that is used for built-in test (BIT). The BIT provides fault isolation to an ambiguity group. Additional carry-on test equipment must be used to break the ambiguity and fault-isolate to a single LRU. In both cases, fault isolation testing must be performed while the vehicle is in a nonoperational maintenance mode. Actual testing requires removing the operational cables and connecting the test set cables and adapters to the boxes being tested.

Diagnostics Solution

A Huntsville, AL, company has developed a way to easily reduce the logistics burden on vehicles. The system, called Sidecar™, provides a comprehensive on-vehicle diagnostics solution consisting of Sidecar modules (either attached to existing boxes or embedded inside redesigned boxes), cables, a host controller, a power supply, and software.

A Sidecar module consists of miniaturized electronic measurement equipment that is permanently installed on a vehicle. These modules are small, easily fitting into the palm of your hand, and even in cramped combat vehicles, can be added in the limited space available. The nonintrusive modules provide measurements on demand from the LRUs via a high-speed serial data bus. They neither stimulate the LRU in any way, nor draw LRU power. Made at the interface test connector so signals are not degraded, measurements are digitized and sent to the host controller.

The host controller provides the command and control for the embedded diagnostic system and may either be embedded in the vehicle, such as on a processor card in an

LRU, or be in carry-on equipment such as a ruggedized laptop computer. Software embedded in the system performs the diagnostic logic unique to each vehicle's subsystem. The embedded processor and software provide the capability of health checks during vehicle operation. A carry-on computer provides full diagnostics and fault isolation capability, and can also provide the latest in interactive electronic technical manuals to direct the testing, troubleshooting, and removal and replacement actions.

Militarized cables, which include the data bus and a power bus and are designed to withstand the vehicle-operating environment, permanently connect the modules. The end link of the cable chain is connected to the host controller, and the system can be used both during vehicle operation and maintenance.

Module Interface

Sidecar modules have one part number and are the same for all installations. Every LRU test connector is different, yet the Sidecar module can interface to the unique test connector using a personality cable that configures the signal lines as necessary. The personality cables and Sidecar modules are permanently installed in the vehicle, providing a significant logistics advantage. A limited number of spare modules can support the entire division because they are interchangeable. If a Sidecar module on a critical LRU is damaged, it can be replaced with one from a noncritical location.

There are several ways to implement Sidecar modules, depending on the requirements of the particular vehicle and the maturity of the LRUs. External Sidecar modules may be used for legacy vehicles where older LRUs are used and the vehicle cabling and space claim are established. The Sidecar module is attached to the generally unused LRU

One of the best ways to reduce false failure is to improve the on-vehicle system testing capabilities.

test connector, and the cables are then bundled with the existing vehicle cables.

In some cases, signals required for complete fault isolation capability may not be available on the test connector but are found on the functional connectors. The Sidecar modules can be added to a T-connector of a functional cable without impacting the vehicle's operational performance.

As these older systems are upgraded, electronic test circuitry can be incorporated into new LRU designs, thus reducing the internal wiring requirements of a test connector. For new designs, the diagnostic data bus can be directly connected to the electronic box.

Where LRUs were designed with spare slots in the backplane, an embedded Sidecar can be installed into a spare slot and the test signals brought through the backplane. For those LRUs without spare backplane slots, a mounting bracket for the Sidecar circuit cards can be added and test signals brought through the LRU harness or a flex cable.

Conclusion

Use of Sidecar in older weapon systems will result in major savings, both in time and hardware repair costs. Permanent installation on the vehicle eliminates the need for special test equipment to be issued, taken to the vehicle, and then

returned to storage. In addition, approximately 40 percent of all LRUs removed from a vehicle are damaged as a result of improper use of special test equipment. Removal and installation of vehicle cables and test cables, and manual probing with special equipment during testing, can cause delicate electronic contact pins or pin receptacles to bend or be pushed into cables or boxes. The use of Sidecar eliminates these maintenance-induced faults.

The Sidecar system is currently being installed in the M1A1 Abrams Integrated Management (AIM) upgrade tank and is planned for installation in several other U.S. and foreign vehicles, such as the Egyptian M1A1 AIM tanks, the U.S. M1A1 legacy fleet, and various vehicles being considered for the medium brigade. One program manager estimates that total operations and sustainment cost savings will easily exceed \$1 billion thanks to the Sidecar system.

This innovative approach to embedding robust diagnostics systems will reduce the volume of spare parts and test sets required for transport overseas during an operation. By reducing this hardware, the support personnel requirements also decrease. Sidecar is a direct result of the U.S. Army and its contractor partners working together to find low-cost and effective solutions for improving logistics.

RUSSEL L. O'NEAL, a Logistics Management Specialist, is the M1A1 Tank Embedded Diagnostics Integrated Product Team Leader in the Abrams Tank Program Manager's Office, Warren, MI.

WILLIAM K. EMERSON is a Senior Program Manager at PEI Electronics, Huntsville, AL. He is a retired Army lieutenant colonel.

MISSILES AS THE FULCRUM OF WAR

“Without vision, the people perish.”
— Proverbs

“If you're in a fair fight, you didn't plan it properly.”
— Nick Lappos
Chief R&D Pilot
Sikorsky Aircraft

Introduction

We have the technology. Lack of brains isn't the problem.

Want to “fire for effect” on a major enemy position? Done—the “steel rain” of the Multiple Launch Rocket System (MLRS) in Desert Storm, 1991. Want to kill Third World thugs in their own living room? Tube-launched, Optically-tracked, Wire-guided (TOW) missiles did the job in Mogadishu in 1991. Want to remain in the comfort of your own fox-hole while you do it? Not a challenge—remote Avenger operations since the mid-1990s. We can devise a missile that can hit practically anywhere, anytime, in any weather. Take your pick—PATRIOT, MLRS, etc. But can the Army afford it? More to the point, *will* the Army afford it?

We envision a battlefield where the enemy can find no sanctuary and cannot retaliate. In battle, mobility and earth are sanctuary: “Incoming!” means “Dive!” But we see missiles as the key to “turning the flank from above” (or even behind), thus changing earth from sanctuary to grave. In Erwin Rommel's words: “The enemy's air superiority has a very grave effect on our movements. There's simply no answer to it.” Missiles are the Army's “air superiority” over an enemy—highly mobile, perfect kamikazes, foiling all countermeasures and inflicting enormous damage with utter disregard for themselves.

Consider a situation in which American troops find themselves in

John Carter

cities with poor road, rail, air, and communications infrastructure. The hills and streets are crawling with bandits. The enemy's largest formations “hug” allies and noncombatants alike, producing a situation in which there are “no war-winning targets, but many war-losing ones.” This is an enemy whose typical formations are not formations at all, but Chechnya-style 20-man teams scattered throughout urban and rural terrains.

The mission was asserted to last a few months; it has stretched to years. It was peacekeeping, but the countryside has suddenly burst into open warfare aimed at ejecting the infidels. Your own units are scattered—not your choice, but as required by diplomatic nation-building constraints. Equipment designed for “the big one” is rusting from constant exposure to long, harsh winters. And because of frequent rotations, you're the “old hand” and you've only been there 6 months.

In 200X

The Army Tactical Missile System (ATACMS) is used as the Army's immaculate weapon for systematically destroying electrical power and fuel supplies (the deciding factor in Serbia, according

to British Historian John Keegan) with zero risk to American forces. At long ranges, from 100 to 160-plus kilometers, ATACMS is the premier area target as well as mobile-target and point-target weapon of choice (using either Brilliant Anti-Tank submunitions or a unitary warhead). Work done by the U.S. Army Aviation and Missile Command's Research, Development and Engineering Center (AMRDEC) on improved infrared seeker automatic target recognition, microelectromechanical systems, inertial navigation, and countermeasure technology paved the way for this capability: to pound enemies in detail, without warning, beyond their furthest reach.

For the first time, Army artillerymen can devastate the enemy with a pinpoint (20-meter circular error probable) weapon in the 20-100 kilometer range and avoid bomblet collateral damage and cleanup issues entirely. By combining a unitary warhead with an improved anti-jam Guided MLRS (GMLRS), the Point-Hit MLRS brings the battle home to the enemy even while he hugs hospitals and embassies. The standard MLRS is still the “grid square removal system,” the weapon of choice to shatter enemy forces, materiel, and morale. The GMLRS reduced the rockets-per-target-destroyed requirement by a factor of 10 and more. Today, there are fewer to fire, fewer to transport and support, and

fewer to build and store.

A helicopter-launched version of the DARPA-developed Loitering Attack Missile (LAM), LAM-Aviation (LAM-A), has few peers. It allows the aviator to kill innumerable targets, such as command posts, mobile missiles, armor, and anti-aircraft sites, deep in enemy territory. Loitering lets us turn the enemy's flank, not only from above, but also from behind. Deep standoff enables major infrastructure strikes by Army aviators. Shoulder-



The Future Missile Technology Integration Program demonstrated key technologies for the Common Missile in May 2000.

fired surface-to-air missiles (SAMs) can't be everywhere at once, and this kind of change increases the defended area by a factor of 100 (to more than 30,000 square kilometers). We always seek to fight "unfairly."

Still closer, in the 5-20 kilometer range, we find a highly proliferated Common Missile, which makes possible the continuous engagement of mobile point targets from guerrilla teams to tanks. With the Common Missile, uncommon destruction is delivered from many platforms: unmanned ground vehicles, current manned light vehicles, helicopters, and Future Combat Systems (FCS), to name a few. Lethality and versatility at unprecedented standoff ranges, and a direct-fire mode for the close battle Common Missile is the utility infielder of tomorrow's unpredictable full-spectrum operations.

To help find targets throughout the 0-100 kilometer range, we employ a variety of unmanned systems, organic to company-sized and smaller units in the Army. LAM-A and the Common Missile are two forms of Unmanned Aerial Vehicles (UAVs), extending the "vision" of their launch platforms and telemetering video back for shared use. Another is Quick Look, a "disposable," munition-sized UAV: a personal UAV for the company commander.

The Low Cost Precision Kill (LCPK) missile means low cost for the program/project/product manager, light weight for the logistician, high loadout for the warrior, and sudden death for the enemy. LCPK made it possible, for the first time, for an Apache to accomplish literally dozens of kills, of both light and heavy targets, in a single sortie. In countries with Vietnam-type intermingled strongholds, combined with today's proliferated shoulder-fired SAM environment, LCPK changed our world from sorties per target to targets per sortie. Ground-launched LCPK also finds innumerable uses as a devastating through-the-window weapon in urban warfare. With its extremely light weight, it is a logistician's delight to sustain in theater.

In the 0-5 kilometer range, we will still have many older systems in use: Javelin, TOW II, TOW Fire & Forget, HELLFIRE, and Longbow. They are all still relevant. Many countries have developed active protection systems (APs), but few have produced them. Counteractive protection systems kept alive a missile stockpile we could not afford to replace. Pre-emptive deployment

of counteractive protection systems also fundamentally destroyed much of the APS market—why buy an APS that doesn't work? Combined with a stockpile reliability and service-life extension program, these battle-proven systems continue to savage the enemy in the close fight.

Defeating all known and projected APs and reactive/advanced armors, the Compact Kinetic Energy Missile (CKEM) is the king of the 0-5 kilometer fight. This lightweight, sustainable weapon is the follow-on to Line-of-Sight Anti-tank for the close battle, when the tanks are rolling. As Chinese General Sun Tzu said, "Let your plans be dark and as impenetrable as night, and when you move, fall like a thunderbolt." CKEM is a thunderbolt; when that target absolutely, positively has to die. It is the silver bullet for FCS and other light platforms; CKEM is death on tanks.

Tying all these things together are common, modular, fire-control systems, a first for Army ground forces, as exemplified by the Real-Time Adaptive Multi-Munition Technology (RAM Tec) Launcher. As many airborne weapons platforms have demonstrated, it makes a lot of sense to "mission load" specific weapons packages on standard weapons pylons—not to mention the acquisition savings from adopting sta-



The Guided MLRS Technology Demonstration in 1998 paved the way for the current Guided MLRS System Design and Demonstration Program.

ble, common, public-domain interface standards. RAM Tec's Joint Technical Architecture, commonality, reusability, combat versatility, and affordability were key to putting more "steel-on-target."

Conclusion

American airpower is omnipresent on our fields of action because it offers diplomats the tantalizing promise of quick, immaculate victory for the price of "a few" American widows and orphans. If the Army is to be a relevant force at the "combat" end of the operational spectrum, it must establish its role beyond "muddy boots" as a determining force that cannot be ignored in our Nation's marketplace of diplomatic and military options.

We believe that the key metric to "get light and get there" in weapons is "pounds per kill"—how many pounds of weapon, launch platform, and support we must move in country to kill a class of targets. We also believe that "cost per kill" is positively correlated with this metric. Our enablers are increased precision (as in Guided MLRS and LCPK), range (as in Common Missile and LAM-A), and increased versatility (as in the RAM Tec Launcher and Common Missile).

We hear the prophetic words of MG J.F.C. Fuller, writing in his 1945 book *Armament and History*: "The weapon of superior reach or range should be looked upon as the fulcrum of combined tactics." We see missiles as the fulcrum of a new kind of war for the Army, one in which the weapon of longest reach defines tactics; perhaps even, the strategy. The systems and technologies needed for victory in 2010 are embedded in our "weapons roadmap"; we can create the future. All we must do is do it.

JOHN CARTER is a Staff Engineer at AMRDEC. His assignments have included project management, simulation development, strategic planning, and technology program development. His education includes degrees in electrical engineering and industrial and systems engineering, and he is a graduate of the Defense Systems Management College Program Management Course.

FUEL CELLS: AN ENABLING TECHNOLOGY FOR FUTURE ARMY VEHICLES

James Pechacek

Background

In the last decade, our dependence on imported oil and the continuing erosion of our environment have given new direction to government and industry. This concern and the desire to improve fuel economy and reduce harmful emissions have come to the forefront of action items to be studied by the departments of Defense (DOD), Transportation (DOT), and Energy (DOE).

With this current attention has come the opportunity to consider new technologies for the largest fleet of trucks: the one operated by the U.S. government. Thus, the Army and, indeed, the entire country face major challenges in relation to energy consumption and environmental compliance. The use of cleaner, more fuel-efficient vehicles is a formidable yet necessary goal for the military establishment and for commercial manufacturers. To help meet this challenge, the Army has taken a leadership role in establishing a research consortium between government and industry organizations to address these issues.

This article describes the fuel-cell research being conducted by the National Automotive Center (NAC), a

part of the U.S. Army's Tank Automotive Research, Development and Engineering Center, and covers some of the barriers, near-term and far-term goals, and expected end results of this research.

Research Problem

Resolving environmental and fuel efficiency concerns while reducing U.S. dependency on foreign petroleum sources and introducing advanced technologies is not an easy task. Fuel constitutes 70 percent of the bulk tonnage needed to sustain a military force on the battlefield. This equates to 600,000 gallons of fuel per day, per division, at full advance. The situation clearly demands the development and deployment of clean alternative fuels and of new propulsion and other vehicle technologies that can compete with reliable, proven, and fully matured conventional products. Thus, there needs to be research and development (R&D) initiatives that concentrate on advanced propulsion technology, with a focus on advanced diesel engines, hybrid electric drives, and fuel cells.

A fuel cell is an electrochemical device that combines hydrogen fuel

and oxygen to produce electricity, heat, and water. Fuel cells operate without combustion, so they are virtually pollution free. The fuel cell itself has no moving parts—making it a quiet and reliable source of power.

The challenge of adopting fuel cells to military applications is daunting. Military vehicles will require the reformation of diesel or JP-8/5 military fuels with hydrogen gas, a technology that is still quite immature for the power levels needed on combat vehicles. Diesel fuel is very difficult to reform because its chemical nature, which promotes soot and tar formation, fouls catalysts and heat exchangers, and can eventually deactivate reforming and fuel-cell catalysts. Although the military is most likely constrained to using logistics fuels, fuel cells can provide a considerable degree of fuel flexibility; they can operate on hydrogen, methanol, ethanol, natural gas, and other hydrocarbon fuels.

Fuel-cell systems have the potential for Army applications because fuel cells are more efficient than internal combustion or diesel engines and have reduced emissions. While the fuel cell itself is the key

component, and an understanding of its features is essential, a practical fuel-cell system requires the integration of the fuel-cell stack with fuel processing, heat exchangers, power conditioning, water management, and control systems. The importance of each of these components and their integration cannot be overemphasized.

Expected Applications

Many types of fuel cells have been developed and tested. Fuel cells have already been introduced in government-subsidized demonstrations and space-program applications. It should be noted that fuel cells have received a large amount of publicity, which has resulted in the false impression that they are in widespread use.

The NAC has anticipated, as a near-term application of fuel cells, the use of solid oxide fuel cells (SOFCs) as 3-10 kilowatt auxiliary power units (APUs) for trucks operating on diesel fuel. SOFCs could find application on commercial trucks and military vehicles as APUs for providing heat, air conditioning, on-board electronics, and refrigeration.

Historically, auxiliary power has been generated as parasitic power drawn from propulsion power, continuous engine idling, or lead-acid storage batteries. Diesel-fueled APUs have been developed for trucks and military vehicles to improve fuel efficiency, reduce engine noise and emissions, and reduce engine wear.

Although diesel APUs for trucks and military vehicles can reduce engine noise and emissions as well as increase fuel efficiency, there is room for considerable improvement. Furthermore, APUs are bulky, and for military applications, tend to be used on high-cost combat vehicles where the added cost can be more easily absorbed.

For certain military applications, lead-acid storage batteries are still used to provide auxiliary power when propulsion power is not required. However, problems with lead-acid

storage batteries include deep discharge, high cost, high maintenance, and the need to recharge the batteries.

New technologies that offer the potential to improve fuel economy and reliability, as well as reduce emissions and maintenance requirements, are needed. SOFCs, which are essentially solid-state devices with few moving parts, offer these benefits and should be considered candidates for improving APUs for trucks and military vehicles.

In the far term, the NAC expects fuel cells to become the main propulsion system or support for the propulsion system for trucks and military vehicles. One such application of the SOFC is to combine it with a gas turbine engine to form a hybrid engine, which permits internal fuel reformation. The approach would use the SOFC as a replacement for the combustor of a gas turbine engine. The SOFC is most efficient at partial power, and the gas turbine is most efficient at peak power, resulting in high combined efficiency over a broad power output range.

Impact On Scientific Field

The NAC approach of incorporating fuel-cell technology into ground vehicles, and the methodology for testing and evaluating it, is zealously supported. Continued demonstration, evaluation, and simulation of fuel-cell technology will foster the acceptance of this new technology for future ground vehicles. This is evident because industry, academia, and other government agencies have also begun research into fuel-cell technologies. For example, DOD, DOT, and DOE are all involved in fuel-cell systems R&D. These agencies have initiated several fuel-cell projects and committed significant financial investments in fuel-cell research.

Fuel-cell engines are expected to meet the performance and range-between-refueling requirements of transportation vehicles, including

transit buses, automobiles, and trucks. This, together with much higher efficiency, improved fuel economy, and significantly lower emissions than the internal combustion engine or diesel, is expected to result in fuel cells capturing emerging world-market opportunities. In fact, fuel cells can be applied to all forms of transportation that use internal combustion engines: heavy-duty trucks and buses, locomotives, ships, passenger cars, light trucks, and vans. This application vastly increases the market for fuel cells and leverages their potential for global benefits.

A major hurdle for public acceptance of fuel cells is their current high cost. In the final analysis, bringing into account the enormous potential for energy that fuel cells present, environmental and economic benefits will depend on successful commercialization. The long-term prospects are indeed encouraging. The current commercialization focus is on further development of the technology, cost reduction, and high-volume manufacturing processes. Fuel cells are predicted to revolutionize new vehicles and will be implemented by almost all automakers around the world in the future.

The NAC plans on continuing its research in this active area of fuel-cell systems to observe where this new attractive technology can best impact future Army applications.

JAMES PECHACEK is a Project Engineer for the NAC's Alternative Fuels and Fuel Cells Team. He has an M.S. in software engineering from Central Michigan University, an M.S. in computer science and engineering from Oakland University, and a B.S. in both electrical engineering and engineering mathematics from the University of Michigan.

Board Selects 20 For Competitive Development Group

A board convened in January 2001 to select individuals for the Army Acquisition Corps Competitive Development Group (CDG) Year Group 02. Twenty individuals were selected from 63 applicants to participate in this 3-year career development program. Each applicant went through a stringent board selection process for the opportunity to be provided expanded leadership and management training and cross-functional experience in the various acquisition career fields. (For more detailed information about the CDG Program, see the article on Page 29 of this issue.)

Congratulations to all those selected to this program! Selectees and their employing agencies are shown below.

Ballard, Janet	AMCOM
Collier Jr., Samuel	AMCOM
Cryderman, Marque A.	TACOM
Falling, Barbara G.	AMCOM
Featherston, W. Daniel	AMCOM
Fletcher, Janet	PEO, Aviation
Goodman, Eric	CECOM
Hiltunen, Kenneth R.	TACOM
Isbell, Janice	AMCOM
Khong, Thuan	AMCOM
Kim, Abraham	CECOM
Kowallik, Jacquelyn S.	SMDC
McCoy, Mark W.	TACOM
McPherson, Gary L.	MATREADACT
Nichols, Marvin W.	PEO, Tactical Missiles
Sellers, Ray K.	AMCOM
Smith, Millie	AMCOM
Traylor, John B.	AMCOM
Voltz, Robert J.	STRICOM
Yocom, Roger L.	AMCOM

Amendment Changes Education Requirements

In a measure aimed at improving the professionalism of DOD's contracting workforce, Section 808 of the *Floyd D. Spence National Defense Authorization Act for FY01* has amended 10 U.S.C. §1724, *Contracting positions: qualification requirements*. Section 808 mandates new minimum education qualification requirements for all new entrants into positions in the GS-1102 occupational series or similar military occupational specialty positions. The change also applies to contracting officers with authority to award or administer contracts above the simplified acquisition threshold.

Previously, the education requirement for contracting personnel was a baccalaureate degree or 24 semester credit hours (or the equivalent) in designated business-related disciplines or successful completion of an approved equivalent competency examination.

Currently, the Defense Acquisition Workforce Improvement Act (DAWIA), as amended by Section 808, mandates that to qualify for a contracting position, an individual must have earned a baccalaureate degree and have completed at least 24 semester credit hours (or the equivalent) from an accredited institution of higher education in any of the following disciplines: accounting, business finance, law, contracts, purchasing, economics, industrial management, marketing, quantitative methods, and organization and management. Section 808 eliminates the examination option and, furthermore, deletes the "grandfather clause" previously included in the qualification requirements for contracting personnel.

On Jan. 16, 2001, the Office of the Secretary of Defense (OSD) issued interim guidance that clarified some of the issues regarding Section 808. The guidance stipulated that the new requirements constitute a qualification standard versus a quality ranking factor. Under a qualification standard, a person must meet the requirements to be considered basically qualified. A person to whom Section 808 applies but who does not meet the qualification standard requirements cannot be hired or assigned into an 1102 position without first meeting the requirements or being granted a waiver under 10 U.S.C. §1724(d). Next, the interim guidance interpreted the applicability of the waiver provision in Section 1724(d), which refers to an "employee or member." OSD stated that because applicants and recruits are not "employees" or "members" of DOD, they are not eligible for waivers.

Lastly, the guidance announced that civilian employees who did not meet the requirements of Section 1724(d), as amended, but who occupied a career ladder position prior to Oct. 1, 2000, may be promoted up to the full performance level, provided that the employee meets all the other requirements for advancement. These promotions do not require a waiver.

The most recent guidance, issued by OSD in a memo dated March 21, 2001, *Changes in Education Requirements for the Acquisition Workforce*, declared that the education requirements mandated by Section 808 apply only to civilian employees and military members entering contracting positions after Sept. 30, 2000. Therefore, those excluded from the new requirements include DOD civilian personnel who occupied GS-1102 positions, military personnel in equivalent positions, and those personnel in contracting officer positions with authority to award or administer contracts above the simplified acquisition threshold prior to Oct. 1, 2000. You may access the memorandum outlining exclusions at <http://www.acq.osd.mil/yourfuture>. Click on "the new 1102 qualification standard." DAWIA, Section 1724, as written prior to the Section 808 amendment, continues to apply to exempt personnel. However, all personnel, including those excluded from the new requirements, are highly encouraged to earn a baccalaureate degree and 24 semester credit hours (or the equivalent) in business-related disciplines for professional and personal development.

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Contracting certification standards should also be applied in accordance with the OSD guidance. Those personnel who are excluded from Section 808 requirements are also exempt from the amended education requirements for the purpose of certification. However, a baccalaureate degree and at least 24 semester credit hours (or the equivalent) in business-related disciplines are required for the certification of new entrants as of Oct. 1, 2000.

Organizations must submit requests for waiver, in accordance with 10 U.S.C. §1724(d), for all civilian and military personnel who have encumbered contracting positions since Sept. 30, 2000, but do not meet and who are not exempt from the Section 808 qualification requirements. Principal Assistants Responsible for Contracting or similar authorities should submit requests for waiver for Army personnel on a DD Form 2591, *Department of Defense Contracting Officer-Waiver Request*. Requests for waiver can be forwarded to Department of the Army, Office of the Deputy Assistant Secretary of the Army for Procurement, ATTN: SAAL-ZP (Steve Hamilton), Skyline 6, Suite 302, Falls Church, VA 22041.

All personnel who require assistance or guidance regarding the DAWIA qualification requirements for contracting professionals can contact their acquisition career manager (ACM). ACMs can also advise personnel who want to complete additional training and education. ACM contact information is available at <http://dacm.rdaisa.army.mil/>. Click on **Your Acquisition Management Team**.

AETE Board Results

The Acquisition Career Management Office is pleased to announce results from the Acquisition Education, Training and Experience (AETE) Board, which met in January 2001 to review applications for training and educational opportunities. Listed below are the personnel selected and their AETE opportunity:

Name	Requested Opportunity
John Chapman	Harvard University
Mark Dixon	School of Choice
Anthony Echols	University of Texas/ Senior Service College
Robert Golden	Harvard University
Beverly Harbin	School of Choice
Keith Harbin	School of Choice
James Neubauer	School of Choice
Matt D. Price	School of Choice
MAJ Leon Thurgood	University of Pennsylvania, Wharton School
Yancy Williams	University of Pennsylvania, Wharton School

The AETE Board, which meets biannually in January and August, recommends acquisition workforce members for education, training, and experience opportunities supported by the Army Acquisition Corps (AAC). The *AETE*

Catalog provides a list of these opportunities, outlines eligibility requirements, and describes the application process. The catalog can be accessed on the AAC home page at <http://dacm.rdaisa.army.mil>, and click on the Acquisition, Education, Training & Experience Catalog icon on the right side. The next board will convene in August, and the closing date for applications is 30 days prior to the board. Specific AETE dates will be posted on the AAC home page at <http://dacm.rdaisa.army.mil>.

Both military and civilian applicants must meet position requirements, be members of the Army Acquisition and Technology Workforce, and be currently assigned to a workforce position. **Applicants must also meet the requirements and prerequisites stipulated in the *AETE Catalog* for the registered opportunity.** The AAC philosophy requires that a career development plan balance training, education, and experience. A panel of AAC members evaluates the application packages. Selections are based on need, applicability, and appropriateness of the requested opportunity. Official notification of the board results is provided to the applicants approximately 30 days after completion of the board.

Acquisition career managers can assist in preparing board packages. A list of telephone numbers and e-mail addresses by regions is on the AAC home page.

DAU Internet And Hybrid Courses

The Defense Acquisition University (DAU) is converting traditional resident DAU courses into distance learning opportunities via the Internet. This initiative provides individuals greater access to courses and results in DAU travel and per diem cost savings. Many courses have already been converted to online formats or transitioned to a "hybrid" configuration (one part online and one part resident). For example, one of the latest conversions to a hybrid configuration is ACQ 201 (Intermediate Systems Acquisition). This course, released in March 2001, requires individuals to take the first part of the course via the Internet and then attend a 1-week resident class.

Hybrid courses require individuals to register first for the resident class. Once enrolled, students are automatically registered for the online portion of the course and sent notification and instructions by e-mail. Typically, students are given 60 days to complete courses or portions of courses that are conducted online. Hybrid courses require additional planning on the part of the student. It is necessary to enroll early in the resident portion of the course to allow sufficient time to complete the online portion.

Re-Engineering PMT 302

Another initiative of DAU is the re-engineering of PMT 302 (Advanced Program Management Course). This course has been re-engineered to support workforce members requiring Level III certification in program management and those selected or desiring to become program managers (PMs). The result is the creation of three new PMT

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courses: PMT 250 (Program Management Tools Course), PMT 352 (Program Management Course), and PMT 401 (Advanced Program Management Course).

PMT 250 was developed as a Web-based course and is currently available. PMT 250 will be required for Level II certification starting October 2001 and will be the prerequisite for PMT 352. PMT 352 will be a hybrid-training course required to obtain Level III certification in program management. When this article was written, the resident length of PMT 352 was expected to be 4 to 5 weeks, and it was expected to be available starting in fall 2002. PMT 401 will be the designated course for newly selected PMs (or those desiring to become PMs), and PMT 352 will be the prerequisite for enrollment.

For more information on the conversion of DAU courses to online and/or hybrid versions, log on to the ATRRS Internet Training Application System (AITAS) at <https://www.atrrs.army.mil/channels/aitas/>. *Reminder:* Army acquisition personnel must use AITAS to apply for all DAU courses, whether they are online, hybrid, or resident. Army acquisition workforce personnel must also have the DAU course(s) approved on their automated individual development plan before applying in AITAS. For a complete list of courses, including those online, check out the DAU Web site at <https://dau5.fedworld.gov/dau/index.htm>.

AAC Reserve Stack

The U.S. Army Command and General Staff College Acquisition Education and Training Program (AETP) administrators recently established an Army Acquisition Corps (AAC) reserve stack in the Combined Arms Research Library at Fort Leavenworth, KS. Books in this stack are reserved for AAC officers attending the Command and General Staff Officer Course.

The reserve stack consists of those books on the AAC reading list (see *Army AL&T* September-October 2000), as well as copies of *Who Moved My Cheese* by Spencer Johnson (see review on Page 62), *Serious Play* by Michael Schrage, and *Arming the Eagle* by Wilbur D. Jones Jr.

AETP administrators plan to increase selection by continuously purchasing books for the reserve stack.

PERSCOM NOTES . . .

AY01/02 Senior Service College Slate Announced

The U.S. Total Army Personnel Command recently announced that the following Army Acquisition Corps officers are slated to attend Senior Service College at the schools indicated during academic year (AY) 01/02.

Army War College (Carlisle Barracks, PA)

Bell, Anthony B.
Bliss, Gary L.
Gwilliam, Jeffrey
Janker, Peter S.
Maddux, Jonathan A.
McDaniels, Lloyd E.
Norgaard, Kevin R.
Pecoraro, Joseph E.
Rust, Stephen L.
Vaughn, John
Willey, Jeffery D.

Industrial College Of The Armed Forces (Fort McNair, VA)

Chase, Deborah J.
Coker, David W.
Fuller, Peter J.
Incorvati, Anthony R.
Kendrick, Robert III
Lambkin, Glenn D.
Nichols, Camille M.
Patterson, William N.
Price, Nancy L.S.

Acquisition Fellowship (University Of Texas, Austin, TX)

Conley, Joe E.
Diego-Allard, Victoria
Mancuso, August R.
Payne, Jerome F.
Stone, Jesse M.

Air War College (Maxwell Air Force Base, AL)

Mahanna, Cory W.

Australian College Of Defence And Strategic Studies (Canberra, Australia)

Stautz, Thomas R.

FY03 Congressional Fellowship Program

HQDA has announced that the FY03 Congressional Fellowship Program will be conducted August 2002-November 2003. This program offers top Army officers an outstanding opportunity to receive valuable training and experience by serving as staff assistants to members of Congress. Fellows are typically given responsibility for drafting legislation, arranging congressional hearings, writing speeches and floor statements, and briefing congressional members for committee deliberations and floor debates.

The U.S. Total Army Personnel Command's (PERSCOM's) Acquisition Management Branch (AMB) will convene a review board in August 2001 to nominate Army Acquisition Corps officers for the program. On Dec. 4, 2001,

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the Army Congressional Fellowship Selection Board will review the list of nominees and make final selections.

To be eligible for the program, officers must meet the following criteria:

- Hold the rank of major or lieutenant colonel with no more than 17 years Active federal commissioned service as of Jan. 1, 2002;
- Be a graduate of the Command and General Staff College (resident or nonresident);
- Be branch qualified at current rank;
- Meet height and weight requirements in accordance with Army Regulation (AR) 600-9, *The Army Weight Program*;
- Have no adverse actions pending; and
- Have potential for future military service.

The Congressional Fellowship Program begins with an August-December 2002 HQDA orientation and attendance at the Force Integration Course and a variety of meetings and seminars. Following the orientation, fellows complete a classroom phase and then serve as staff assistants to members of Congress from January-November 2003. After completing the program, officers will incur an Active duty Service obligation of no less than three times the length of the fellowship (per AR 350-100) and then serve a 2-year utilization assignment in a position that requires knowledge of congressional activities.

To apply for the FY03 Congressional Fellowship Program, officers should complete DA Form 4187, *Personnel Action*. The form must be approved and signed by the individual's field grade supervisor or equivalent and forwarded by Aug. 15, 2001, to PERSCOM, ATTN: TAPC-OPB-E (Paula Bettes), 200 Stovall Street, Alexandria, VA 22332-0411.

Additional information on the Congressional Fellowship Program is available at the Office, Chief Legislative Liaison Web site at <http://www.hqda.army.mil/ocll> or on AMB's Web site at <http://www.perscom.army.mil/opfam51/ambmain.htm>.

FY02 White House Fellows Program

The President's Commission on White House Fellows annually selects exceptionally promising individuals to serve as White House fellows. The White House Fellows Program is an opportunity for officers to receive unique training and firsthand experience in the process of governing the Nation. Fellows write speeches, help review and draft proposed legislation, answer congressional inquiries, chair meetings, conduct briefings, and assist high-level government officials. In the past, fellows have worked for the vice president, the White House Chief of Staff, and the National Security Council.

Candidates for the White House Fellows Program must participate in a highly competitive process. Applicants are expected to have a record of achievement in their careers, the skills necessary to serve at the highest levels of government, and above-average leadership potential. To be eligible for the program, officers must meet the following criteria:

- Be a U.S. citizen;
- Have no more than 19 years Active federal commissioned service as of Sept. 1, 2002;
- Be available for a 2-year utilization tour following the fellowship;
- Be branch qualified at current rank;
- Have no adverse actions pending;
- Meet height and weight standards in accordance with Army Regulation 600-9, *The Army Weight Program*;
- Have a graduate degree;
- Have no Army educational requirements system utilization obligation; and
- Have potential for future military service.

The U.S. Total Army Personnel Command's (PERSCOM's) Acquisition Management Branch (AMB) will conduct a review board in late August 2001 to select Acquisition Corps officers for nomination to the program. The first step for interested Acquisition Corps officers is to submit a DA Form 4187, *Personnel Action*, requesting consideration for the program. The DA Form 4187 must be approved and signed by the applicant's field grade supervisor and forwarded to PERSCOM, ATTN: TAPC-OPB-E (Paula Bettes), 200 Stovall Street, Alexandria, VA 22332-0411. The suspense date for submitting an application is Aug. 15, 2001. Officers are encouraged to review and update their official military personnel file (on microfiche) prior to submitting their application. Applicants should also verify with their assignment officer that all college transcripts and a current photo are on file at AMB.

PERSCOM Headquarters will forward Army officer nominations to the president's commission prior to Feb. 1, 2002. Regional finalists will be selected in March, followed by the selection of national finalists in May. The president's commission is scheduled to announce names of selected fellows in June 2002. Once selected, the fellows will relocate to the Washington, DC, area to begin the program. The fellowship year runs from September 2002 to August 2003. This is followed by a 2-year utilization assignment that will begin in September 2003.

Officers incur an Active duty Service obligation (ADSO) for a period of three times the length of the fellowship. The ADSO begins the day after the fellowship is completed.

Additional information is available online at <http://www.whitehousefellows.gov/home.html> or <http://www.perscom.army.mil/opfam51/ambmain.htm>. (Click on **Training and Education**, then **White House Fellowship Program**.)

FY02 LTC/GS-14 PM/AC Board Results

The U.S. Total Army Personnel Command's (PERSCOM's) Acquisition Management Branch recently completed an analysis of the FY02 Lieutenant Colonel (LTC)/GS-14 Product Manager (PM)/Acquisition Command (AC) Board results and overall command opportunity for Army Acquisition Corps (AAC) officers and civilians. The selection board was held Nov. 14-22, 2000, and the list of selectees was released April 26, 2001. The following paragraphs summarize the results and possible trends.

Overall Results

Board members reviewed the files of 261 AAC members. From this population, the board selected 47 principals for PM and AC assignments. The selectees included 39 acquisition officers, 6 civilians, 1 officer who was revalidated, and 1 Army Medical Department (AMEDD) officer. Overall selection rate was 18 percent. The military selection rate was 18 percent (39/212), and the civilian selection rate was 12 percent (6/49). Officer results by year group (YG) are as follows (these results do not include the revalidated or medical officers): YG85 (3), YG84 (30), YG83 (4), YG82 (0), and YG81 (2).

Who Was Selected?

All of the civilians and 27 of the 30 officers (90 percent) selected to be PMs had at least 2 years in a program office, major headquarters staff experience, and a variety of career-broadening jobs. Eight of the 9 officers (89 percent) selected to be contracting commanders have at least 4 years of contracting experience at the Defense Logistics Agency; U.S. Army Materiel Command; Forces Command; or in the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology. Three of the six civilians selected are in the Competitive Development Group. Thirty-eight of the 39 officers (97 percent) and 5 of the 6 civilians (83 percent) selected have master's degrees. Six of the 39 officers (15 percent) had not been previously selected for resident Command and General Staff College.

General Observations

Consistently strong evaluations were common among selectees. All selected officers received at least one above-center-of-mass (ACOM) officer evaluation report (OER) under the new DA Form 67-9, with strong supporting narratives from senior raters. Officers with ACOM OERs in company command and overall ACOM or center-of-mass-plus (COM+) performance were competitive. Officers that had all COM OERs under the new DA Form 67-9 were not competitive for command. Selection for command is extremely competitive. Most of the officers were selected on their first or second time considered. Four of the six civilians were selected on their first time considered. Military officers and civilians made themselves competitive by expanding their scope of training, education, and experi-

ence in a variety of jobs. The six selected civilians had very strong comments on their Senior Rater Potential Evaluation (SRPE).

To be competitive for PM, an individual should have program office experience. However, there is no evidence that consecutive or repetitive program office tours better qualify an individual for PM selection. Contracting officers require extensive contracting training and experience in pre-award and post-award contracting. Success in other acquisition positions (Department of the Army staff or joint assignments) enhances overall file strength and selection.

Command Opportunity

Command opportunities for AAC officers during the past 4 years compare favorably with the Army average of 12-16 percent. The AAC continues to afford officers and civilians a healthy opportunity to command.

Summary

Before future PM/AC boards convene, it is imperative for officers to personally "scrub" their Officer Record Brief and microfiche to ensure accurate information is conveyed to LTC board members. Officers should request a copy of their fiche at least 180 days prior to the board convening. Traditionally, the board meets in November each year. The AMB will scrub packets for officers in the zone of consideration 30-45 days prior to the date of the board. If your official photo is more than 3 years old, replace it. Prior to taking a new photo, check your awards, branch, and U.S. insignia, etc. Attention to detail makes a difference.

To be competitive for future selection as a PM or commander, captains and majors should seek career-broadening experiences. Officers should seek positions that offer experiences in program management, combat developments, testing, and contracting. With a limited number of positions available in program offices, PERSCOM will continue to rotate captains and majors at approximately 24-month intervals to ensure a sufficient pool of experienced, qualified officers for future PM and command positions. Officers who want to be competitive for contracting commands should seek contracting officer positions in pre-award, post-award, and contingency contracting officer environments.

Civilians should also take time to ensure that their application package is complete and contains all required documents. Special attention should be given to ensuring the accuracy of data on the Acquisition Career Record Brief (ACRB). Dates on the ACRB should match dates on accompanying documentation. "Fresh" ACRBs may be obtained from acquisition career managers and submitted with application packages. Discrepancies in the record such as missing evaluations should be explained. Remember, the application package reflects your career and defines your training, education, and experience to the board. Civilians must also stress to their supervisors the importance of the SRPE form. Weak comments or the lack of comments may negatively impact the board's selection decision.

CAREER DEVELOPMENT UPDATE

FY02 LTC/GS-14 PM/AC Selectees

All selectees are lieutenant colonels unless otherwise indicated.

Bezswana, Haribaru (CIV)
Bither, David Edwin
Blyth, Jeffrey Brown
Bogardts, Allen Lee
Carpenter, Robert Cameron
Crabb, Jeffrey Alan
Dukes, Beatrice S.
Earl, Arthur John
Edwards, Keith Richard
Ellis, Carl Mason
Ellis, William (CIV)
Fletcher, James Paul
Guinta, Joseph Anthony Jr.
Green, William Leslie III
Greene, Bradley D.

Healy, Edward Augustine Jr.
Ikirt, Steven Clark
Jenkins, Kennedy Elwood
Jennings, Kevin Nathan
Kihara, Steven Wayne
Klumpp, Joseph Jerome
Lamb, William Leetch
Lepine, Paul Raymond
Madden, Michael (CIV)
Malatesta, Mark L.
Manning, Barry George
McVeigh, Bryan Jay
Moore, David Murdock
Nicolella, Anthony John
Oday, Sean Patrick
Oelberg, Gregory Porter
Oxford, John Raymond Jr.
Pietruszka, Raymond (CIV)

Rice, David John
Robinson, Keith Wayne
Roitz, Frederick Paul
Shalosky, Christopher Angelo
Shifrin, Scott Erwin
Stockel, Eugene Francis
Tubell, Wallace John Jr.
Vanrassen, Michael Jeffrey
Verille, Michael (CIV)
Vollmecke, Kirk Fredrick
Walsh, Damon Thomas
White, William (CIV)
Winters, Brian Christopher

AMEDD

Hines, Claude Jr.



LESSON 6



"You don't know what you can get away with until you try."

You know the expression, "it's easier to get forgiveness than permission." Well, it's true. Good leaders don't wait for official blessing to try things out. They're prudent, not reckless. But they also realize a fact of life in most organizations: if you ask enough people for permission, you'll inevitably come up against someone who believes his job is to say "no." So the moral is, don't ask. Less effective middle managers endorsed the sentiment, "If I haven't explicitly been told 'yes,' I can't do it," whereas the good ones believed, "If I haven't explicitly been told 'no,' I can." There's a world of difference between these two points of view.

Who Moved My Cheese?

By Spencer Johnson, M.D.
(Putnam, New York, 1998) 94 pages,
hardbound \$19.95

Foreword by Kenneth Blanchard, Ph.D.

Reviewed by LTC John Lesko, U.S. Army Reserve, a Decision Coach and Group Facilitator with Anteon Corp. He provides collaborative decision-support services to the U.S. Air Force acquisition community. Lesko is also a member of the Army Acquisition Corps and a frequent contributor to Army AL&T. Contact him at John.Lesko@saftas.com.

The national business bestseller *Who Moved My Cheese?* is a simple parable that reveals profound truths about change. This amusing and enlightening story concerns four characters living in a maze and looking for cheese to nourish and make themselves happy.

Two of the characters are mice named Sniff and Scurry. The others are "little people" the size of mice who look and act a lot like people. Their names are Hem and Haw. "Cheese" is a metaphor for what you want to have in life, whether it is a good job, a loving relationship, money, a possession, health, or spiritual peace of mind. The maze is where you look for what you want: the organization you work for, the family you live with, or the community you live in. In the story, the characters face unexpected change. Eventually, one of them deals with it successfully and writes what he has learned from his experience on the maze walls.

In the foreword, Kenneth Blanchard reveals the entire plot and describes "the story behind the story" well before the author tells the tale. It is unusual for those who write a foreword to steal such content from the principal author. However, it is Blanchard who first explains how some people act like Sniff—sniffing out change early and following their nose. Others react like Scurry, who scurries quickly into action trying new paths to find new cheese. Others may deny the situation and resist change like Hem, who fears that change will lead to worse things. Finally, the story's hero, Haw, offers comic relief and serves as the narrator of this tale. He learns to adapt, overcome his fears, and act to find new cheese.

Johnson, however, tells the story like no other storyteller. He fully develops each pint-sized character. Readers learn about emotions, habits, and fears, then discover the "handwriting on the wall" as Haw scratches out guidance for his friends in the form of business axioms, observations, or guideposts to steer Hem (and the reader) to a better future. Johnson's storytelling technique is masterful, leading readers to examine their motives, strengths, and weaknesses along the way.

Dr. Johnson prescribes a remedy that also helps Haw, the story's least proactive character.

So why should a member of the acquisition community purchase or borrow this very short book written about two rodents and two cartoon-like characters? Philosophically speaking, one can call on the poet Robert Burns who said, "The best laid schemes o'mice and men/Gang aft a-gley." Such sage advice has universal appeal and application. But more substantive reasons come from the significance of this story to any company's business situation in today's stress-filled environment.

Clients within the acquisition community include all stakeholders who might affect a program's outcome. Warfighters, maintainers, suppliers, commercial partners, Congress, Defense executives, etc.; any may decide to move your cheese. Those in a program office must be ready to adapt to new challenges and opportunities. As technology advances, acquisition professionals must keep their skills current. They must be willing to insert new technology into existing systems. They must remain mentally sharp and maintain positive attitudes toward accepting and dealing with inevitable change.

Successful programs bring new capabilities and will transform the Army. Therefore, today's acquisition professional should think of the skills needed both in adapting to change and in serving as a change agent.

Some say that *Who Moved My Cheese?* is Johnson's best work to date. This is high praise, given that Johnson and Blanchard are coauthors of *The One Minute Manager*, the book that gave American business "management by walking around" and related techniques for building high-performance teams. This book is a practical guide for just about anyone who wants to succeed in a changing world.

The Project Manager's Desk Reference

By James P. Lewis. McGraw-Hill Professional Book Group, 2000.

Reviewed by LTC Kenneth H. Rose (USA, Ret.), a Management Consultant in Hampton, VA, and former member of the Army Acquisition Corps.

Many project managers face the dilemma of having to select a single reference book to keep close at hand. *The Project Manager's Desk Reference, 2nd Edition* by James P. Lewis is a good choice. Lewis' book is designed for practitioners and is not a textbook for academic study. Rather, it is a hands-on resource that offers practical advice for day-to-day use. The second edition includes current information and a revised format based

on reader feedback to improve its direct application to project management.

The book's 30 chapters present bite-sized, concise morsels that address principal elements of project management. They are organized into five sections for continuity and easy indexing. Lewis covers the basics of planning, scheduling, controlling, and evaluating, and then advances to other issues that affect or often determine project success.

The opening section is brief and to the point. It introduces two unique aspects of this book: a view of a seven-part project management system that defines essential components, and a proprietary 16-step project management model that provides a roadmap—a process for managing projects of any size in any domain. Succeeding chapters add detail to the framework.

Lewis explains that project planning begins with understanding what customers really want. This leads to establishing the project's mission, vision, goals, and objectives. In discussing project strategy, Lewis opens the door to social aspects of project management, which receive additional attention later in the book. He also introduces SWOT analysis (strengths, weaknesses, opportunities, and threats), which recurs throughout the text.

The planning section ends with the work breakdown structure (WBS). Lewis reminds readers that the WBS does not show the sequence of activities, and he advises readers not to include more detail in a WBS than they can manage. He also introduces "consensual estimating" in which several people collaborate to develop an estimate through interactive discussion rather than through mathematical models or majority votes.

Scheduling is both an art and a science. With all the tools available to project managers, the science part is well understood. According to Lewis, it's the "art" that's a real struggle. In spite of the many network and simulation tools, there is usually no "one best way" to schedule a project. The key often lies in a combination of wise choices. Lewis offers suggestions for applying art and science, and includes a walk-through of a sample schedule for a common event—a dinner party—as an illustration.

Project controls are essential in getting to where you want to go. Lewis briefly discusses three types of project reviews: design, status, and process. He offers tips for conducting reviews that produce meaningful results. He also addresses the important issue of canceling projects, a traumatic but often necessary action. The project control overview closes with a summary of a project control system that emphasizes dividing work into "chunks" that can be monitored using tangible deliverables as progress indicators.

Lewis pays considerable attention to earned-value analysis as a control mechanism. His explanation is clear and concise considering the number of acronyms associated with this topic. His frank discussion of cross-charging is a welcome illumination on a shadowy subject that is often neither recognized nor addressed. Lewis extends the text to cover progress payments and general budgeting topics that are informative to readers whose careers involve developing and delivering products.

Lewis concludes the traditional handbook material with causes of project success and failure. He presents 13 potential causes for failure that serve as project planning warning signs. He includes risk management as the means for preventing trouble by avoiding, mitigating, or transferring project risk.

What makes this book different is the section on "other issues"—issues that go beyond typical project management handbooks. Lewis' chapter on sociotechnical systems is an eye-opener for those who consider people as just another resource to be assigned. His analysis of the sociotechnical interaction in project organization is augmented by a chapter contributed by Robert K. Wysocki that profiles world-class project-management organizations. The chapter includes a quick diagnostic survey instrument for project organizations, a discussion of project management competencies, and a series of evaluation tools with guidance on interpreting results.

Projects are completed by people, and communication can bring people together or tear them apart. Lewis discusses five factors for good communication and defines conditions required for effective communication.

Julian Stubbs, another contributor, addresses business-to-business marketing using a structured approach that brings discipline to a highly creative domain. While the approach is valuable in its own right, the concepts can also be useful to project managers for communication within their organization.

The book closes with several chapters on systems thinking, problem solving, and decisionmaking. These are important in contemporary project management where scheduling is not the primary focus. In today's "systems" world, project managers must be virtuosos skilled in the tools and techniques necessary for success.

Many handbooks compete for the project manager's attention, and most handbooks claim to be the best. However, such a designation is difficult to confer. James P. Lewis' *The Project Manager's Desk Reference, 2nd Edition*, will not let you down. It provides an extensive repertoire from which busy project managers can extract practical information for immediate use.

Acquisition And Logistics Excellence Week

The Principal Deputy Under Secretary of Defense for Acquisition, Technology and Logistics has announced that Acquisition and Logistics Excellence (A&LE) Week will be Sept. 10-14, 2001. Originally scheduled for June 4-8, 2001, the event was changed to allow time for confirmation of the new acquisition and logistics officials, including the Service Secretaries.

For the past 5 years, DOD has sponsored A&LE Week to emphasize DOD and industry acquisition reform initiatives. During this week, each DOD organization is requested to cease normal operations for 1 day to participate in activities that focus on acquisition and logistics reform. Commanders and managers at all levels are responsible for planning this day's events.

To support commands in the A&LE Week effort, the Defense Acquisition University's Acquisition Reform Communications Center will provide a package of training materials. This package and other pertinent information is available online at <http://www.acq.osd.mil/alr01>.

The Army point of contact for A&LE Week 2001 is Melissa J. Pittard, (703) 681-9141, DSN 761-9141, or e-mail melissa.pittard@saalt.army.mil.

Commercial Acquisitions

Dr. Kenneth Oscar, Acting Assistant Secretary of the Army for Acquisition, Logistics and Technology, recently signed a memorandum outlining commercial acquisition procedures. This memorandum was in response to a directive from the Under Secretary of Defense for Acquisition, Technology and Logistics requiring that "to the maximum extent possible, commercial acquisitions should be conducted using Federal Acquisition Regulation (FAR) Part 12."

Oscar's memorandum was the impetus for the Army's plan to increase the use of FAR Part 12 for the acquisition of commercial items. The plan requests that Army commanders and program executive officers take appropriate action to ensure that Army acquisition teams are aware of the plan's embedded goals and that they use FAR Part 12 as appropriate.

The Armywide goals are to:

- Double the dollar value of FAR Part 12 contract actions awarded in 1999 by the end of FY05. The 1999 baseline is \$2.479 million.
- Increase the number of FAR Part 12 contract actions awarded to 50 percent of all Army contract actions by the end of FY05. (For the purposes of these goals, a contract action is defined as any new contract award and/or new delivery order placed against a contract awarded with a value greater than \$25,000.)

The implementation plan included a policy change, effective immediately, that all services are presumed to be

commercial in accordance with the FAR Part 12 definition of commercial item. In addition, FAR Part 12 policies and procedures will be used to buy these services. (FAR Part 36, Construction and Architect Engineering Contracts are excluded.) For those services where the results of market research indicate that the service is not commercial, the local competition advocate must approve the commercial determination.

Other action items included:

- Class commerciality determinations;
- Development of a commercial acquisitions community practice area within the Army's Internet-based Procurement Knowledge Center;
- Training in market research, performance requirements, and use of FAR Part 12;
- Development of a metric to track Army goals quarterly; and
- Increased management emphasis on appropriate use of FAR Part 12.

The point of contact for the above acquisition reform article is Monti Jagers, (703) 681-7571, monteze.jagers@saalt.army.mil.

NEWS BRIEFS

A New Micro Rappel System

Instead of slinging a load of rope over their shoulders, soldiers can now use a lean, simple micro rappel system. The micro rappel system provides soldiers, military police special reaction teams, and Special Operations Forces with compact, lightweight equipment to enter or escape from buildings. In contrast, the standard military rappel system is heavy and bulky, and the equipment is carried in separate bags or containers.

"Not every soldier carries the standard rope. With this system, everybody can carry the rope. This supplements the mission and gives them added capability," said Barry Hauck, Project Director for Product Manager, Soldier Equipment at the U.S. Army Soldier Systems Center (Natick).

According to Joe Jones, a Combat Developer at Fort Benning, GA, the micro rappel system provides commanders with an alternative in emergency situations and gives special operators a less cumbersome rope that's not as likely to interfere with the mission.

The micro rappel system is a nylon belt with a strap at each end that pulls out and wraps around each thigh to form a "seat." Attached to the belt is a nylon container about the size of an ammunition pouch. The pouch holds a descender, a carabiner, and 80 feet of 5mm rope with a Kevlar center surrounded by a nylon shell. When necessary the rope is protected by a sheath of fabric for high-abrasion surfaces, such as brick. The rope's tensile strength exceeds 5,000 pounds.

Advancing Composite Artillery Projectiles

Modern composite materials are being exploited to reduce the weight of munitions and other materiel required by U.S. Army forces. Of particular interest is the use of high-strength composite materials that are as strong as steel in selected orientations, yet weigh one-third as much per unit volume.

The High Capacity Artillery Projectile (HICAP) Program was the first effort of its kind to employ off-the-shelf, low-cost composite materials for fabrication of artillery shells. The prototypes had to withstand more than 13,000 g's of axial acceleration to be compatible with the highest propellant charge in the 155mm category. The M483A1 and the M864 are examples of two 155mm artillery shells. The M864 is a reduced-drag, slightly less lethal version of the M483A1. Both, however, carry grenades. Another cargo-carrying round is the XM898 Sense and Destroy Armor (SADARM) projectile, which delivers two submunitions for counter-battery missions. Development of the XM898 is ongoing.

Technology from the HICAP Program has been used extensively by the Navy in its Best Buy Program and by the Army in fabrication of the current lightweight 75-pound artillery shell.

Cargo-carrying artillery shells have always been fabricated from steel for two reasons: to sustain the setback loads from launch and to satisfy the mass distribution of the shell required for spin stabilization. Composite artillery shells weigh substantially less than their steel counterparts, allowing an equal payload to that of steel shells at a 25 to 30 percent overall weight reduction. However, they do not have sufficient mass at the outer radius for spin stabilization and, therefore, require fins for stability. Composite deployable fins were demonstrated with the HICAP Program in June 1996.

The HICAP round further demonstrated that two-piece, composite-body, fin-stabilized, artillery projectiles were achievable, even for the highest propellant charges. HICAP's successes were dampened by a rear section that created large base drag. The question of the ramifications of a two-piece projectile also loomed.

A new twist on the HICAP theme emerged in the creation of a fin-stabilized, single-piece, composite round. The

forward shell of this 75-pound projectile, which is made from a carbon epoxy composite, is relatively thin as it sustains only its own weight during launch. It is often referred to as an aeroshell, meaning that it is more of a containment vessel than a structural support shell like the rear cargo shell. The new fin stabilization approach is also used by the round to incorporate deployable elliptical fins on the rear projectile section. This design results in lower drag than HICAP, yet retains sufficient fin area for stabilization. This fin-body rear section intrudes into the gun chamber, but allows sufficient volume for almost all standard propellant charges. The composites and fin package combine for a substantial weight reduction from the 103-pound M483.

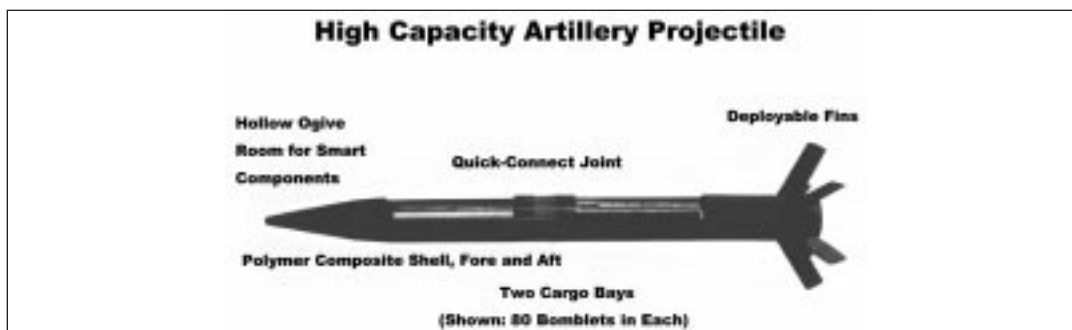
The forward shell deploys payload by bursting from pressure internally generated by rapidly burning energetics. The results of laboratory burst tests with M42 grenade payloads created radial expulsion velocities that were considered favorable for an acceptable grenade density on the target area.

As the composites layup technology matured, thinner-walled shells were fabricated. The composite shell can be made very thin to allow more grenades as payload. These ultrathin composite shells were demonstrated under the Navy's Best Buy Program (a 5-inch guided artillery shell program to which virtually all of the HICAP technology was transferred).

Conclusion

Composite technologies, coupled with aerodynamic advances, are offering munitions designers options for meeting today's objectives for "lighter and more lethal" munitions. The logistical benefit of these rounds is that they may be used with conventional artillery systems as well as with the newer lightweight systems mentioned. The composite shell's structural integrity and efficacy is well established. Additionally, cost reduction is being achieved through ongoing improvements in manufacturing techniques.

The preceding article was written by Jim Garner, an Aerospace Engineer, and James Bender, a Mechanical Engineer, both employed at the U.S. Army Research Laboratory, Aberdeen Proving Ground, MD. Both are graduates of the College of Engineering, University of Maryland.



New Chemical And Biological Protective Suits Ready To Issue

Chemical and biological agent protective suits will soon replace current protective clothing no longer in production. Procurement of the Joint Service Lightweight Integrated Suit Technology (JSLIST) suit, consisting of coat and trousers, began in 1997. The suit will be released to Army units from the war reserve as the Battledress Overgarment (BDO) supply depletes. Fielding will continue through 2005.

JSLIST resulted from a joint program led by the Marine Corps to develop an overgarment that can be worn in all environments under imminent threat of a chemical or biological attack and after these operations have started. The JSLIST suit replaces three types of chemical and biological protective suits.

The project is the result of a congressional mandate that future research, development, and procurement of all chemical items be jointly managed. "The military wanted to make a joint program for the sake of economy. Commonality will save money through the economy of scale," said George Costas, Project Engineer for Product Manager, Soldier Equipment at the U.S. Army Soldier Systems Center (Natick).

Service members will find many reasons to like the JSLIST suit. It is about a pound lighter and 60 percent less bulky (when packaged) than the BDO. JSLIST suits feel cooler and can be washed six times while the BDO cannot be washed.

"You sweat like crazy in these things. It can be a pretty miserable existence to wear it until the end of its wear life," Costas said. The wear life for the JSLIST overgarment is 45 days compared to 22 days for the BDO. Service life extends from 30 days for the BDO to 120 days for the JSLIST overgarment. Both provide 24 hours of protection after exposure to a chemical agent, and the JSLIST overgarment is expected to have at least the same shelf life as the BDO.

Another major improvement is the charcoal liner. The BDO liner is a charcoal-impregnated polyurethane foam and nylon-tricot laminate. The JSLIST liner consists of a nonwoven front laminated to activated carbon spheres and bonded to a knitted back that absorbs chemical agents. The BDO foam deteriorated as the wearer rubbed against the foam, and it could become messy.

Depending on the temperature and mission, the overgarment may be worn over the standard duty uniform, underwear, or over or under cold-weather garments.

JSLIST suits are stored in vacuum-sealed packages. They are offered in seven sizes and have the advantage of being split-issue, allowing users to combine a large coat with extra large pants. "With all the body types, you get a more comfortable fit and better chemical protection because it fits them properly," Costas said.

Natick is part of the U.S. Army Soldier and Biological Chemical Command (SBCCOM). For more information about SBCCOM or the Soldier Systems Center (Natick), visit their Web site at <http://www.sbccom.army.mil>.

New Liner Improves Boots

A removable insulation liner and a softer, more flexible midsole are two major changes for the Army's improved intermediate cold/wet boot. The first version of the boot was fielded in the early 1990s. That version filled the void between the standard-issue leather combat boots, which offer minimal performance in cold and damp conditions, and the extreme cold weather vapor barrier boots, which lock out the cold and wet with their rubber-enclosed air chambers but don't breathe.

The current 10-inch-high intermediate cold/wet boot provides a compromise for dismounted soldiers operating in cold, wet environments where the average temperature is 10 degrees below zero to 40 F. However, the boot's comfort level changes when the boot's interior becomes soggy.

"The insulation was built into the boot itself, but what would happen is that the inside would get soaked if water went over the top of the boot or sometimes sweat could build up. When the insulation gets wet, it's useless," said Chris Palmer, Project Officer for Military Footwear at the U.S. Army Soldier Systems Center (Natick).

Soldiers depended on an extra pair of boots to wear while their wet boots dried. They also used boot driers to speed the process. Both are an extra expense and inefficient.

The blueprint for an intermediate boot came from the commercial market, but the product improvement effort carried out by the Product Manager, Soldier Equipment found none of the currently available boots have removable liners.

The upper part of the new boot is still constructed of highly water-resistant and breathable military-specification leather bonded with a Gore-Tex lining. It also has a wet 200-gram insulation liner that can be removed and exchanged for a dry one, allowing soldiers to continue wearing the same boot. Instead of having two or three pairs of boots, soldiers will have two or three washable liners.

"You can still wear the boot without the liner, but it won't fit right. Two liners come with the boot, but more will be available if necessary," Palmer said.

The boot's tongue has also been upgraded with the more breathable leather. A rugged, aggressive-tread Vibram vulcanized rubber outer sole stays with the improved model. However, instead of rubber, the new boot is made with a softer polyurethane midsole.

Natick is part of the U.S. Army Soldier and Biological Chemical Command (SBCCOM). For more information about SBCCOM, the Soldier Systems Center (Natick), or various products, go to <http://www.sbccom.army.mil>.

Besson Awards Recognize Procurement Excellence

At a recent U.S. Army Materiel Command (AMC) conference in Fort Lauderdale, FL, Michelle L. Weinert, Matthew G. Meinert, and MAJ Daniel M. Munoz received the Frank S. Besson Award for Procurement Excellence. GEN John G. Coburn, AMC's Commanding General, presented the awards during a ceremony to recognize the awardees for their accomplishments.

The prestigious Besson Award was established in honor of GEN Frank S. Besson, the first AMC Commander, and his lifelong achievements in acquisition. The award recognizes individual excellence in the AMC contracting workforce. Selection is based on demonstrated technical expertise and development and implementation of innovative procurement-related ideas or processes in support of AMC's mission. Awards are made annually to recognize exceptional achievements by an intern, a civilian careerist, and a military officer within AMC.

Contract Specialist Michelle L. Weinert, the intern recipient of the 2000 Besson Award, started her contracting career with the U.S. Army Communications-Electronics Command (CECOM), Fort Monmouth, NJ, in 1998. Weinert was commended for her initiative, resourcefulness, and customer-focused approach in accomplishing diverse and complex assignments typically reserved for journeyman contract specialists. She performed a range of duties from market research through contract close-out and even provided training to her co-workers. Her contributions in effectively using and demonstrating a variety of electronic contracting tools, including her efforts at the National Contract Management Association World Congress 2000, were particularly noteworthy. Weinert is an active member of the National Contract Management Association. She is Level II certified in contracting, holds a B.S. in international business and Spanish, and is pursuing an M.B.A. degree at Monmouth University.

Matthew G. Meinert is a Procurement Analyst at CECOM, with more than 16 years of Army civilian service. He was honored for his knowledge and leadership in the development of electronic business tools that have placed CECOM at the forefront of Web-based electronic commerce technology. His initiatives have revolutionized the way CECOM contracts for goods and services. Meinert served as Project Leader for both the award-winning Interactive Business Opportunity Page, known as the Army's "Single Face to Industry," and the Electronic Reverse Auctioning Project. His expertise in developing these and other e-tools has enabled CECOM to realize dollar savings of more than 40 percent in comparison with traditional prices. Meinert's contributions in electronic commerce and contracting extend well beyond his command and the Army. Many senior government officials, including former Secretary of Defense William Cohen and former Secretary of State Dr. Madeline Albright, have formally recognized him for his efforts. Meinert is a graduate of Wheeling Jesuit University and is Level III certified in contracting.

MAJ Daniel M. Munoz, a Contracting Officer in the Apache Attack Helicopter Project Office, Redstone Arsenal, AL, was recognized for his dedication, demonstration of initiative, technical competence, and leadership, which were instrumental to the timely success of a source selection evaluation for the Modernized Target Acquisition Designation Sight/Pilot Night Vision Sensor. Munoz managed all aspects of this critical Army system procurement and provided expert guidance to a selection board of approximately 100 evaluators representing many disciplines. He skillfully controlled the dialogue with industry to ensure a common understanding of requirements and to facilitate achievement of the Army's acquisition objectives. Munoz's efforts culminated in the award of a complex \$80 million engineering and manufacturing development cost-plus-incentive-fee contract. The chairman of the Source Selection Evaluation Board (SSEB), who has been involved in five major source selections, noted Munoz's contributions to the SSEB, stating "... your outstanding performance and dedication to duty stand out above the rest. Your personal efforts were key to getting the job done." Munoz has more than 16 years of military service. He holds a B.A. in business management and an M.A. in procurement and acquisition management. He is also Level II certified in contracting and has received numerous military awards and decorations.

Each October, AMC requests nominations for the Besson Award. Procedural guidance for the award is contained in AMC Regulation 672-10 and can be accessed at <http://www.amc.army.mil/amc/rda/rda-ac/besson99/besson.htm>. For additional information, please contact Scott Crosson at (703) 617-0544 or scrosson@hqamc.army.mil.

Brandler Wins Laboratory Director Of The Year Award

U.S. Army Natick Soldier Systems Center Director Philip Brandler recently won the 2000 Laboratory Director of the Year Award for his exemplary contributions to technology transfer for economic development at the Natick, MA, facility. The competition for this national award, sponsored by the Federal Laboratory Consortium (FLC) for Technology Transfer, is open to more than 700 federal research and development laboratories and centers nationwide.

Technology transfer is an integral part of Natick's mission of conducting research, development, testing, and evaluation focused on maximizing a soldier's survivability, combat effectiveness, and quality of life in the field. Brandler has been influential in ensuring that every opportunity is taken to effect transfer of technologies through avenues such as Cooperative Research and Development Agreements (CRDAs), formal and informal partnerships, and consortia. His efforts resulted in the establishment of the National Protection Center, a joint agency pilot program that provides state-of-the-art protective equipment to military personnel and civilian emergency responders, which saved millions of taxpayer dollars.

AWARDS

Under Brandler's leadership, the Natick Soldier Systems Center Web site now includes industry partnering and promotion of technology transfer information. His leadership success in technology transfer is also evidenced by the 37 active CRDAs in which Natick Soldier Systems Center participates as well as the 8 Dual Use Science and Technology Program projects during the past 4 years.

Another notable example of Brandler's leadership success in technology transfer is his receipt of the 1999 FLC Excellence in Technology Transfer Award for achieving a technical breakthrough in developing shelf-stable pocket sandwiches for military and commercial use.

David Packard Excellence In Acquisition Award Winner Announced

David R. Oliver, Acting Under Secretary of Defense for Acquisition, Technology and Logistics, has selected the 2001 Army winner of the David Packard Excellence in Acquisition Award for FY00 achievements. The winner, a team that worked on the Small Computer Program at the U.S. Army Communications-Electronic Command (CECOM), will be recognized during Acquisition and Logistics Excellence Week at a Pentagon ceremony on Sept. 10, 2001. The team was nominated by BG Michael R. Mazzucchi, CECOM Deputy for Systems Acquisition, Office of the Director, Systems Management Center and MG Robert L. Nabors, Commanding General, CECOM HQ, Fort Monmouth, NJ.

The David Packard Award is the highest DOD acquisition award. It recognizes teams that have made highly significant contributions that demonstrate exemplary innovation and best-acquisition practices. The Army Small Com-

puter Program team successfully negotiated a series of software enterprise agreements that resulted in discounted prices and leveraged the combined buying power of the Army and DOD.

Oliver also selected three Army recipients of the Defense Acquisition Executive (DAE) Certificate of Achievement. The DAE Certificate of Achievement, which will also be presented during Acquisition and Logistics Excellence Week, recognizes organizations, groups, and teams for exceptional contributions in reducing life-cycle costs and/or improving DOD's acquisition systems and programs.

CECOM's Acquisition Center "Reverse" Auctioning Project Team was chosen for the DAE certificate for its initiative in demonstrating how auctioning, particularly reverse auctioning, can provide a timely and viable approach to advance acquisition reform.

The Joint Program Office for Biological Defense Joint Field Trial Team, another recipient of the DAE certificate, will be recognized for providing the biological defense acquisition community with proven technologies that can be inserted at any point in a program's life cycle to reduce performance risk, cost, and schedule time.

Finally, the U.S. Army Space and Missile Defense Command's Systems Engineering and Technical Assistance Contract Team was selected for the DAE certificate for using standard templates when receiving or issuing new or revised requirements, and for receiving proposals and/or task management plans. These templates allowed the team to save time and money by reducing both the requiring activity's preparation time and the contract specialist's time.

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