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Transforming the Future of Business Processes

Defense AT&L interviews
Elizabeth McGrath
Principal Deputy Under Secretary of Defense for Business Transformation

ALSO

Enlisting Lean Six Sigma in the Army Acquisition Process

Avoiding the "Army of Professional Amateurs" Paradox

Opportunity Management: Be Careful What You Ask For

The Case of the Business Systems Modernization

Krog's New Weapon

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DEPARTMENTS

Transforming the Future of Business Processes

Elizabeth McGrath
Principal Deputy Under Secretary of Defense for Business Transformation

Acquisition, finance and accounting, program management—Elizabeth McGrath has experienced it all, and her skills are helping to play a role in transforming the way the Department of Defense does business. Currently the principal deputy under secretary of defense for business transformation, McGrath has previously served as the deputy director for systems integration with the Defense Finance and Accounting Service. Throughout her career, she has had a variety of program management roles culminating in program executive office-level oversight responsibility. McGrath talked to *Defense AT&L* in December 2007 about DoD's transformation efforts and the challenges it faces in developing new enterprise-wide strategies.

Q
You've served as the principal deputy under secretary of defense for business transformation since the position was created on Feb. 3, 2006. Can you provide an overview of your roles and responsibilities?

A
My primary responsibilities include executing the department's primary governance body for business transformation, the Defense Business Systems Management Committee (DBSMC); implementing DoD's continuous process improvement/Lean Six Sigma (CPI/LSS) efforts; and co-leading, with the director of national intelligence, an initiative to reform the government-wide security clearance process. More broadly, I am responsible for ensuring that the many diverse aspects of the department's business transformation efforts are aligned and working together toward our shared goal of agile, adaptive, flexible, and accountable business operations.

Q
Can you describe what must be done in order to ensure a successful DoD business transformation effort?

A
Fundamentally, business transformation requires a number of things—leadership commitment, strong investment

management, an active governance structure, and a sound enterprise-level strategy. Deputy Secretary of Defense Gordon England continues to have an active personal role in defense business transformation. He has been, in many ways, acting in the capacity of a chief management officer throughout his tenure, most notably in his role as the chair of the DBSMC, the overarching governance board for the department's business mission area.

Recently, the department codified these CMO functions in a directive that states that the deputy secretary, as CMO, shall:

- Ensure department-wide capability to carry out the strategic plan of the DoD in support of national security objectives
- Ensure the core business missions of the department are optimally aligned to support the department's warfighting mission
- Establish performance goals and measures for improving and evaluating overall economy, efficiency, and effectiveness and monitor and measure the progress of the department
- Develop and maintain a department-wide strategic plan for business reform.

Further, the department has placed additional focus and emphasis on adopting continuous process improvement principles and implementing Lean Six Sigma methodologies. More broadly, the department has focused on five key areas, which together, are critical to the successful execution of our business transformation endeavor: strategy, process, culture, information, and technology. The department understands that business transformation is a marathon, not a sprint. Following this course, the department has made steady, significant progress in each of the five key areas mentioned above, and is poised for greater gains as we move forward.

Q

What challenges face DoD as it works to change its business practices, and how is your office responding to those challenges?

A

The biggest challenge facing the department's transformation efforts is simply the size and complexity of the organization. DoD manages a budget more than twice that of the world's largest corporation, employs more people than the population of a third of the world's countries, provides medical care for as many patients as the largest health management organization, and carries 500 times the number of inventory items as the world's largest commercial retail operation. We are responding to this massive transformational challenge by using a systematic approach that focuses on the five key areas I mentioned previously—strategy, process, culture, information, and technology—and by vesting accountability for successful transformation at all levels of the department's hierarchy. The department has tried to create an environment in which each level of the DoD organizational structure—component, enterprise, or other—can focus on those requirements specific to its level, with oversight and assistance provided by the Office of Business Transformation and the Business Transformation Agency. Additionally, we have focused on bringing together a world-class workforce—using special hiring authority granted to us by Congress—that is led by experienced business professionals.

Q

You've mentioned Lean Six Sigma, which is one of the hottest programs DoD organizations are adopting. As of July 2007, 64 percent of DoD organizations were applying this methodology to their business practices. Can you describe what Lean Six Sigma is and why so many DoD organizations are turning to it to improve processes?

A

As part of our ongoing business rhythm, we routinely review and assess our organizational structure to ensure alignment with customer needs and the strategic vision. As customer requirements and priorities evolve, it is crucial that we have the agility and flexibility to meet their needs in the most effective way possible. Lean Six Sigma is a disciplined improvement methodology that utilizes a combination of rigorous analytics and common sense to create efficient and effective processes. Lean Six Sigma provides a framework through which complicated processes can be examined in an organized and understandable way, thereby allowing us to identify where specific inefficiencies reside and allowing us to fix them. Lean Six Sigma has been endorsed by DoD leadership as the means by which the department will eliminate waste, improve quality, and put its resources and capital to the best use in our effort to make our business processes best support the warfighter. At the end of the day, it is leaders that make Lean Six Sigma successful, not the other way around. Leadership coupled with clear objectives, projects with impact, rigorous tracking, and a robust recognition program are key to driving the successful deployment of Lean Six Sigma across DoD.

Q

One of your responsibilities is an end-to-end reform of the security clearance process—one of the major Lean Six Sigma projects currently being undertaken. Can you talk more about this project?

A

One of the most ambitious process improvement projects that has been undertaken to date is an end-to-end reform of the government-wide security clearance process. DoD is working in close cooperation with the Office of the Director of National Intelligence, the Office of Manage-

Elizabeth A. McGrath

Principal Deputy Under Secretary of Defense for Business Transformation

As the principal deputy under secretary of defense for business transformation, Elizabeth A. McGrath is responsible for the Department of Defense's primary governance body for business transformation, the Defense Business Systems Management Committee. The committee is responsible for implementing DoD's continuous process improvement/Lean Six Sigma efforts and is co-leading, with the director of national intelligence, an initiative to reform the government-wide security clearance process. Additionally, McGrath was instrumental in the October 2005 establishment of the Defense Business Transformation Agency. Her responsibilities require integration and coordination with deputy secretary of defense and principal staff assistant (PSA) organizations as well as other inter-governmental agencies, such as the Office of Management and Budget and the General Accountability Office. She ensures that all business transformation requirements are aligned to PSA goals and objectives, thereby maximizing the capabilities of the offices of the Under Secretary of Defense for Acquisition, Technology and Logistics; the Under Secretary of Defense for Personnel and Readiness; and the Under Secretary of Defense Comptroller.

Prior to her current appointment, McGrath served as the deputy director for systems integration at the Defense Finance and Accounting Service, where she managed the entire design of a new DoD-wide standard financial system. The project scope included logistics, personnel, medical, acquisition, and financial missions, including many acquisition category IAM and III programs. Throughout her career, McGrath has served in a variety of program management roles, culminating in program executive office-level oversight responsibility. She possesses extensive knowledge of acquisition-related statutes, regulations, and policies, and she has more than 18 years of applied acquisition experience with major defense acquisition programs and major automated information systems. She has served as the business and acquisition manager for an international program with the United Kingdom and has held numerous other financial, acquisition, and program management positions within the U.S. Department of the Navy.

McGrath holds a bachelor's degree in economics from George Mason University and is a graduate of the Federal Executive Institute. She is certified at the acquisition level III in program management, financial management, and logistics. She is a member of the DoD acquisition professional community.

ment and Budget, and the Office of Personnel Management on this effort.

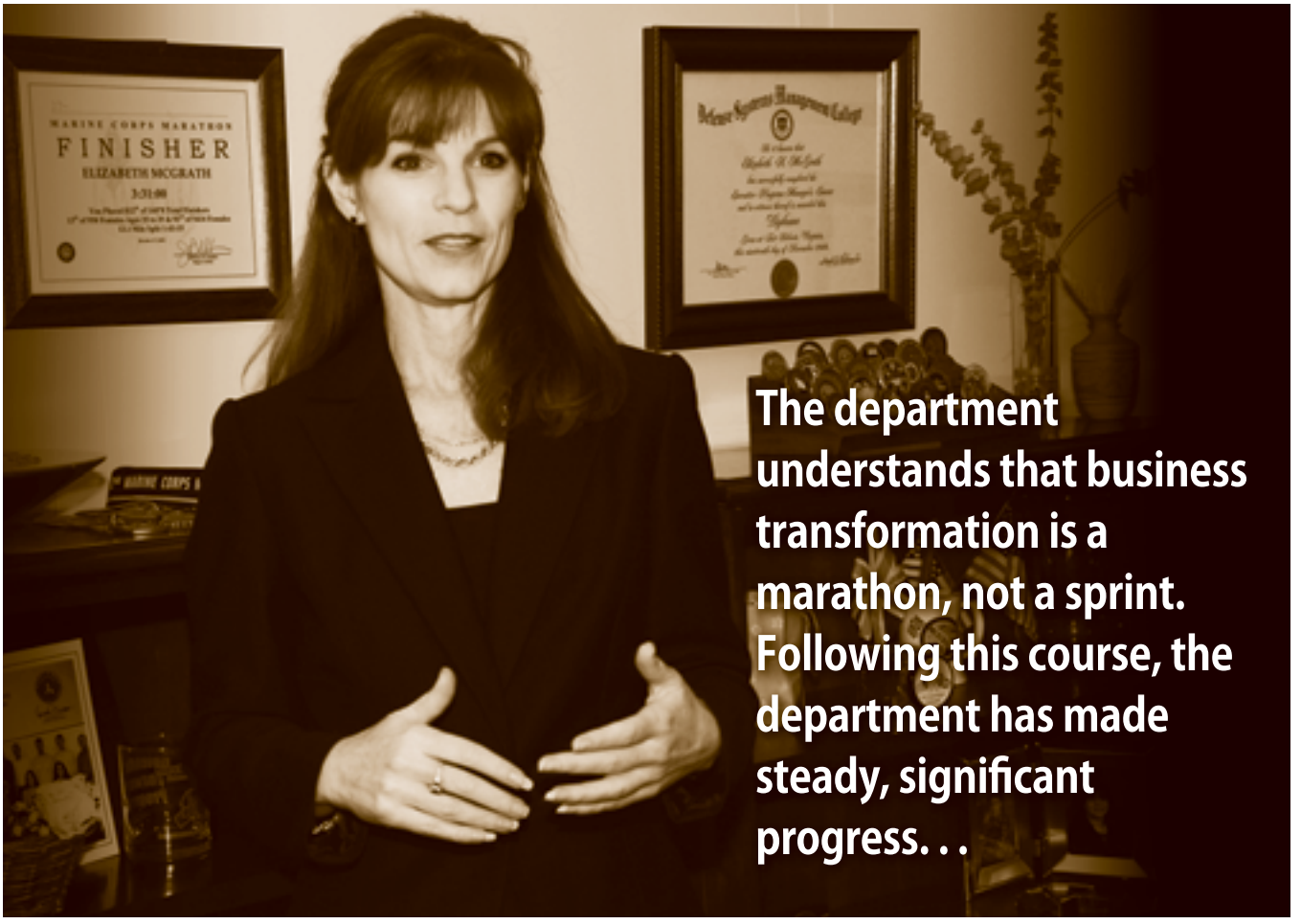
The team, composed of intelligence and defense experts from both the security and business transformation disciplines, began work in June 2007. While OPM was with us for portions of our work in the summer, they are presently expanding their membership in all aspects of planning from here forward, to include the Office of Personnel Management director joining the director of national intelligence, the under secretary of defense for intelligence, and the deputy director for the Office of Management and Budget as champions of an integrated effort.

Working closely with the leadership of all these organizations, our inter-agency team has been charged with creating a new clearance process that is fair; flexible and adaptive; managed and highly automated end-to-end; reciprocal; and delivers timely, high-assurance security clearances at the lowest reasonable cost.

The team has produced a transformed process that employs updated standards, methods, tools, and technologies to ensure effective and efficient performance across the U.S. government. We are presently working on ways to prove the innovations in the transformed process and have begun drafting the policy changes that ultimately will be needed to enable the change. It is important to note that the team's work has always been to create a transformed process—to define a desired future state. I differentiate this from the many, valuable ongoing efforts to improve the present-day process. These efforts and the team's vision are complementary, with near-term efforts as essential steps along the path to the future state.

The challenge for any and all of us involved in the process is to manage it from end to end across the U.S. government and to optimize each segment of the process (application, investigation, adjudication, aftercare) as well as the flow between them. For example, reductions in the backlog in investigations, though essential, may translate to work accumulating in other areas, such as adjudication facilities, unless all are working with the end-to-end perspective in mind. That's the vision of the future state: to find solutions in all areas and improve the experience of the agency and individuals the process is trying to serve.

The DoD Continuous Process Improvement/Lean Six Sigma Program Office was created within the



Office of the Deputy Under Secretary of Business Transformation in April 2007. Since the office was created, what steps have been taken in educating organizations and employees in Lean Six Sigma traits?

A

Since April 2007, much has been accomplished. Training classes have been established and completed; projects have been executed, yielding significant savings of time and money for the department; deployment metrics have been created and tracked; and productive relationships have been established between the Lean Six Sigma leaders from every DoD organization.

A focus on training has been a large part of our Lean Six Sigma deployment effort. The terms "black belt" and "green belt" refer to two Lean Six Sigma certification levels. As part of his April 2007 directive on Lean Six Sigma, Deputy Secretary England emphasized training portions of the department's workforce to the green and black belt levels. The DoD CPI/LSS Program Office currently offers green belt and black belt training, as well as a course for the department's senior leaders that teaches them to be champions of Lean Six Sigma within their organizations. Green belt training involves one week of classroom training. Black belt training involves three weeks of classroom training spaced out over three months. Champion training generally lasts for one day.

An integral part of the training process for green and black belt candidates is their role as leaders in actual Lean Six Sigma projects, ensuring that they can apply the training to complete their project. The objective of Lean Six Sigma is to enable the workforce to solve problems using a culture-changing methodology. The culture change occurs one person and one project at a time.

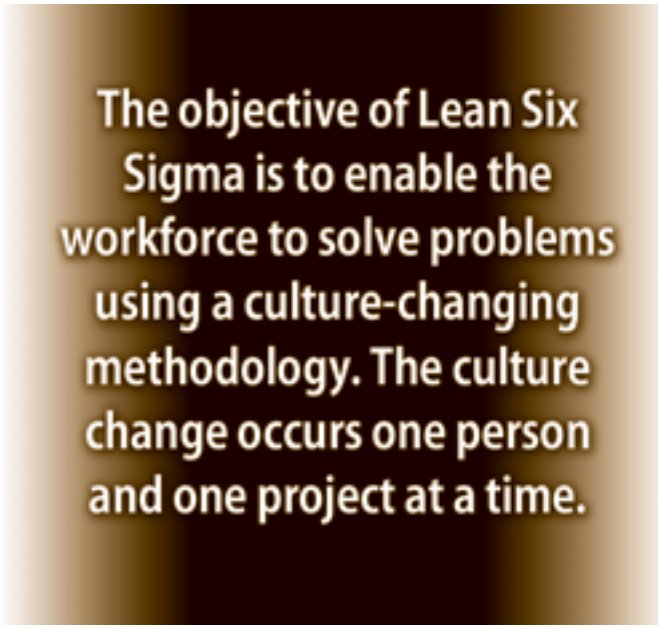
For more information about Lean Six Sigma, I encourage individuals within the DoD to go to <https://acc.dau.mil/dodcpitraining>.

Q

Could you tell us a little about the DBSMC and its importance to the Department's overall business transformation efforts?

A

The DBSMC is an integral part of the department's overall business transformation efforts. The DBSMC, created in 2005, brings the department's top leaders together to serve as the governance structure for the department's business operations. The DBSMC has responsibility for



approving business systems modernizations, the Business Enterprise Architecture (BEA), which is the enterprise architecture for the department's business information infrastructure and includes processes, data, data standards, business rules, operating requirements, and information exchanges; and the Enterprise Transition Plan, which is the strategic plan for the department's business area. Additionally, the DBSMC charter extends the authority of the DBSMC to include responsibility for ensuring that the strategic direction of the department's business operations are aligned with the rest of DoD and for measuring and reporting the progress of our transformation. The DBSMC has also been an integral driving force behind the department's adoption of Lean Six Sigma methodology and the department's shared focus on enterprise resource planning strategy. The DBSMC has provided invaluable top-level direction for the business improvement efforts of the department.

Q

One of the major focuses of the Business Transformation Agency has been to improve the department's acquisition of business capabilities. This effort has produced the Business Capability Lifecycle and Enterprise Risk Assessment Methodology. Could you speak about how BCL and ERAM will improve business capabilities acquisition?

A

The BCL will help resolve long-standing challenges that have impacted the delivery of business capabilities in a timely, well-informed manner—challenges such as fragmented governance and reporting, a need for better-defined requirements and more robust upfront solution analysis, and a need for continual access to comprehensive information to enhance visibility for all process stakeholders. Additionally, the BCL institutionalizes compliance management with BEA. Under BCL process rules, initial operational capability of a program must be reached within 12 to 18 months of the contract award or the business case will not be approved. Integral to the BCL process are ERAM examinations, which are conducted at key events in the program to mitigate emerging conditions that could impact delivery of capabilities. ERAM proactively identifies risk across seven key areas (strategy, process, scope/requirements, technology, contract, people, and external), with a focus on the root cause of the risk.

Q

The Enterprise Transition Plan is the strategic planning document for the department's business operations. How does the ETP interact with the other planning documents that the department produces, such as the supply chain planning document?

A

To manage the breadth of DoD's business and the depth of the organization, DoD is managing transformation through a family of interconnected plans, each with a well-defined focus, and each with accountability enforced by the department's organizational structure. This family of plans includes both enterprise-wide planning documents, such as the Quadrennial Defense Review, and functional business transformation plans, such as the supply chain management improvement and the financial improvement and audit readiness plans. The ETP serves as the umbrella business transformation plan among this family. Each of the major plans and reports play a key role in business transformation and each is aligned with the ETP.

Q

In a July 2004 Defense AT&L article, you wrote, "Each year the Department of Defense spends billions of dollars designing, building, operating, and maintaining business systems for our troops. … Inevitably these independent systems could rarely interact with other systems, and their information could not easily be exchanged or aggregated for use by senior DoD leaders for decision making." What changes are being made in DoD's technology investments right now to prevent that problem of interoperability?

A

The department has made significant progress in ensuring that its technology investments seamlessly interact and share information with one another. All new systems and system modernization programs must comply with BEA. The investment governance structure, including the DBSMC and the Investment Review Boards will not approve an investment unless it complies with the BEA.

Q

Thank you for your time, Ms. McGrath.

Enlisting Lean Six Sigma in the Army Acquisition Process

Leon Smith ■ Randy Wilson ■ Tiffani Burke

As resource managers, our business is not turning a wrench to move the chassis frame to the next station. Rather, we work in a white-collar environment. Our job is to enable our senior leaders to make informed decisions early in the decision-making process and to ensure high-priority requirements are funded to meet the capabilities needed to keep our servicemembers alive.

Understanding the Reason to Change

An understanding of the root causes of change is necessary before we begin to address solutions to a problem. Specific changes in an organization's structure or process are often derived from broader social, economic, and technological changes. General trends in society, politics, and demography affect everyone. As we review our everyday actions in the context of strategic financial decision making, we understand the importance of having timely, accurate, and executable financial management improvement in our environment.

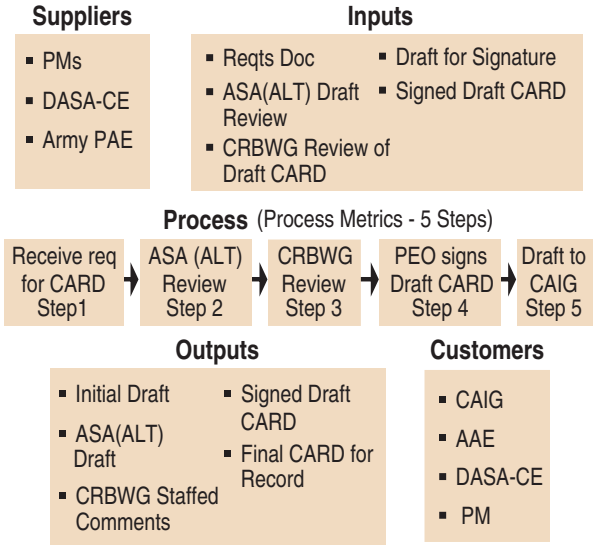
Today's operations involve:

- Constrained budgets
- Increasing accountability and transparency
- Enterprise systems
- Emphasis on controls
- Need for timely resource decision making
- Emphasis on results-oriented government.

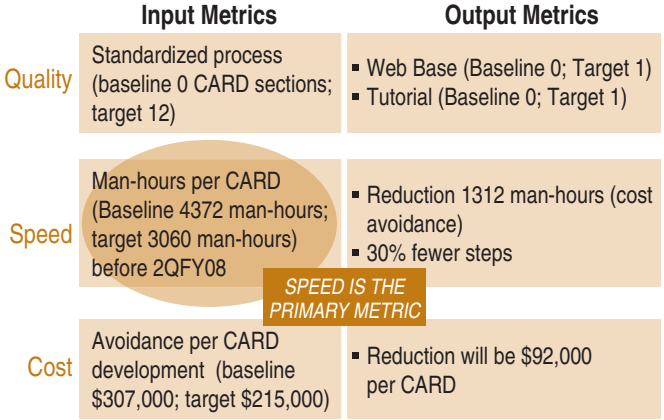
At the initiative of assistant secretary of the Army for financial management and comptroller (ASA[FM&C]) and the assistant secretary of the Army for acquisition, logistics, and technology (ASA[ALT]), the Army began to review the Army's acquisition cost process to identify opportunities to standardize the process and reduce cycle time. The opportunity to review the Army cost process was aligned with one of the pillars of the fiscal year 2007 ASA(FM&C) overarching strategies: implement Army business transformation. One of the strategic objectives of this overarching strategy is to "support Army-wide LSS [Lean Six Sigma] and business transformation and focus on results of financial management LSS projects Army-wide."

Smith *is a colonel in the U.S. Army and is currently the acting deputy assistant secretary of the Army for financial information management in the Office of Financial Management and Comptroller. He was the green belt candidate and CARD team leader.* **Wilson** *is currently the acting director for business transformation for the Office of the Deputy Assistant Secretary of the Army for Cost and Economics. He served as the cost subject matter expert for the CARD team.* **Burke** *is the business applications manager in the Information Technology Operations Office in the Office of the Deputy Assistant Secretary of the Army. She was the IT lead on the CARD team.*

SIPOC Map (Part 1)



SIPOC Map (Part 2)



Creating a LSS Team

To support this objective, a LSS team stood up in September 2006 and conducted a thorough review of the entire Army acquisition cost process. The team consisted of subject matter experts from ASA(FM&C) and ASA(ALT) and program manager/program executive officer representatives. Representatives from the Office of the Secretary of Defense Cost Analysis Improvement Group (CAIG) were also included to provide a customer perspective.

The team found that the CARD—the Cost Analysis Requirements Document—should be examined as a separate LSS project. A CARD is a document required of every Acquisition Category I program as it passes through the milestone decision review process. Created by the program manager, the CARD is a living document that describes the prominent features (12 sections) of both the acquisition program and the system itself, and it provides the basis for the life cycle cost estimate.

The authors of this article formed the CARD team, and we used LSS to analyze the best ways to improve the processes.

The LSS Process

Prior to our analysis, we had to ensure we all understood the purpose of the CARD. We also had to ensure everyone knew what we were going to examine. We then started the Lean Six Sigma process.

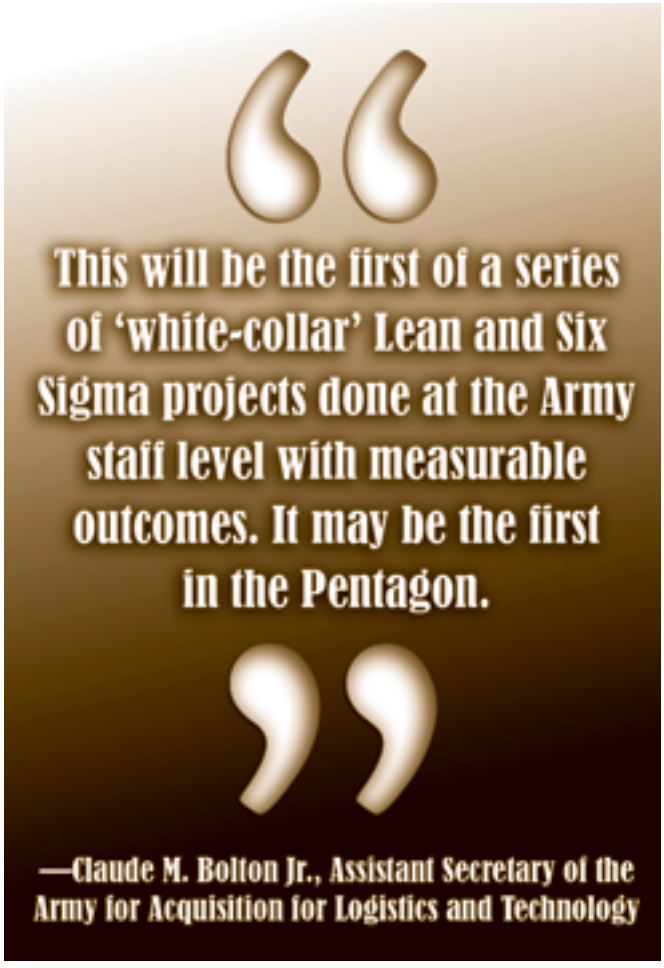
The LSS process has its own methodology that can be applied to any manufacturing, transactional, or service process to reduce waste, eliminate non-value-added functions, and reduce cycle time. The LSS process has five phases—**D**efine, **M**easure, **A**nalyze, **I**mprove, and **C**ontrol. The CARD team followed the DMAIC methodology, concluding each phase with a review that was given to the project sponsors, deployment directors, and at times, the senior leadership of the Army.

Define. In this phase, we defined the scope of the project (what was in-scope and out-of-scope) and the project requirements. We used "voice of the customer" inputs to determine root causes, priorities critical to quality, and critical design elements.

CAIG members were interviewed early in the process so we would understood what the customer desired. CAIG members wanted the primary metric of the CARD to be speed, though speed with quality was essential. As the project progressed, we revisited with CAIG members several times to ensure that we were redesigning the process to their specifications, and to ensure that the metrics remained consistent with their desired output.

Our team also examined the causes and effects of the root problems and found several shortfalls. The current CARD process had non-standard documentation processes (lack of standard operating procedures) as well as variable cycle times with each program management office (man-hour variance). Using our analytical LSS tools, we constructed a quality function deployment chart for prioritized root causes and found that the absence of suspenses, automation, centralization, and standardization caused program managers to use multiple document formats. In addition, there were multiple rewrites, an excessive number of documents, and little control over the changes made to those documents.

We developed a process map addressing suppliers, inputs, process, outputs, and customers (SIPOC). The map identified the suppliers to the process, the inputs provided by the suppliers, a map of the process, the outputs produced by the process, and the customers who utilized the outputs. Using the SIPOC map, we were able to prioritize the inputs and controls to develop a primary metric. In addition, we developed a RACI (responsible, accountable,



consulted, informed) matrix to provide the team structure, and we formed a stakeholder analysis that evolved into our communications plan.

Measure. We developed a data collection survey and collected data from the program managers on their efforts to produce a CARD. We used the primary metric derived in the define phase to determine the sigma quality level (an indicator of how often defects are likely to occur), establish control limits, and project cost reductions.

Analyze. We analyzed the data collected using a cause-and-effect/fishbone diagram to discover root causes, and we used the LSS design of experiment tool to understand and reduce variation. We also performed an analysis on the redesign elements.

Improve. After we analyzed our redesign elements, we were ready to demonstrate the advantages that would be realized if we executed them in the new CARD process. In the improve phase, the four new elements were technically feasible, economically sound, acceptable, and executable with the implementation of the new process.

Control. As the team finalized the CARD project, we constructed another quality function deployment to understand what elements we needed to control in the new process. The new redesign elements had to be prioritized for control discipline to ensure that the elements with the biggest impact on the new design were going to be heavily sustained. In our control phase, we found the highest degree of impact to the new process was having in place a control mechanism that would sustain the feeder documents, providing critical information to the CARD sections.

LSS Deliverables

As part of the CARD-to-be process, the team began with the DoD 5000.4M document, "Cost Analysis Guidance and Procedures," and transformed the CARD sections and the necessary documents into a standardized format.

The specific 12 CARD sections were put into Microsoft® Word and aligned with the master CARD document format. Once the CARD shell was created, it and other necessary documents were uploaded to the Army Knowledge Online Portal, which is the largest and most mature of all Department of Defense portals. This adaptive and agile portal features an architecture that facilitates knowledge management, information sharing, and collaboration across the entire Department of the Army.

The portal consists of personalized, user-defined tools that allow for secure access. There are three levels of access to AKO's new CARD knowledge center: read-only, author, and administrator. A common access card and an AKO account are the two primary tools needed to access the knowledge center

A CARD tutorial was created to assist users and help them navigate through the CARD knowledge center and display files and documents that are contained in this knowledge center. The tutorial also shows how a program manager would manage and monitor documents hosted within the CARD files.

Change Isn't Easy

The CARD team faced numerous challenges throughout the entire process, and here are some of the reasons why change wasn't easy:

White-collar environment. The idea of a white-collar team conducting a LSS project in a non-manufacturing environment was new to white-collar employees, causing some skepticism.

Lack of SOPs. Since we were the first team at Army headquarters to conduct a LSS project, we had to develop standard operating procedures, templates, instructions, and other necessary documentation to support our efforts.

New LSS support structure. The LSS support structure was getting established at Army headquarters at the same

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time our team started work on the project. Working together, we leveraged our collective strengths to make the LSS process successful.

Longevity of CARD team members. We initially estimated the project would last three months. As the project progressed, we found the duration was going to be about five months. The point here is that the estimated time may be longer, and team members' supervisors need to be flexible.

Turf battles. Sometimes it's true: What is right for me is not right for you. This is the reality of the turf battles. The team must be composed of members who will remove their turf hats and work together.

Consensus building. The LSS process is multi-generational. The team needs to understand what is in-scope and out-of-scope for each generation, which will help in setting realistic expectations. Because of limited resources and time, the team will have to possibly accept the scope as not all-inclusive. The additional efforts to improve can be done at a later sequel to this project in the form of multi-generational projects. In our project, we projected the multi-generational perspective out three generations.

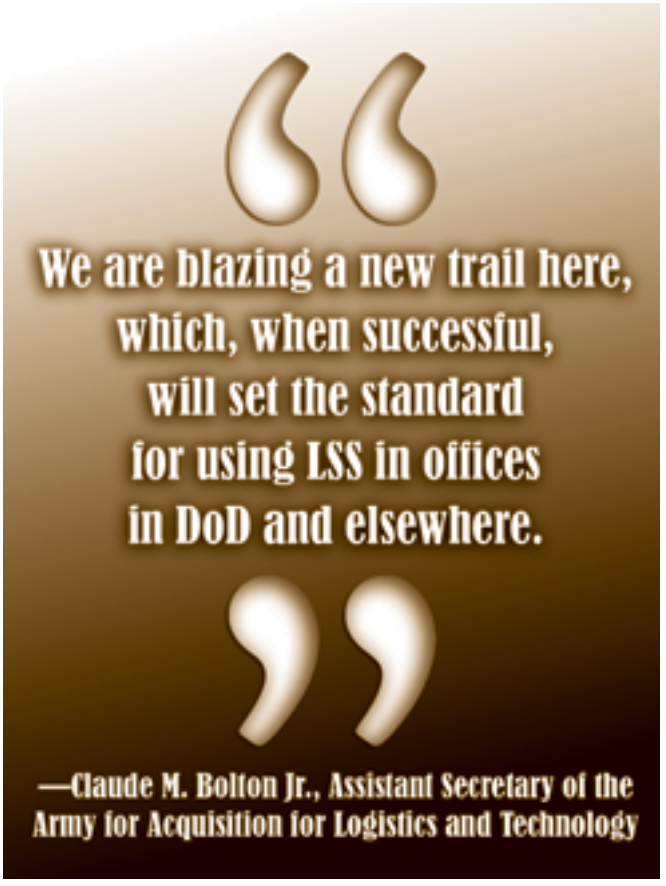
Competing Conflicts. Team members will have full-time jobs, but the expectations for a LSS project imply some commitment—at least 25 percent of the project's leader's time. The leader will maintain the momentum of the overall effort. The remaining team members will have varied commitments.

Team reluctance to follow the LSS approach. The five-phase process of LSS is intense and requires constant commitment. The team may try to avoid the time-consuming analytical tools to cut to the chase. However, the tools have been tested and will yield results—they will identify the root causes and substantiate what is not the obvious. By using the analytical tools in each phase, we found several root causes that we did not know. The bottom line is that shortcuts will not afford a team the opportunity to provide the senior leadership with the best redesign solution to implement.

An Example for Future Processes

The redesign of the CARD process represents a significant step for Army LSS. The recommendations proposed by the project team were implemented in March 2007. Key recommendations included a standardized, electronic CARD format with a standardized (one variable) submission process.

The forecast results of this project should be realized by the second quarter of fiscal year 2008 and include the following estimates:



- A reduction in man-hours from 4,300 to 3,000 for each CARD
- Cost avoidance of $92,000 for each new CARD completed.

The success of the Army CARD project stands as a hallmark for Army LSS activities because of its ability to address white collar processes with clear and demonstrable goals for program success. ASA(ALT) is continuing to identify improvement opportunities to the milestone decision review process and will be convening a series of teams to streamline other high-level, cross-functional processes similar to the CARD.

The acquisition, logistics, and technology community has previously shown how LSS can be applied to manufacturing processes. However, the CARD project is a great example of how LSS can also be effective when applied to transactional processes. Additionally, we were able to go outside organizational boundaries to hit a high-level, high-impact process that will bring bigger savings and improvements than if we just worked within our functional silos.

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Avoiding the "Army of Professional Amateurs" Paradox

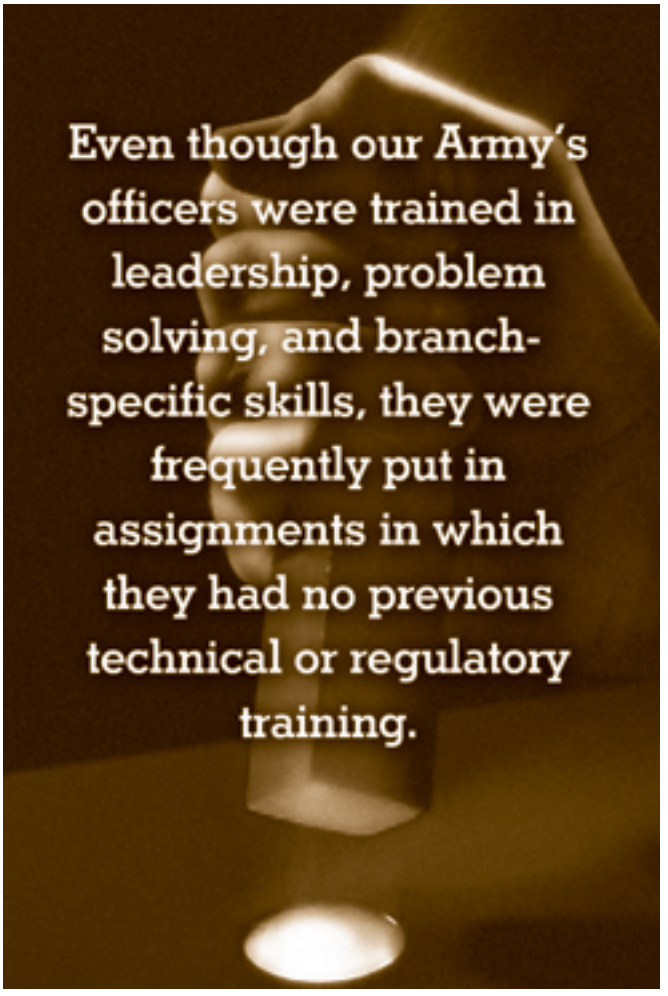
Capturing Tacit Knowledge in Our Workforce

Doug McCallum

I first heard the term "Army of professional amateurs" when I was a lieutenant in Germany in 1982. Our battalion's most dynamic infantry company commander, Capt. "Napalm" Jackson, had just finished his company command and was assigned to be the battalion S1 while waiting for his next assignment. Jackson had absolutely no training (or desire) to be a battalion S1, which is the battalion commander's principal staff officer for personnel support and involves responsibility for glorious tasks such as inspecting mail rooms and tracking a multitude of personnel transactions from evaluation reports to urinalysis testing. But, as with any good officer, he quickly learned how to do it.

Jackson used the term "Army of professional amateurs" to describe how, even though our Army's officers were trained in leadership, problem solving, and branch-specific skills, they were frequently put in assignments in which they had no previous technical or regulatory training. This term stuck with me over the rest of my career.

For branch-specific jobs, the Army provided me excellent training, but every time I had to perform a staff job—which became more frequent as I was promoted to higher ranks—I became an amateur again, having to learn new policies, regulations, office networks/relationships, and the large-scale frameworks supporting Army programs. At the upper levels in the Army and joint Department of Defense organizations, officers had to learn highly complex frameworks such as the Quadrennial Defense Review, program objective memorandum cycle, or training transformation to name a few—for which we did not receive any formal training. We had to teach ourselves the knowledge we needed to accomplish these jobs. It wasn't until I retired and had the opportunity to study new technologies in knowledge management (KM) and the challenges of our organizations undergoing Base Realignment and Closure (BRAC) that I realized that significant opportunities exist for the Army, joint DoD, and federal civilian communities to end the paradox of being a professional amateur. We can grasp this opportunity by teaching our leaders how to leverage KM technologies. Developing KM as a core leader competency should be included throughout our leadership's training and education systems—from the initial entry employee to the senior leader. Ending this paradox will assist the Army, joint DoD, and federal civilian communities in their need to transform to knowledge-based learning organizations.



A note: While the examples given in this article are based on the Army, they can apply to all of DoD and the federal government.

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Turbulent Conditions

Transitions into new jobs for which our leaders are not fully prepared are the norm in the DoD community—both in the civilian and the military workforce. The civilian workforce faces high rates of turnover, the departure of the aging baby boomer population, promotions, transfers, and civilian deployments into combat zones. In fact, the U.S. Department of Commerce's Recruitment and Retention Plan for fiscal years 2003 to 2007 noted that one of the top three issues identified as their most urgent and formidable human capital challenges was training replacements for a projected surge in retirements, particularly in the Senior Executive Service.

One of the biggest KM challenges faces the DoD organizations undergoing a BRAC move. For many organizations affected by BRAC, a high percentage of their current civilian workforce will not make the move to a new location. By some estimates, as much as 70 percent of the federal workforce (and supporting contractors) will not move to new locations. To use a military analogy, the Army's fire support doctrine states that an enemy unit can be destroyed by inflicting 30 percent casualties. This percentage reflects the damage done not just in raw numbers, but to the systems and single points of failures (such as key leaders or logistical support) that will prevent that unit acting in a coherent, synergistic manner. To continue this analogy, the organizations affected by BRAC face a devastating loss of knowledge because some will lose not just 30 percent, but possibly 70 percent of their current workforce.

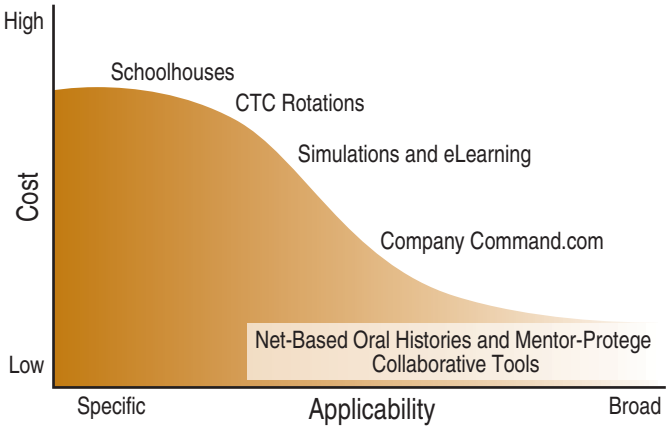
Since DoD has faced these turbulent conditions for many years, the department is often slow to grasp that knowledge loss is an avoidable situation.

Different Types of Knowledge

Most knowledge constructs establish a difference between explicit knowledge and tacit knowledge. **Explicit knowledge** is easy to capture and transfer. This is the knowledge that is documented and stored—files, standard operating procedures, continuity books, presentations in shared folders, or collaborative portals/sites. **Tacit knowledge** is knowledge that people carry around in their minds, therefore, it is difficult to access. Tacit knowledge is considered more valuable because it provides context for people, places, ideas, and experiences. The tacit aspects of knowledge are those that are difficult to codify and are typically transmitted via training or gained through personal experience.

Tacit knowledge may seem a simple idea, but its implications are large and far-reaching. If important knowledge is tacit, then it is difficult to effectively spread throughout an organization. This often means that useful knowledge will not be able to reach those who need it without direct, face-to-face contact. It also means that training newcomers in an organization is very time consuming because newcomers must learn their new job while simultaneously perform their new job duties. This results in a high degree of inefficiency, slowness of job execution, and increased costs of making mistakes, whether these mistake are in combat or in the acquisition community's cost-schedule-performance environment. These costs could otherwise have been avoided through capturing the wisdom gained by others and transferring it to the new leader.

Examples of Evolving Tacit Knowledge Capture-and-Transfer Systems



Timely, Costly Knowledge Capture Methods

The Army has many ways it has transmitted tacit knowledge—from the observer controller in the combat training centers, to the publications of the Center for Army Lessons Learned, to what was one of my favorite readings—the series of e-mails sent to the field relaying issues important to top leadership called *Random Thoughts While Running* by the former Army Chief of Staff Gen. Dennis Reimer.

Even though DoD and the Army have frameworks in place to capture and transfer hard-won experience, those methods are typically highly resource- and time-intensive methods of transferring tacit knowledge directly to emerging leaders—schooling or a combat training center rotation, for example. These methods are also typically branch-, rank-, or unit-specific, and they may not be directly applicable to those moving into staff jobs involving the administering of DoD programs.

Flattening the Knowledge Transfer Methods

The figure above provides a few examples of the Army's evolution of tacit knowledge technology. The flattening effect shows increased applicability with lower costs. The forces causing this flattening effect are the same as those described by Thomas Friedman in his book, *The World is Flat*. Friedman's context is a discussion of the new age of globalization and how 10 phenomena, or "flatteners," have enabled, empowered, and enjoined individuals and small teams to have transformational impact on their global competitiveness. Specifically, this new-world flat

platform is a convergence of the personal computer, fiber optic cable, and newer forms of hardware and workflow collaborative software, which allows for the building of the knowledge worker. This convergence now provides the opportunity to access highly efficient, low-cost technologies that can exponentially increase the Army's and DoD's ability to capture tacit knowledge and transfer it to developing leaders.

There have been a number of technologies enabling or facilitating explicit knowledge management practices such as document management systems, shared files and folders, portal-based digital environments, and organizational knowledge flows (process charts and continuity books).

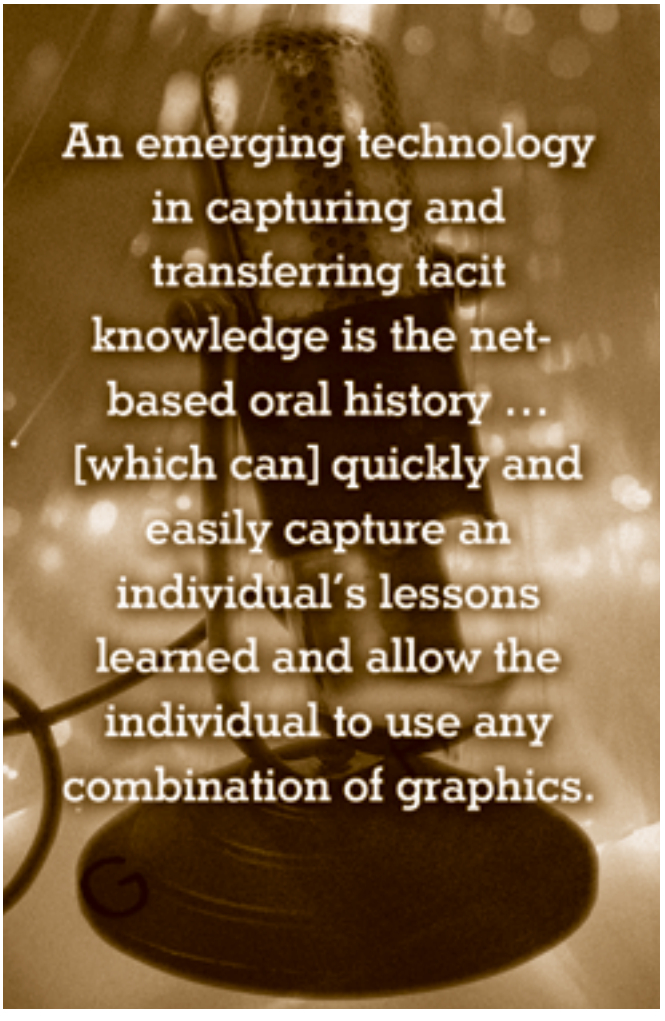
One technology that has become highly effective in recent years for transferring explicit knowledge is online classes, or eLearning systems. These online classes have developed from earlier versions that were of questionable effectiveness to recent versions that are highly effective, interactive, and well-designed in their ability to allow the student to learn the required knowledge. Examples of such classes are those that are offered by the Defense Acquisition University or DoD's Skillport™ classes. These courses encompass a wide range of subjects from leadership development courses to more technically-based knowledge such as the acquisition workforces' certifications or IT end-user curricula. These classes are truly effective for developing administrative and technical skills, but they frequently do not have the capability of capturing and transferring content-specific, organizationally-unique knowledge such as the tacit knowledge of the company commander operating in an asymmetric warfare environment. It takes a large amount of resources to develop online courses, while new tacit knowledge capture tools allow an organization to capture and share specific, critical knowledge more quickly with far less costs.

Another evolutionary step in tacit knowledge capture and transfer is the <http://companycommand.army.mil> Web site, which shares tacit knowledge throughout a specific community of practice and takes the additional step of establishing online protégé-mentor relationships. This community allows those seeking knowledge that will help prepare them for company-level command to connect laterally to a larger world, introducing them to many styles of leadership and issues of battle-ready command. It creates an opportunity for the learning curve to begin well before officers actually take command of a company, and the learning and contribution continues through their years in command and beyond. However, the Company Command site still relies on written documents, lessons learned, and other knowledge that is time-consuming to codify, and it fails to use emerging, efficient, key-word-searchable audio-visual capture technology that allows for increased tacit knowledge capture and transfer.

Each of these evolving knowledge capture-and-transfer systems reduces the cost of capturing and transferring knowledge while expanding the number and types of users who can access this knowledge.

Taking Online Learning to New Dimensions

An emerging technology in capturing and transferring tacit knowledge is the net-based oral history. This off-the-shelf technology is inexpensive, easy to use, and provides a broad range of applicability. It builds on a net-based portal system's capabilities, encompassing communities of practice, hosting shared explicit knowledge (i.e., shared folders and files), providing information security, and linking protégé-mentor relationships through collaborative connections. Net-based oral histories add another feature to capturing tacit knowledge. They quickly and easily capture an individual's lessons learned and allow the individual to use any combination of graphics (such as PowerPoint® slides or whiteboard concept sketches) to visually supplement the oral history, thereby increasing the effectiveness of the knowledge transfer. This technology is similar to that found on YouTube, but it provides a structured and focused learning message. Most importantly, it can be searched by key words in order to go to that specific part of the oral history that is relevant to



the knowledge seeker. This is a big improvement over current Army video KM systems, in which the user must watch hours of video in order to obtain the few nuggets of pertinent knowledge.

Oral histories have a broad level of applicability. If you are a company commander about to deploy to combat, a colonel about to report to the Office of Congressional Affairs, an acquisition professional taking over a project office, or an Army civilian hired for a position at an organization's post-BRAC location, you can go straight to the part of the oral history (or key meeting) that has the relevant information you need to increase your knowledge to effectively perform your job. It is this ease of collection and access, as well as the ability to codify pertinent and in-depth tacit knowledge that makes this next step in technology innovative and highly useful in DoD's efforts to build knowledge-based learning organizations. The oral histories can apply to the warfighting community, the acquisition and technology community, or any other DoD community. They are an innovative way of solving the knowledge gap between the aging federal workforce and the younger workers. This increase in the ability to collect pertinent individual knowledge will enhance organizational performance by limiting the knowledge loss from turnover and will augment the workforce's access to knowledge that is needed to perform their jobs.

Leaders Drive Change

The efficient codification and use of tacit knowledge has many implications for the DoD's ability to be a learning-based organization, especially because:

- Tacit knowledge is embedded in human capital. This makes it valuable as a strategic advantage fully leveraging the human dimension.
- Exploiting tacit knowledge has been shown repeatedly to be a key ingredient to the innovation process.

The slowness to understand and apply these emerging knowledge management innovations is not due to some inherent failing or an unavoidable human conservatism. Rather, it reflects leaders' limited training and expertise in understanding how to use technical tools to get the most out of their workforce. Where knowledge management courses do exist, they are generally online courses with no professional forcing function—i.e., tied to promotion, organizationally established human capital strategies, or associated leader individual development plans. This lack of core leadership training in knowledge management principles and technologies hinders the transition to a knowledge-based organization.

A word of caution: technology by itself does not drive organizational improvement. It is leaders' understanding of how to leverage these technologies in support of their workers that is, by far, the more important aspect in improving an organization. This leads to the conclusion that our leaders must increase their knowledge of learning techniques and apply these tools to improve the human dimension. Applied to an Army analogy, there was once a very wise commander of an Army combat training center operations group who said, "Fire support is too important to leave to the artillery." By this, he meant that the commander had to be intimately involved in the integration and execution of fire support within his commander's intent. Likewise, knowledge capture and transferring techniques are too important to leave to the G6/chief information officer/information technology supporters. Leaders of DoD organizations must get involved in understanding and integrating these new technologies for capturing and transferring tacit knowledge within their organizations.

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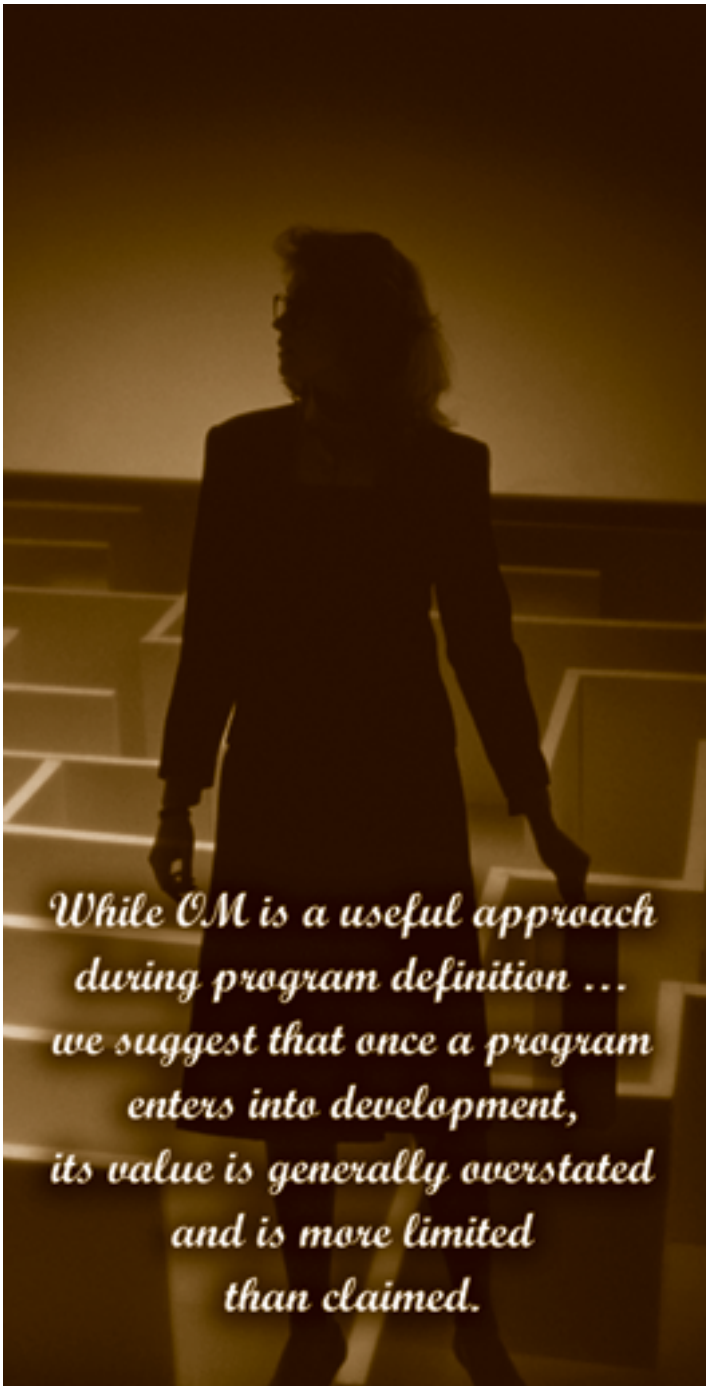
Opportunity Management

Be Careful What You Ask For

Edmund H. Conrow ■ Robert N. Charette

Articles have appeared in defense journals such as *Defense AT&L*, *Cross Talk* (the Journal of Defense Software Engineering, Hill Air Force Base, Utah at <www.stsc.hill.af.mil/crosstalk/about.html#mission>), and others arguing for including a formal opportunity management (OM) process as a method to get more bang for the buck on defense programs.

While OM is a useful approach during program definition, when a wide range of alternative solutions are being investigated, we suggest that once a program enters into development, its value is generally overstated and is more limited than claimed. A deeper examination of OM indicates a number of limitations and concerns that may not only limit its potential effectiveness, but may cause more problems than are solved. For instance, unless tightly controlled, OM may exacerbate the enduring problem of requirements creep that plagues programs today. (Note: throughout this article we use the word "program" for simplicity, although we recognize that there may be distinctions between a "program" and a "project.")



In this article, we discuss these limitations and further argue that there is no defined need or major added value to implementing a separate OM discipline when robust program management, risk management (RM), and systems engineering are practiced.

What Is An Opportunity?

The first issue that needs to be address is this: What exactly *is* an opportunity? While there is no universal or perfect definition (and we view the term "positive risk" as an oxymoron), we define opportunity as the potentially desired better- (greater-) than-expected outcome of an event or situation that requires an additional allocation or reallocation of resources to pursue. In simple terms, it's a change in direction from the status quo that will leave us—we believe—in a place better than is currently anticipated.

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Charette *is president of the ITABHI Corporation, which specializes in enterprise risk management. He is the author of several books on risk management.*

That is not to say that opportunity is the mirror image of risk (which is generally defined as the potential for the unwanted negative outcome of an event or situation) even though the definitions appear to be symmetric. For instance, consider a hypothetical situation: a program with absolutely no risk. The program is perfectly planned to accomplish its objectives on time and at projected cost. Now let us hypothesize an approach—an opportunity—that may reduce the cost of the program further. However, the approach, if not implemented correctly, may lead to the program's becoming overbudget and/or late. What would you choose to do—pursue the opportunity or proceed as planned?

In the above case (a program with no risk, etc.), for most decision makers, the value of the possible cost reduction (gain) would have to be much greater than the potential loss to the program's cost and schedule in order for the opportunity to be selected. The maxim of one in the hand is worth much more than two in the bush aptly applies.

As economics Nobel Prize winner Daniel Kahneman and his late colleague Amos Tversky demonstrated through Prospect Theory, people do not evaluate decisions involving gains (e.g., opportunity) and losses (e.g., risk) in a symmetrical manner. (For example, creating opportunity and risk matrices or cubes that mirror one another or are identical copies of each other, as some OM advocates propose, can lead to erroneous decisions.)

Is RM Negative?

One argument that is often raised for the need for OM is that RM is "negatively focused," or even worse, a practice that managers may sometimes avoid because it is seen as highlighting problem areas. Risk management is sometimes presented as a "can't-do" program process rather than a "can-do" program process like OM, which sounds more upbeat and positive.

However, while we do indeed define risk as "negative," properly practiced RM is a very positive approach. It identifies and recommends alternatives to alleviate potential negative events or their consequences and, therefore, brings the program back to within expectations. Furthermore, RM routinely identifies and recommends novel alternatives—that is, opportunities that leave the program better off than originally planned.

Risk management has been unfairly framed by OM advocates as being a practice whose sole objective is to keep the expected probability of program success the same or that ignores alternatives that may lead to improved program outcomes. What is even more interesting to us is the implication, based on OM proponents' arguments about RM, that the current practices of program management and systems engineering are also aimed at achieving the same objective (keeping the expected probability of program success the same). Our several decades of experience do not bear this out—effective program management, RM, and systems engineering are used regularly to examine alternatives to improve program outcomes and increase the probability of program success.

Is OM Really Necessary?

OM advocates like to point out that valuable opportunities for improving a program's cost, performance, and/or schedule are routinely left on the table, thereby requiring an active OM process to correct the situation. Yet both the quantitative as well as qualitative proof offered by OM advocates appear to us to be razor-thin. One can see this in the four types of opportunities said by OM advocates to be customarily overlooked by programs. (For example, see "Silver Linings in Every Cloud," by David Hillson, *Project Manager Today*, February 2007, pp. 27-28, as a representative sample of OM literature.)

The first source of opportunity that OM advocates claim is overlooked is an opportunity that occurs because of an absence of risk. The classic and seemingly favorite example given by OM advocates is if it appears that poor industrial relations may lead to a strike, the program might be able to introduce an incentive scheme and turn the situation around from negative to positive. It is interesting to us that the absence of a program risk is defined as an opportunity. By this definition, almost any program risk that does not materialize is an implied opportunity.

Given that the risk posed by industrial action was highly likely and material to program success, is it really plausible that program management or RM would not be actively investigating alternatives to avert a strike, including incentive schemes? Does anyone really believe that program management or RM would be aimed solely at maintaining the status quo, or be focused only on ways to contain the impact of industrial action, as OM advocates contend?

A second source of opportunity that OM advocates claim is often missed are opportunities that are the inverse of some program risks. For instance, OM advocates cite a situation where the productivity rate on a program task is unknown; i.e., it might be lower than expected or it might be higher.

OM advocates claim that "traditional" program management, RM, and systems engineering would automatically label this uncertainty as having only negative outcomes and that program management decisions would henceforth be made from this perspective and assumption. Yet, again, how believable is that contention?

Even if the situation above were labeled as a risk, let us say that risk monitoring showed that, in fact, the productivity rate was better than expected. Do OM advocates actually contend management would not revise the pro-

gram plan accordingly? Do they think the productivity rate would remain, once contrary data was provided, as a program risk?

A third source of opportunities OM advocates claim is habitually overlooked are the opportunities provided by the interaction of managing risks themselves. OM advocates claim that program risks are managed in "silos" so that situations can arise in which the aversion of one risk is not used to offset the risk posed by another.

But again, how credible is it to ignore the killing-two-birds-with-one-stone argument? How often are program risks managed in a manner such that the risk-handling approach to one is not transparent to the risk-handling approach being considered for another? This may occur if the risk consequences are highly localized, meaning that they don't affect the rest of the program. But for any risk that has program-wide implications, the handling approach and its impact will be thoroughly reviewed by program management and systems engineering. Do OM advocates really believe that if the risk-handling approach for a given risk has beneficial side effects for another risk, it will be deliberately ignored or overlooked?

The final source of opportunity cited by OM advocates that is routinely unnoticed are "pure opportunities," which unlike the previous three, are unrelated to specific program risks. Examples given are the availability of new processes or technologies that can help improve program performance. It is claimed that these "pure opportunities" are not being actively exploited.

Again, how reliable is that claim? On every program in which we have ever been involved, the search for processes, technology, or skilled personnel to improve program performance is the norm. In fact, a recurring problem for far too many programs is a lust after new program "silver bullets" instead of a focus on implementing current processes and technology that adequately meet the requirements.

We remain unconvinced that the four "opportunity situations" cited by OM advocates as being overlooked or missed by program management, RM, and/or systems engineering, *are* in fact widely missed on actual programs—especially those in the Department of Defense—that use accepted practices. Again, we would like to see data that demonstrate lack of OM causing program under-performance on programs that apply accepted—let alone best—program management, RM, and/or systems engineering practices. The same applies to the converse, where OM has improved program outcomes in which program management, RM, and/or systems engineering practices are poor.

Please, show us the data.

Are Program Risks Currently Well Managed?

We do concede that on too many programs, poor program management, RM, and/or systems engineering practices might miss more subtle situations where better program outcomes might be possible.

Alas, our experience suggests that RM is often poorly performed on many DoD programs. Results from the Tri-Service Assessment Initiative (which looked at 50 major DoD programs), performed a few years ago indicate that while RM is carried out on most programs, it is often ineffective. Risk-management processes are often superficial, risk analyses are not communicated, and identified risks frequently do not influence program decision making (e.g., outputs are not utilized to make decisions or to improve how the program is being run). Similar issues plague both program management and systems engineering practices on many programs.

We believe that more emphasis should be placed on ensuring that accepted program practices are in place and being applied properly—something that the Office of the Secretary of Defense has been actively trying to address. Even with the best of intentions, adding a new program

process, be it OM or something else, to programs that have poorly implemented standard practices would do little to improve program success; more likely it would serve only to undermine it, as well as to add another layer of bureaucracy to the program. It takes a major leap of faith to believe that in a program in which poor program management, RM, and/or systems engineering practices exist that an OM practice would be implemented significantly more effectively.

Where Is OM Potentially Effective?

An area where OM might be very useful indeed is during the program definition stage, in which alternative technical solutions are being actively explored. At this point in a program, innovative thinking and approaches are required to be explored, and program assumptions and constraints challenged. OM has the potential to be an effective remedy for the scourge of overly optimistic program cost and schedule estimates that currently rely on achieving technological breakthroughs on demand in order for them to be met.

A strong dose of a capital venture-based, risk entrepreneurial-based OM might go a long way towards bringing needed realism to program plans before program development begins, but once it begins, the first order of business is to ensure that the promises made to Congress, OSD, the appropriate Service, and to the warfighting community are kept, not that they are exceeded.

OM in conjunction with systems engineering will also likely be useful during program sustainment, when opportunities for investments in new system or platform capabilities often present themselves.

Unintended Potential Consequences of OM

Assuming you are unconvinced of our arguments and still wish to go ahead with OM, at least be aware of the risks with OM before you do so. Many advocating OM seem anxious to highlight the upside but are reticent to discuss the downside of OM.

First, Government Accountability Office data indicate that the development time cycle for major DoD programs has increased over 23 percent in the past year; anything that exacerbates this situation is not needed. Unfortunately, as we pointed out earlier, OM has the potential for encouraging unconstrained requirements creep unless you act quickly and forcefully to stop it.

Why is that? Any bureaucratic organization has to justify itself; an OM integrated project team, which OM advocates claim is vitally needed in programs today, is no different. The job of an OM IPT is to find opportunities (that are supposedly being overlooked), and its success is going to be measured by how many "overlooked" opportunities it "discovers."

As the previous example illustrated, the OM IPT will be sorely tempted to re-examine every risk-handling strategy to find greater leverage. Another layer of review will be placed over the RM team's handling strategies, when that is really the purview of the program management team. Every program activity will be fair game for the OM IPT.

In addition, once an opportunity is identified by the OM IPT, expect the team to become vocal promoters for that opportunity, if for no other reason than to show that its judgment was correct. The team has a vested interest in opportunities not only being identified, but pursued.

You, as the PM, risk setting up a competing group for influence in your program or having kibitzers second guessing the decisions you make. One of your jobs will now be to dampen down the desire of program personnel to work on the novel opportunities your OM IPT uncovers, rather than concentrating on the mundane hard work that program success requires.

OM advocates claim that requirements creep can be controlled by ensuring that opportunities that might change project program expectations or scope for the better be presented to higher management. As we noted earlier, be prepared to present proof positive that the opportunity "upside" you are presenting is substantial, and that the downside is minimal. In our experience, senior managers don't believe they will get something for nothing.

Be careful, too, that your OM process doesn't end up taking resources from program management, RM, systems engineering, and so on. At the very least, think hard about where the resources will come from to pursue OM. If you manage to get extra resources to implement OM, do a cost/benefit trade-off to see whether OM or some other activity would create more bang for the buck. The same is true if you find extra resources to pursue an identified opportunity.

Remember, too, that opportunities are not risk-free. You will need a very robust RM process to ensure that any opportunities you pursue are captured and do not lead to subsequent risks or problems (as we have seen too often on actual programs).

Finally, if you are using OM as a way to overcome the risks of over-optimistic program estimates, then call it by its true name: Optimism Management. For now OM becomes akin to a technique for picking lottery numbers in hopes of funding your pension plan.

The authors welcome comments and questions and can be contacted at conrow@risk-services.com and charette@itabhi.com.

The Case of the Business Systems Modernization

A Study of a Successful MAIS Partnership

David J. Falvey ■ Austin T. Huangfu ■ C. David Carlson

Successful implementation of a major automated information system acquisition program requires different organizations with seemingly distinct needs, expectations, and goals to work together to reach a common goal—namely a better tool that helps users accomplish their missions. A MAIS acquisition program is an automated information system whose cost in any single year is in excess of $32 million, has a total program cost in excess of $126 million, has a total life-cycle cost in excess of $378 million, or has been designated by the Milestone Decision Authority as a special interest program—with all costs based on the fiscal year 2000 equivalent dollar. Although implementing a MAIS involves numerous stakeholders, three organizations in particular—the program management office (PMO), the designated operational test agency (OTA), and the Office of the Director, Operational Test and Evaluation (DOT&E)—must work especially close to bring the system to operational form.

Different Perspectives

Each of these organizations might have a different perspective on how schedule, cost, and performance tradeoffs should be managed, and these differences need to

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be understood and addressed. From the PMO perspective, the OTA often seems to slow the program down and adds time and money because of its desire to perform operational test and evaluation beyond the developmental test and evaluation, which generally is performed only to satisfy developmental requirements. The PMO might view DOT&E as a bureaucratic oversight organization whose sole purpose seems to be prolonging the acquisition process.

On the other hand, the OTA might think the PMO has failed to demand sufficiently robust developmental test and evaluation, so the OTA might find problems during operational test and evaluation that should have been discovered in the developmental test and evaluation stage, making the operational tests last longer. The OTA might feel that DOT&E sometimes dictates too many of the testing details, especially in milestone-related documents like the Test and Evaluation Master Plan.

Finally, DOT&E's perspective of the other organizations might include the belief that the PMO is too willing to sacrifice performance in order to keep cost and schedule in check and, thus, can't be trusted to do things right. As for the OTAs, DOT&E might think that although they try hard, OTAs need firm guidance and assistance to successfully plan and execute operational tests.

What this dynamic usually yields is three organizations with unique motivations and perspectives working together grudgingly because they have to, not because they want to.

But it doesn't have to be this way. These organizations do not need to be natural antagonists. They can be cooperative partners moving toward a common goal—namely to provide better tools for the warfighters. But how can the organizations break down barriers and foster cooperative relationships that best serve the warfighters and their support staffs? We can answer this question using a recent successful acquisition as the model.

The Case of the Business Systems Modernization Tool

In the late 1990s, the Defense Logistics Agency, headquartered at Fort Belvoir, Va., began an ambitious replacement of their legacy accounting, order processing, and billing systems by a new tool called Business Systems Modernization, or BSM. Because of the costs associated with the implementation of BSM, it was declared a MAIS program and placed under DOT&E oversight. OTA responsibilities were assigned to the Joint Interoperability Test Command (JITC) at Fort Huachuca, Ariz. The Washington Operations Division of JITC was also assigned to perform interoperability analyses and provide recommendations to the Joint Staff regarding interoperability certification of the system.

After successfully completing the developmental test and evaluation as well as performing the necessary business process re-engineering to adopt the business practices provided by the enterprise resource planning software, BSM was awarded Milestone C in 2002. The core BSM system was approved for limited fielding to about 400 DLA employee users.

At that time, the DLA program management office was convinced that, since the developmental test and evaluation had indicated no problems with the functionality of the software, operational testing would be a simple verification that all was well. The first increment for BSM was tested by JITC in late 2002. Unfortunately, following the testing, DOT&E determined that BSM was not operationally effective or suitable to support DLA's mission based on the operational performance criteria determined by DLA. Operational effectiveness is the overall degree of mission accomplishment of a system when used by representative personnel in the planned environment. Operational suitability is the degree to which a system can be satisfactorily placed in field use, with consideration given to reliability, availability, maintainability, compatibility, interoperability, information assurance, safety, human factors, manpower supportability, logistics supportability, documentation, and training requirements.

For many programs, DOT&E's negative assessment would have been followed by intense disagreements between the PMO (who would suspect that the operational testing was flawed), the OTA (who would argue that developmental test and evaluation should have caught and fixed the problems discovered in operational testing), and DOT&E (who would feel that more oversight would be needed to make sure the system eventually worked the way it should). Those arguments didn't happen. Instead, the DLA program manager, who observed much of the operational test and evaluation, agreed with both the JITC and DOT&E assessments and immediately devised a plan to correct the deficiencies found during the testing.

An Open, Three-Party Relationship

The next thing that the DLA PMO did was to institute a continuous dialog with JITC regarding the operational test and evaluation schedule and scope. The program manager also instructed the PMO staff to be open with JITC and DOT&E about issues affecting the program, whether the issues were directly related to testing or otherwise. The bottom line was that from that point on, there was total transparency between these organizations regarding the state of the program.

JITC responded to this new relationship by working hand in hand with the PMO to help refine system requirements that were either ill-defined (not testable) or no longer needed because they were holdovers from legacy business processes not applicable to BSM. Recognizing that

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BSM requirements were now stable, and with the PMO displaying exceptional acquisition discipline, DLA was allowed to make minor changes to the approved operational requirements document without going through a formal and time-consuming change processes. This expedited the communication between the users, program office, and testers to ensure all were on the same page regarding expectations.

The Second Round of Testing

The initial operational test and evaluation of the modified BSM was successfully conducted in late 2004, with the system determined by DOT&E to be operationally effective and potentially suitable. However, there were some issues found in the areas of system usability and training. The PMO and the DLA Program Executive Office embraced the changes recommended by DOT&E in these areas and modified the user interface and training plan accordingly.

Following the initial operational test and evaluation, a major revision to the software was released and operationally tested by JITC in seven separate test events over the course of two years (instead of one large, all-encompassing test after the last release) to ensure that each rollout met user needs and was operationally effective and suitable. The benefit of this testing approach was that it allowed issues to be addressed quickly so the PMO could make course corrections if needed.

The effective communication established after the first test event in 2002 continued through this final round of testing as well. The PMO, DOT&E, users, and JITC engaged in frequent teleconferences during and after each day of testing to ensure that all stakeholder questions were addressed in near real time.

How'd They Do It?

Some obvious questions to ask are "what worked?" and "why?" Let's look at the answers:

- DLA leadership recognized the importance of the operational test and evaluation after BSM did not meet operational performance test criteria in the first test in 2002. Their response was to acknowledge system issues rather than argue with testers, and to institute corrective actions for those issues.
- There was continuity in the personnel involved. The JITC test director had many years of experience with operational testing, and this same person was involved throughout all of the operational testing and evaluation. The original program manager for BSM maintained involvement in the program after being assigned as the DLA program executive officer. The DOT&E action officer originally assigned to monitor BSM provided oversight from the program's beginning to end. This continuity of personnel added stability and constancy to the acquisition and operational

Fielding such systems with only "trust me" as evidence is a recipe for failure.

test and evaluation processes, and it gave the PMO confidence that they would get the same answer tomorrow as they got today.
- DOT&E provided oversight, not micromanagement. DOT&E recognized it was dealing with professionals who should be treated as such, and who might need advice but not dictation.
- DLA recognized the importance of organizational change management and the need to reorganize to accommodate the business processes that come with the enterprise resource planning solution—the true evidence of business process re-engineering. This change brought the users on board as true partners in the acquisition, not as mere recipients of the software. The authors all agree that implementing an ERP system that crosses an entire organization is daunting and requires not only completely replacing the system, but transforming the business processes and the way the organization operates. Nearly everyone's job is impacted, so the users need to be a part of the transformation, not have it imposed on them.

Another question to ask is "how do we bottle the BSM success?" While it is true that some of the success was due to the people who were in various positions at the three organizations, some aspects of the BSM success were independent of the personnel.
- The BSM system was fielded in small, manageable increments with a well-defined rollout plan rather than in large blocks of capability and/or users. This allowed the PMO to better manage the expectations of users (since the users knew when they would get the tool), and to better facilitate test planning, conduct, and reporting.
- The PMO and JITC used a DOT&E policy, "Guidelines for Conducting Operational Test and Evaluation for Software-Intensive System Increments," to determine testing requirements for limited initial system deployments—both before and after initial operational test and evaluation—to help scope an adequate test to identify operational issues while minimizing test resources and speeding up reporting and feedback.
- The PMO used operational test and evaluation results to make changes to the program acquisition plan rather than ignore the results. This is what testing is supposed to do. It should be a learning tool for all stakeholders to provide a better system for the user.

The authors feel that the success of the BSM acquisition can be replicated in other MAIS programs, especially with ERP acquisitions, if the following basic tenets are incorporated into the program test and acquisition plans:
- DOT&E and the OTA should engage the PMO in the test and evaluation planning of a program early in its development cycle so all parties can work together to devise the most effective test-and-evaluation strategy.
- Whenever possible, the program should be developed and fielded in small increments and provided to a limited number of users for mission accomplishment and for operational assessment purposes. When the functionality provided by these small increments reaches a critical mass (in terms of both user base size and overall system capability), the OTA should conduct initial operational test and evaluation.
- The PMO should use the results of the operational test and evaluation to provide course corrections and system changes to improve the performance of the system in support of the full fielding decision.
- Program managers should be encouraged to adapt to evolving user needs, even if it means schedule adjustments and acquisition program re-baselining. Leadership should reward program managers' decisions to be flexible instead of penalizing them. Moving ahead with an acquisition approach just to stay on schedule or within budget may not deliver what the user needs and will cost more in the long run.
- For ERPs and other programs that require business process re-engineering to be successful, user organizations should demonstrate an executable BPR plan prior to granting Milestone C. Fielding such systems with only "trust me" as evidence is a recipe for failure.

While some in the acquisition and testing communities might view the early BSM program results as less than successful because of failed tests and cost and schedule adjustments, the lessons learned from those early results were incorporated in the successful program plans that moved forward. The fact that the user community ultimately benefited from an operationally effective and suitable system, implemented during and successfully continuing in a wartime operations tempo, is, in our opinion, money and time well-spent.

The authors welcome questions and comments and can be contacted at david.falvey@dla.mil, austin.huangfu@osd.mil, and dcarlson@ida.org.

Krog's New Weapon

Reality Is a Special Case

Maj. Dan Ward, USAF ■ Maj. Chris Quaid, USAF ■ Capt. Gabe Mounce, USAF

Can anyone tell me why we're building this thing?

Krog watched skeptically as D'raw and Kwa-id entered the cave dragging a large object behind them and breathing heavily. Their prominent brows were soaked with sweat, and their thick manes were matted and dirty.

"This new weapon?" Krog grunted, his own ridged forehead wrinkling slightly.

"Ug, yes," replied D'raw. "It improved. Kill mammoths dead." Kwa-id snorted in agreement and made little hops of excitement.

Ward, *currently a student at the Air Force Institute of Technology studying systems engineering, holds degrees in electrical engineering and engineering management. He is Level III certified in SPRDE, Level I in PM, T&E, and IT.* **Quaid** *is a Level III COTR, space operator, and battlefield airman, currently working for the Secretary of the Air Force, Pentagon.* **Mounce** *holds an advanced degree in electrical engineering from the Air Force Institute of Technology. He is Level I certified in T&E and PM.*

Illustration by Jim Elmore

"Er … long time since me see mammoths," Krog pointed out, as delicately as his caveman sensibilities allowed.

"True, no mammoth lately," Kwa-id acknowledged. "Sun get hotter, snow melting, mammoths go far away. But cold come back soon. Mammoth come back too."

"Krog hope so. Krog like mammoth. Very tasty. Very chewy. Make good fur pants." Krog briefly considered the possibility of permanent global climate change, then shrugged it off as unlikely. "Show Krog how weapon works."

D'raw and Kwa-id directed their considerable strength towards lifting the strange object. "Is like … old club," D'raw panted, "But … much heavier. Makes … bigger dent … in mammoth … head."

"Me see," Krog replied, encouragingly.

"Only problem," Kwa-id conceded, in between breaths, "is mammoths tall. Club heavy. Club best … on small mammoth … or … sleeping mammoth."

"Sleeping mammoth?" Krog asked. "How we get close and mammoth not wake up? If mammoth wake up, how we get away and not get squished?"

D'raw and Kwai-id dropped the club with a thud.

"In all this time, you only make one club?" asked Krog. The two nodded, and Krog spat in disgust. "Krog not impressed. You go away. Make better club. Maybe even make two different ones, then Krog do comparison and …"

Krog was interrupted by a voice coming from the ceiling: "Lieutenant Commander Krog, your program management review is about to begin. Please report to Conference Room F22."

"Computer, end program," Krog sighed. The cave simulation dissolved around him and his mammoth-fur pants disappeared to be replaced by the uniform of a Federal Space Force officer.

Reality Is … a Special Case

"Those cavemen sure were stupid," Commander Krog said to no one in particular as he stepped out of the holo-deck and headed towards Engineering. "It's too bad the sim doesn't include a Cave Acquisition University module."

Krog wasn't looking forward to this meeting. The Peregrine starfighter development program was a real headache, and it wasn't clear whether a couple more program reviews were going to fix it, even if they were required by regulation 5000.2. Besides, Torrapians like him were built for combat, not conference rooms. Even though it was an honor to be the program manager for the new ship, it wasn't quite what he expected to do when he enrolled in the Federated Technocracy's Space Force Academy. He stepped into the conference room and took his seat.

"Good morning, sir," said Ensign Tkll'ngs'm, a wet-behind-the-ears program management trainee from the swamp planet Lg'oo'hnn. "Since we have a few new members, including myself, I thought I would start with a recap." He gestured at the PowerCube on the table, which showed a three-dimensional spinning model of a sleek starfighter, accompanied by countless lines of text in 2-point type.

"In 2285, Federated Technocracy leaders identified several new threats the existing starfighters could not counter, primarily from the Torrapian Empire. Oh, ummm …" Ensign Tkll'ngs'm paused and blushed yellow as he realized his faux pas, but Krog gestured for him to proceed.

"Sorry, sir. Um, as we all know, hostilities between the Federated Technocracy and the Torrapian Lords of the Iron Sun ceased in 2293. The Torrapians joined the Federation two years later. This was three years before the first Peregrine was scheduled to be completed, but the Technocracy High Council decided to continue the program anyway.

"However, there were delays with key suppliers, which pushed back the Initial Delivery Date seven years, to December 2305. At that time, the High Council cut the budget—again—which meant the Space Force would get half the ships originally envisioned. Additional delays ensued and a new delivery date was set for 2322. Now it is 2364 and we are about to receive the first 12 operational units."

"How many were originally needed?" Krog asked.

"Originally? The Council ordered 8,000, sir, but that was before … ."

"I know what it was before, Ensign. Torrapians have an excellent sense of history. Never mind. Talk to me about the technical progress."

"Well," said Ensign Tkll'ngs'm, reading from a list of talking points, "the aforementioned threats will now be defeated by the highly lethal and survivable Peregrine Starfighter with its balance of increased speed and range, enhanced offensive and defensive spacionics, and reduced observability. The design of the Peregrine also emphasizes reliability and maintainability. To ensure reduced observability, we are emulating the Wavedroid's cloaking technology, the main drawback of course being that, like the Wavedroids, we will have to decloak in order to fire weapons. Or activate the sensors. Or turn on the engines. Otherwise, it works very well … in our simulators."

"Wait a minute," Krog interjected. "You're telling me that even in simulators, the Peregrine is blind, toothless, and can't move when it's cloaked? Doesn't that miss the point?"

"Um…" Ensign Tkll'ngs'm ducked his head, avoiding prime sensor contact.

"Never mind," continued Krog. "The operational shortfalls aren't the main point. I'm still trying to understand what threat this thing is supposed to address. Obviously we're not fighting the Torrapians anymore. *Are* we?" Krog paused ominously.

"Well, the Minotaur-Squids of the Indigo Zone …" the Ensign began nervously.

"Are a technologically backwards group of jelly-fish-based terrorists with very limited spacefaring capabilities," interrupted Krog. "They lack both the means and the inclination to conduct combat operations in space. Their most effective planetary defense weapon flings a cloud of debris in the general direction of a spacecraft and hopes to punch a hole or two in the hull. Please don't tell me we're building a sophisticated, agile starfighter to counter that! If they are the target, we should be working on armor, intel, or psyops.

"Trust me," he continued with a fierce grin, showing all four rows of his razor sharp teeth, "I believe in using overwhelming strength as much as anyone, but even I don't use a plasma nuke to kill a tiny, furry kucatani, no matter how sharp its claws might be. I just bite its fuzzy little head off. The truth is, the Peregrine is entirely unsuited for combat against the Minotaur-Squids, or anyone else in the Indigo Zone." He sat back and took a deep breath, wishing he could bite something. Or someone.

"Well, sir," added an engineering officer from the jungles of Gontapen 5, "although there are no immediate threats that require Peregrine-class starships, we can't rule them out for the future."

Krog raised his eyebrows. "I'm sure you are not insinuating that the Technocracy and the Torrapians will resume hostilities," he growled, not unreasonably.

An uncomfortable silence descended on the room.

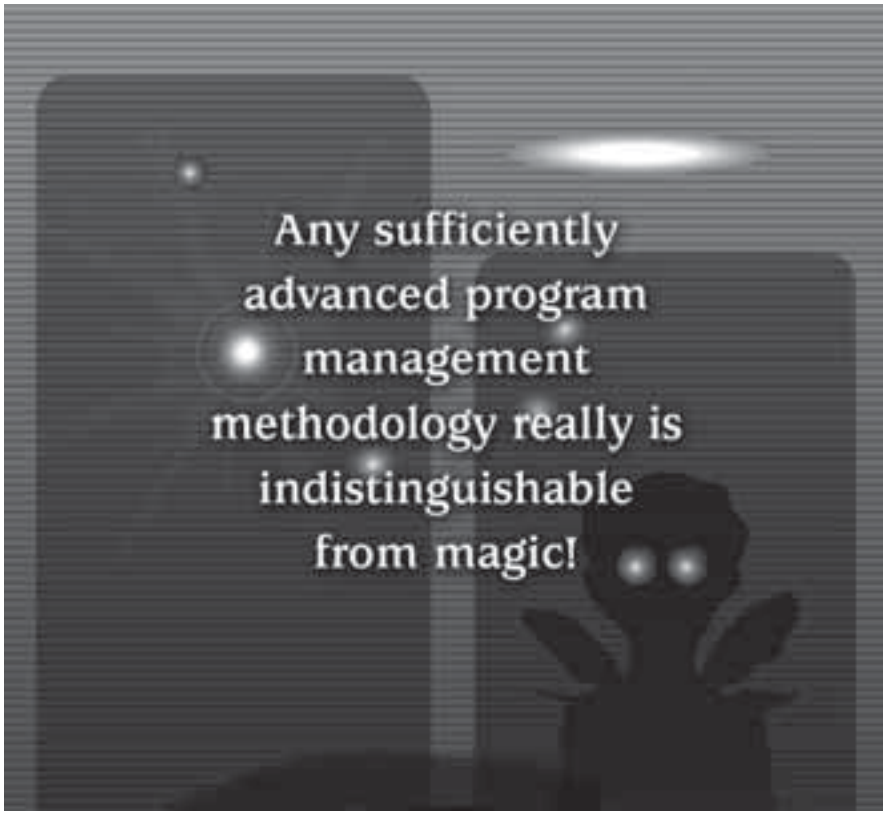
"Can *anyone* tell me why we're building this thing? It's designed for a threat that doesn't exist, and it isn't very good at what it's supposed to do—finding and killing things in space without being found or killed itself. On top of that, we're not planning to buy nearly enough of them."

The silence deepened.

"No ideas why we're building it? No good reasons? All right then, let's stop."

An excited squeak escaped from Ensign Tkll'ngs'm's ventral gill, and he blinked all three eyes rapidly, one at a time.

"That is," Krog continued, "I suggest we shift our research into efforts like the Fugoid Elite Surreptitious Force, who are trying to infiltrate the Minotaur-Squids. The cloaking technology could be very useful in their attempts to isolate and capture the Minosidian chiefs.



"Thanks to our enlightened, highly advanced program management methodologies, the High Council has empowered us and entrusted us with full authority on this matter. I will inform them of our decision at the off-planet workshop next starbreak, of course, but we all know they will support us completely."

"Sir, does this mean you are invoking the AWESOME initiative?" asked Ensign Tkll'ngs'm breathlessly. "I've always wanted to be part of an Advanced Weapon Engineering System Operational Management Empowerment."

"Yup, this is AWESOME in action, Ensign. No doubt you studied the AWESOME principles at the Academy?"

"Yes sir! Principle number one is 'Always trust.' Principle number two is 'Heroes rock!' Principle number three is—"

"No need for a recitation, Ensign." Krog turned his attention to the others at the table. "Well. Ideas? Feedback? Observations?"

The assembled team murmured excitedly, and several began feeding information into the input devices scattered throughout the room. It was good to have such a varied corps of talent on this team. Krog could feel the sparkle of electricity in the air as ideas flashed through the ether—literally, in the case of the psionically enhanced Grudith Jeigian contingent. The newly freed brainpower raced as if released from a G'Luringingin prison camp.

A visiting research scientist from Arback 1 spoke up first. "What if we took the free-acting bosons?"

Several discussions and spontaneous mini-experiments quickly erupted, and Krog looked around the room in satisfaction. He loved it when the team went off like this. No wonder they were considered the best in the galactic innovation business. He felt a claw on his shoulder, and realized Ensign Tkll'ngs'm was patiently waiting to ask a question.

"Sir, I was just wondering—is it always like this? I mean, I learned about advanced program management capabilities at the Academy, but I didn't realize …"

"You didn't realize it would be so flexible and empowering? You thought maybe things like AWESOME were just science fiction stories they tell first-year cadets? Well, it's real. Welcome to the big leagues, kid."

Ensign Tkll'ngs'm blinked and squeaked a few more times, then replied. "Tar-thur C-B'rk was right. Any sufficiently advanced program management methodology really is indistinguishable from magic!"

The authors welcome comments and questions. They may be contacted telepathically or else at daniel.ward@afit.edu, chris.quaid@gmail.com, and gabemounce@earthlink.net.

The Abiding Cultural Problem

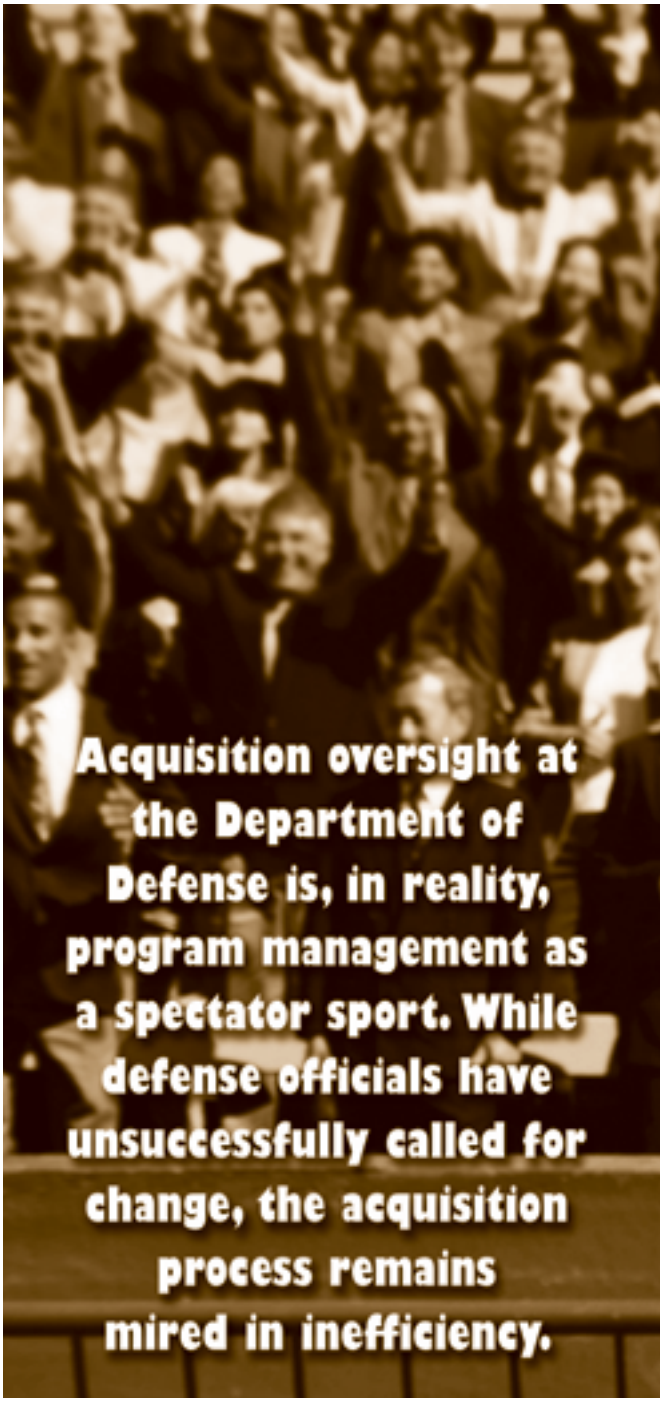
Accountability, Consequence, and the 129th Study

Gary E. Christle

In a May 2001 interview with *Defense News*, then-Defense Secretary Donald Rumsfeld posed a rhetorical question: "Why has there been little fundamental change in the department's acquisition process despite the 128 different studies that have chronicled the ills of the procurement system?"

Rumsfeld's number was an exaggeration, but it reflected the common frustration with the endless series of studies conducted on the defense acquisition process—all with no real results. Seven years later, the litany continues. There have been two Quadrennial Defense Reviews, three Beyond Goldwater–Nichols reports, the Defense Science Board's report on "Management Oversight in Acquisition Organizations," and the Defense Acquisition Performance Assessment—collectively becoming the metaphorical 129th study to result in little fundamental change.

Acquisition oversight at the Department of Defense is, in reality, program management as a spectator sport. While defense officials have unsuccessfully called for change, the acquisition process remains mired in inefficiency. Chester Paul Beach Jr., whose inquiry into the Navy's A-12 aircraft program followed its cancellation—a rare example of accountability in acquisition—recognized the problem with inefficiency, and in his 1990 report, he recommended the creation of "appropriate incentives to enable senior leaders to rely upon responsible, accountable line managers for realistic perspectives on the cost, schedule, and technical status of their programs. … Unless means can be found to solve this abiding cultural problem, the failures evidenced in this report can be anticipated to occur again."



How to Enact Changes

The primary problem is unless there is a significant paradigm shift, to include a revamped process of accountability in conjunction with ongoing—not ex post facto—assessment of decisions and program execution, recommendations from blue-ribbon panels and scores of studies will continue to fail to lead to any meaningful change in the way the defense components conduct acquisition. The defense leadership should enact a two-pronged approach to improving acquisition among the Department of De-

Christle *is a research analyst at the Center for Naval Analyses and a frequent guest lecturer and honorary professor of the Defense Acquisition University. He retired from the federal government in 2000 as deputy director for acquisition management in the Office of the Undersecretary of Defense for Acquisition, Technology and Logistics.*

The Change Model

fense components. First, change the culture to one that is rooted in trust and accountability—a delicate but essential balance. And second, change the business model to one that includes an annual operating plan. Three aspects must be taken into account when enacting this change: behavior, expectations and accountability, and oversight and trust.

Behavior

Behavioral scientists posit that people are motivated by antecedent or consequence. In other words, there are two ways to alter behavior: Do something before it occurs or do something after the fact. Antecedents do not necessarily cause behavior, but rather, set the stage for it, and as they relate to acquisition, antecedents can be policies, goals, and practices. Antecedents will not by themselves sustain a desired level of performance or behavior. Only the nature and likelihood of consequences can do that, and too often, consequence is missing from acquisition. Acquisition officials tend to implement more policy antecedents to obtain the behavior they want, but fail to realize the lack of consequence will become an offsetting antecedent—resulting in only marginal change.

Expectations and Accountability

While program managers may understand that the component acquisition executive expects them to be responsible for adhering to schedules, staying within cost, and meeting performance goals, those goals are typically far into the future, and program managers rarely have input into the establishment of those goals. Program managers should know specifically what is expected of them as it relates to their individual program in its current state. In other words, they need to know the near-term measures of progress toward the program's long-term goals.

To establish a basis for accountability, the acquisition leadership should begin by articulating three things to its program managers: that acquisition leadership decisions and program objectives will be reviewed as they are executed; what, specifically, the program manager will be held accountable for; and what the consequences are for failure.

Oversight and Trust

In a 2001 CNA Corporation study, "Improving Metrics for Acquisition Management," senior defense industry executives described what was most important to them in executing defense programs. They emphasized the need to stay out of the details in order to foster an atmosphere of responsibility and trust while, at the same time, making it clear that their managers will be held accountable for achieving established corporate and company goals and objectives.

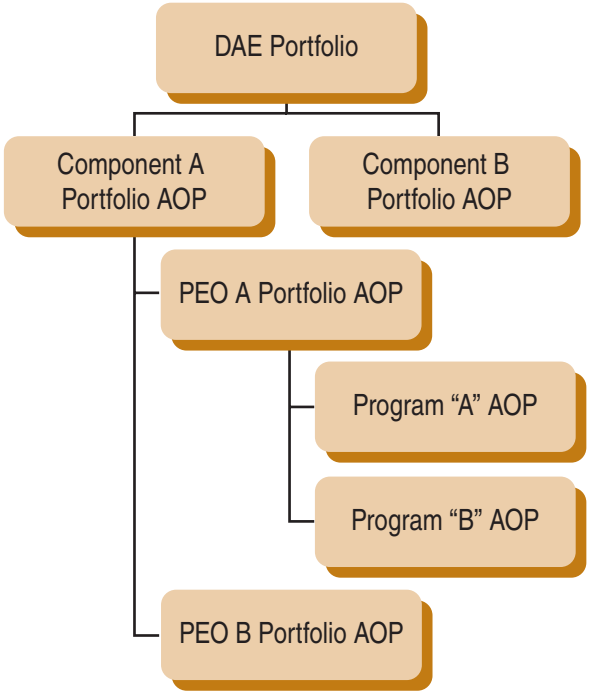
The Department of Defense, on the other hand, often compensates for the lack of accountability with increased and stifling oversight. This has resulted in a system based on a lack of trust, and a system that too often puts oversight staff and program managers in adversarial rather than in supporting team roles. Defense and component officials place too much emphasis on how to do things and too little emphasis on what outcomes they expect. Unless the system and the culture change, acquisition will only improve at the margins. New studies will repeatedly "chronicle the ills of the procurement system" and will continue to result in "little fundamental change in the department's acquisition process."

Steps to be Taken

In order to overhaul the defense acquisition process and make it truly effective, the DoD acquisition leadership should incorporate certain fundamental principles into management of its portfolio of acquisition programs. Those principles should:

- Emphasize accountability

Revamping the Oversight Process



A Six-pack of Tips for Defense AT&L Authors

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- Establish clear, near-term, cost, schedule and performance objectives
- Communicate clearly to program managers the consequences of failure to meet the established cost schedule and performance objectives.

To accomplish this ambitious but crucial goal, defense acquisition officials should:

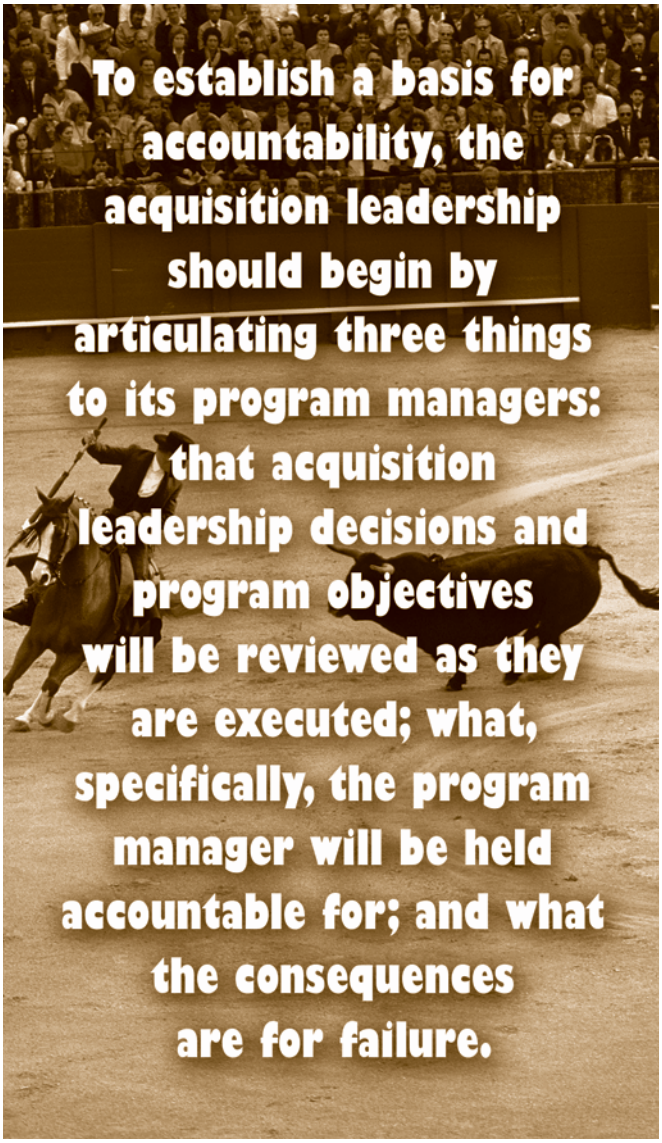
Establish an effective strategic management system. A management system for acquisition oversight should be based on two of the core realignment principles of the Defense Department's 2004 Business Management Modernization Program: business enterprise clarity and tiered accountability, and program management discipline. Enterprise clarity establishes who is responsible for what, while tiered accountability reflects the relationship between the various acquisition management levels—and both are necessary for effective acquisition oversight.

The Acquisition Program Baseline—which sets standards for an acquisition program's cost, schedule, and performance measurement—should serve as the overarching strategic plan for a program. However, the problem with the APB and with strategic plans in general is that they commonly extend so far into the future that it is often impossible to hold anyone accountable for its achievement. So while an overarching strategic plan is necessary, the acquisition oversight process should also have an execution plan that is updated yearly.

Adopt an annual operating plan. The new oversight process should be based on an industry model that revolves around an annual operating plan. An annual plan would establish the near-term schedule of events and accomplishments required for the successful execution of the APB and would ensure that defense officials could track if and when tasks were completed and decisions implemented. Each element of the acquisition program baseline—the initial operating capability, for example—could be broken down into annual execution components—such as the IOC critical path—and tracked as indicators of progress toward overall baseline goals.

The annual plan should be based on the fiscal year because most funding changes and impacts are known by August or September, even without appropriations or authorization acts. That provides sufficient time to set the next year's goals for the vast majority of programs in a manner that is almost entirely under the control of the program manager. The annual operating plan could be easily updated for changes that were not apparent or anticipated at the beginning of the year.

An annual operating plan would resolve the astute observation of former Under Secretary of Defense for Acquisition, Technology and Logistics (USD[AT&L]) Ken Krieg



regarding typical defense acquisition metrics. In 2004, speaking to an audience at the Defense Acquisition University, Krieg said that "we measure everything, but by measuring everything and aligning nothing at senior levels, we really measure nothing."

Revamp the oversight process. In the private sector, the annual operating plan is usually combined with quarterly onsite reviews of business unit portfolios and is supplemented by monthly reporting, usually of financial information. Using an annual operating plan allows the reviews to be focused upon the unique specifics of the business unit or individual program under review. Effective execution of the annual operating plan is usually incorporated into the annual performance plans of the program manager and appropriate business unit executives. This approach facilitates both individual accountability and early insight into program execution problems. For defense acquisition, the business unit equivalent is the component acquisition executive. Periodic portfolio reviews could be supplemented with earned value reporting as a surrogate for the industry practice of financial reporting between portfolio reviews. Properly implemented, earned value management provides an objective indicator of progress, and because the contractor, in the routine execution of significant contracts, already produces the data, it imposes virtually no additional reporting burden on the program office.

A component review process should be created based on program executive officer portfolios with aggregate portfolio metrics derived from the annual operating plans of individual programs. Consistent with the concepts of enterprise clarity and tiered accountability, these reviews should be held at the PEO's location. In other words, the supervisor goes to the jobsite, not the other way around. The review agendas should be established by the host PEO and should be focused primarily on execution of the annual operating plan with individual programs addressed on an exception basis. Similarly, oversight at the defense acquisition executive's level should consist of periodic reviews of individual component portfolios based on aggregate portfolio metrics, with annual execution goals supplemented by monthly reporting of top-level earned value information. Individual programs would be addressed on an exception basis. For the reasons stated above, these reviews should be hosted by the component acquisition executive. Conducting reviews onsite conveys the sense that component acquisition executives, PEOs, and program managers are responsible for executing programs, not USD(AT&L).

Taking Action Now

A new oversight process that maximizes trust, promotes teamwork throughout the acquisition community, and recognizes tiered accountability needs to be established. An annual operating plan with specific goals and objectives should supplement the acquisition program baseline, and that plan should be the primary focus of a restructured oversight process that would include conducting reviews at the facilities of each host component and making the component acquisition executive responsible for setting the review agenda.

As the current administration winds down, the question on the minds of the acquisition community is "how many more 129th studies will the new administration bring?" Perhaps, if we are lucky, one of those studies will address Paul Beach's "abiding cultural problem" and will recognize establishment of accountability and consequence as the most fundamental acquisition reform.

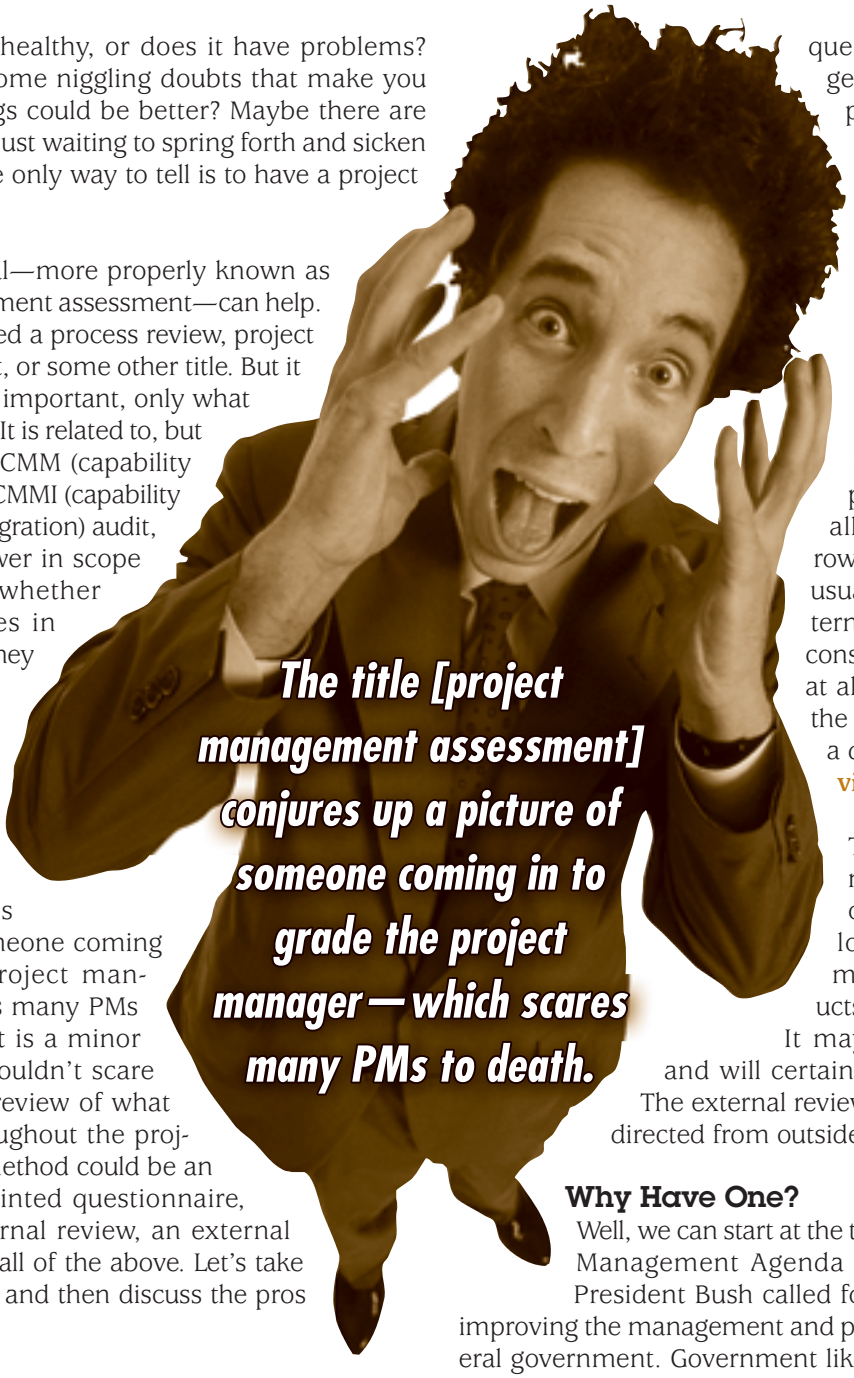
The author welcomes comments and questions and can be contacted at christlg@cna.org.

How Healthy is Your Project?

Wayne Turk

Is your project healthy, or does it have problems? Do you have some niggling doubts that make you wonder if things could be better? Maybe there are latent "germs" just waiting to spring forth and sicken the project. The only way to tell is to have a project "physical."

The project physical—more properly known as the project management assessment—can help. Oh, it might be called a process review, project review, project audit, or some other title. But it isn't the title that is important, only what is covered and how. It is related to, but not the same as, a CMM (capability maturity model) or CMMI (capability maturity model integration) audit, but they are narrower in scope and look only at whether there are processes in place and whether they are being followed.



What is a PM Assessment?

The term means different things to different people. The title conjures up a picture of someone coming in to grade the project manager—which scares many PMs to death. Sure, that is a minor part of it, but it shouldn't scare anyone. It's just a review of what is being done throughout the project and how. The method could be an online survey, a printed questionnaire, interviews, an internal review, an external review, or some or all of the above. Let's take a brief look at each and then discuss the pros and cons.

The **online survey** and **printed questionnaire** are similar in concept. A standard set of questions is answered by select members of the project staff. It is usually multiple choice but may consist of open-ended or gap-fill questions. The questions generally cover actions, processes, attitudes, adherence to the schedule, and similar areas. The survey doesn't take long to fill out, but it really isn't that deep.

The **internal review** is carried out by someone (or more than one person) on the current project staff. (Occasionally it might be a borrowed resource, but that is usually considered an external review.) The review consists of an analytic look at all or specified areas of the project. It may include a questionnaire or **interviews**.

The **external review** is normally done by an objective outsider who looks at the management, processes, products, or the whole project. It may use questionnaires and will certainly include interviews. The external review may be voluntary or directed from outside.

Why Have One?

Well, we can start at the top with the President's Management Agenda for fiscal year 2002. President Bush called for "a bold strategy for improving the management and performance of the federal government. Government likes to begin things—to declare grand new programs and causes. But good beginnings are not the measure of success. What matters in the end is completion. Performance. Results. Not just making promises, but making good on promises."

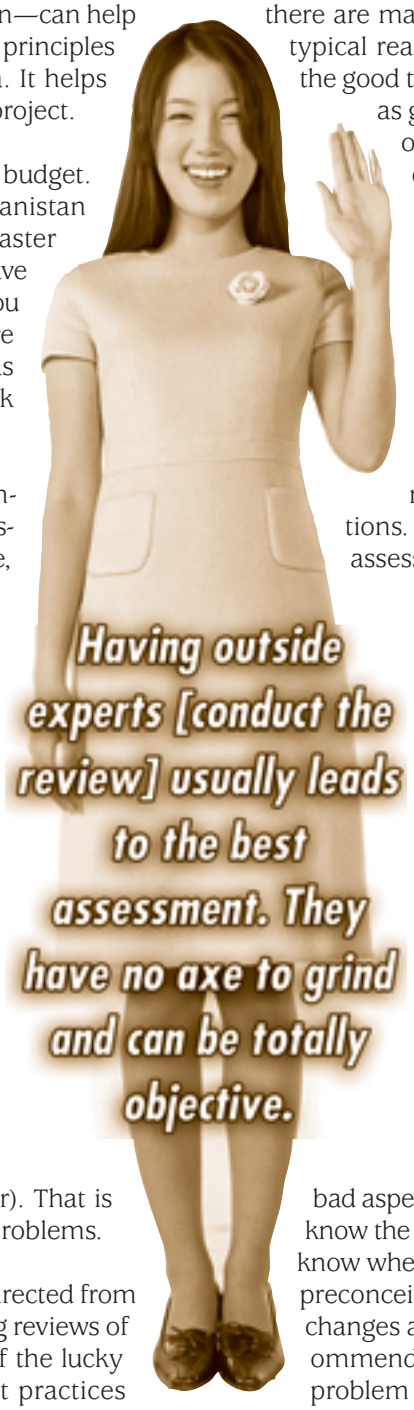
Turk *is an independent management consultant with Suss Consulting. A retired Air Force lieutenant colonel and defense contractor, he has supported information technology projects, policy development, and strategic planning projects for DoD, other federal agencies, and nonprofit organizations.*

The PM assessment—being results-driven—can help the project meet two of the three guiding principles of the President's Management Agenda. It helps with the results and performance for a project.

A reality of life for today's PMs is a tight budget. The operational costs of Iraq and Afghanistan and funding cuts for other reasons (disaster relief and border support, for example) have had a great impact on available dollars. You therefore need to ensure that projects are being run as efficiently and effectively as possible, getting the most out of each buck spent.

Those niggling doubts that were mentioned earlier are another reason for an assessment. While you think things are fine, there may be ways to improve. Project management, to repeat an old cliché, is an art, not a science. No one knows it all, and being caught up in daily crises, the project manager doesn't always have the time to look at things deeply, thoughtfully, and objectively. Managers certainly want to resolve potential problems before they happen. A little help can't hurt.

Then there is the case of the project that already has problems. Yes, *all* projects have problems, but we are talking significant problems here. Managers need to resolve them and their underlying causes before it's too late. They also want to resolve potential problems before they happen, as mentioned earlier. Problems can kill a project (and a career). That is especially true of schedule and budget problems.



Occasionally, the assessment has been directed from above. Upper management may be doing reviews of some or all projects, and yours is one of the lucky ones. They are doing it to identify best practices and problems, look for area to consolidate or share resources, look for redundancies, and identify ways to cut costs. Don't be insulted, and don't take it personally. It's a chance to highlight the good things in the project. Of course, it also identifies areas for improvement. It's a time to learn.

And finally, the assessment may have been directed by an outside agency. Hopefully the project isn't in that category. Normally there is no joy in Mudville if Congress, the Government Accountability Office (GAO), or the inspector general (IG) has directed or is doing the assessment. It usually, but not always, means that someone thinks that there are major problems. Don't panic, which is the typical reaction. Again, it is a chance to highlight the good things and show that the problems aren't as great as perceived. Some process, action or methodology, within the project could even end up proclaimed a best practice and touted to the rest of DoD or the whole government.

According to Warren Suss, president of Suss Consulting, a company that performs PM assessments, "A good project management assessment will improve almost any project and can literally save a project that is in trouble. Of course that means implementing the recommendations. If the assessment is just shelfware, the assessment was wasted effort."

What is the Best Methodology?

Surveys and questionnaires are a good start to an assessment. Bear in mind that there can be a problem with honesty. It may not be intentional, but people want to put the best light on what they do. It can be the same in an interview, although there is more flexibility with a face-to-face interview. Questionnaires are also limited in what they ask, how much they ask, and the understanding of the recipient. But they can and do identify some problems and potential problems, as well as good processes.

Internal reviews have their good and bad aspects. One of the best is that the reviewer(s) know the program and the people. They frequently know where the bodies are buried. They often have preconceived notions of what is wrong and what changes are needed. That's good if what they recommend is right, and bad if not. The other real problem is that sometimes they themselves may be a part of the problem or just can't see it because they are too close to it. Finally, there may also be some fear of retribution if problem areas are identified. All of that said, an internal review is, overall, a good thing.

A review by unbiased outside experts is usually the best idea. It could be voluntary (initiated by the project) or directed. The outside experts could be GAO, IG, contractors, experts from within upper management's chain, or borrowed resources. Having outside experts usually leads to the best assessment. They have no axe to grind and can be totally objective. They can look at the project with a fresh set of eyes, bringing in experience from other

projects and seeing other (or the same) mistakes. On the bad side, review by the GAO or IG may lead to bad publicity or to someone being fired, but there is no choice if they come in. The final bad points are that the assessment can be relatively expensive when compared to an internal assessment or a survey, and it does impact the work staff to a certain degree for a short period. But the results can be worth it.

When and How?

The when for an assessment is almost any time. When the project is just getting started may not be the best because processes aren't all in place, staffing may not be complete, and the bugs in the project may not all be worked out. Toward the end of the project doesn't work too well either. It's too late. But any time in between is good. Once staffing is complete, processes are in place, and everything is moving forward, consider having an assessment done. That way, bad processes are not too ingrained, problems are still in their infancy, and there is time to fix any discovered issues.

What should the assessors look at? The more comprehensive the review, the better it is for the project. That way everything has been looked at and analyzed. What follows is a list of suggested areas for review. As you can see, they cover the full spectrum.

- Requirements
- Documentation
- Budget
- Other resources
- Configuration management
- Overall management
- Communication
- Testing
- Training
- Planning
- Schedule
- Staff
- Risk management
- Processes
- Metrics
- Security
- Deployment
- Contracting Technology
- Conflict and conflict management
- Any others specific to the project.

Sometimes, for financial, time, resources, or other reasons, the assessors may look only at selected areas. While that is not optimum, it is a start and can be very helpful. That is especially true if certain areas have already been identified as having problems or needing improvements. Sometimes, you have to take what you can get.

The Outcome

When all is said and done, the assessors have peeked into all of the project's nooks and crannies, and they have had a chance to analyze the findings. The results should come back as a report, briefing, or both. Honesty and a complete reporting of problems are necessary, so don't get defensive. Accept the findings with an open mind. Some recommendations may not be possible to implement or may have to wait until a later date. Review and implement the recommendations as soon as possible.

Areas in the report should cover at least the following:

- What was reviewed/analyzed
- Who was interviewed (not necessarily by name)
- Examples of any questionnaires or surveys
- What documents were reviewed
- Identification of best practices and things done well
- Identification of good processes in place
- Identification of processes that need changing
- Problems existing now
- Potential problem areas
- Improvements or changes that should/could be made
- Recommendations for improvements/changes.

The final and most important outcome—implementation of changes to improve the project. Identifying those is what the assessment is for. Use it and reap the benefits.

The author welcomes comments and questions and may be reached at rwturk@aol.com or wayne.turk@sussconsulting.com.

Climate Change, Demographics, Technology, and Globalization

Their Impact on the Acquisition Community

Jerry Emke

Trends and shocks subjects continue to receive a lot of attention. In October 2007, Al Gore and the Intergovernmental Panel on Climate Change (IPCC) received the Nobel Prize for their work on climate change. On Nov. 17, 2007, the IPCC released its latest report conclusively documenting climate change. In the last issue of *Defense AT&L*, I presented a variety of cyberspace, energy, and resources trends and shocks that will impact the acquisition community. In this article, I address further future impacts to acquisition arising from trends and shocks emanating from changes in climate, demographics, technology, and globalization. History is replete with examples of unexpected events that startled and surprised people and countries and that drove change throughout time. Our goals are to keep from being surprised and to take note of today's trends in order to avoid or mitigate any adverse impacts to acquisition.

Let's review the terms I used in my first article. Consider a **trend** to be a prevailing direction that people will go in and a **shock** to be an event affecting people much like the first jolt of an earthquake. When you look back at a shock, the long-term trend that resulted in the shock is readily apparent.

Climate Change

Climate change will affect us all. To some it will be life-changing; to others it will simply be an ongoing aggravation and inconvenience. Some parts of the world will turn into deserts while others will become inundated by rising sea levels. The majority of the world's population lives near a coastline, and we conduct much of our business and manufacturing in these coastal areas. Government centers, business and industrial facilities, transportation networks and facilities, and energy production and distribution facilities are close to the coastline. The destruction resulting from Hurricane Katrina in August 2005 and the July 2007 inundation of Bangladesh are examples of recent warnings of things to come for low-lying coastal and tidal areas. Storm surges will also take a greater toll on coastal communities and infrastructure as sea levels rise. The U.S. power grid and energy distribution systems are increasingly vulnerable to damage by extreme weather. At the same time, much of the Middle East, Western China, and larger portions of sub-Saharan Africa are threatened by drought.

Climate change will impact acquisition. Software, parts, subsystems, services, and weapons manufacturing and testing sourced from organizations located in low-lying coastal and other water-stressed areas will pose greater

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risks for acquisition schedules and costs. Storm surges and extreme weather events will increasingly interrupt schedules and production for programs, driving up costs. The disruptive effects of extreme weather events on critical infrastructure will pose even greater risks for acquisition. Problems with energy and resource distribution and flow will be exacerbated by climate change and extreme weather, posing greater risks to the resources required by acquisition for manufacture, test, and continued support of weapon systems.

Demographics

The world's population will increase to 8.5 billion in the next 30 years. Life for the "haves" will get materially better, but many will fall into the "have not" category and will live in dire hardship. The disparity between rich and poor will worsen. Most oil is produced by countries that are autocratic or run as dictatorships, and one cannot readily identify how oil revenues are spent. Misuse of oil revenues in these states will increase the discontent of the people and provoke political violence. Drought will force the migration of millions of people in areas that rely on subsistence farming. Millions more will migrate from inundated coastal areas. Administration, control, and the rule of law will be lost in failed states, regions, and cities around the world. Many other developmental areas will become increasingly unstable, and this instability will make access to needed resources more problematic. New social communities will develop that are poorly structured political, cultural, and economic virtual communities of interest. These groups will use their new associations for competitive advantage. Some groups will take whatever action they deem necessary in response to trends and shocks in order to survive, maintain control, or carry on a chosen way of life. Acquisition will be impacted as access to critical minerals and resources becomes more precarious and uncertain.

Technology

The pace of technology breakthroughs will accelerate faster than ever before. Existing technologies will become obsolete more quickly, challenging procurement cycles. The technological breakthroughs will help our adversaries and competitors—whether nation states, groups, or rogue individuals—to leapfrog dated technology and more quickly close the technology gap with the United States. These adversaries and competitors will be able to embrace new technology, avoiding significant costs and avoiding concerns about upgrading dated legacy systems. Maintaining legacy systems is now prohibitively expensive and will limit investment in new breakthroughs as they materialize. Civilian and military technologies and users are increasingly commingling, and at some point, it will be impossible to disentangle them. That will result in loss of our ability to control access to design-related information and availability of technology, and it will raise grave security considerations.

By necessity, the Department of Defense is increasingly relying on procuring commercial off-the-shelf software that has dual usage and was developed using open systems architectures. Today's reality is that hardware is cheap and software is expensive. More and more research and development is taking place outside the traditional centers for R&D, in rising powers and developing regions that are not controlled by and only marginally influenced by the United States. Deliberate and accidental technology leakage, through the Internet and other digital devices as well as telecommunications and the media, will lead to a widening number of state and non-state actors accessing advanced and sensitive technologies.

Acquisition will be impacted in different ways. Existing weapon systems development and procurement cycles will not keep up with the pace of innovation and technological breakthroughs. Legacy-laden weapon systems that are not easily upgraded will be too costly to maintain and use. Proprietary, sensitive, and advanced technology will become more difficult to keep secure and shared only as intended by the United States.

Globalization

Local markets are being replaced by global markets for goods, services, and labor. This will speed up economic growth while exposing us all to the disturbing effects of never-ending fluctuations in the wider global economy. Life will become increasingly competitive with winners and losers. Our lives will be driven by the laws of supply and demand. The world will keep getting smaller as we become more tightly integrated, interdependent, and linked around the globe. Key consumer nations like the United States will trust neither the security of supply to market forces nor the integrity of an international system over which they have less and less influence. International organized crime will grow in volume, reach, and profitability as perpetrators learn to use the latest off-the- shelf technology to accomplish their ends. The Internet will fuel the aspirations and expectations of everyone who is online, showcase global inequalities, and act as a means of attack for those who opt out of the global community.

Acquisition will become more and more globalized and less subject to the direct control of the Defense Department. The key players in acquisition will be targeted more and more by adversaries and competitors, whether they be nations, groups, crime organizations, or rogue individuals. The United States will not be able to trust the access and supply of energy and critical resources to market forces.

Now is the Time to Respond

As we begin to shape the DoD's next round of strategic planning guidance, we need to consider the steps we must begin to take today to help shape acquisition in a manner that will enable us to have as successful a future as we have had a successful past. Reasoned thought needs to take place in order to weigh the likely trends and upcoming shocks in order to identify those that are most critical for us to act upon now.

A recent report by the CNA Corporation on National Security and the Threat of Climate Change recommended that the Defense Department review the future risk faced by the United States as a result of the great number of military bases, facilities, and ports located in low-lying coastal areas. A similar review should be undertaken to identify the risk to acquisition from the amount of weapons, spares, sub-tier suppliers, and testing that is sourced from organizations with production, test, storage, and distribution facilities located in low-lying coastal areas. Further we need to separate those trends that we have the greatest ability to influence from those that we will not be able to influence. Overall, a comprehensive review of the impact of trends and shocks on acquisition is needed so that we can create the policy that we will require in a more uncertain future.

The author welcomes comments and questions and can be contacted at gerald.emke@dau.mil.

Shaping Industry Interaction Through Secure Information Sharing

Part II: Collaborating to Improve Collaboration

Richard Skedd ■ Paul Grant

This is the second of a three-part series, "Shaping Industry Interaction Through Secure Information Sharing." Part I, published in the previous issue of Defense AT&L, *examined the need for information sharing and collaboration among key aerospace and defense organizations and governments, including the Department of Defense; and the role of the Transglobal Secure Collaboration Program (TSCP) in meeting the need.*

Part II examines the collaboration efforts of those involved to set industry-wide specifications for secure collaboration.

The benefits of secure collaboration have been dramatic for the Department of Defense, which is now looking at how to extend this value through global reach. However, extending global reach is a challenge with which DoD and other participants of the TSCP have been wrestling for nearly half a decade.

Striving to deliver fundamental changes to the way in which organizations collaborate in the aerospace and defense sectors through the translation of goals into capabilities, the TSCP faces the unique challenge of collaborating to improve collaboration. Its international team of part-time volunteers across nine time zones is just one of the challenges that make the TSCP's collaboration efforts particularly tricky—but not impossible.

In support of the TSCP's search to improve industry-wide collaboration, members of the TSCP have worked together to find a better way to collaborate. Their efforts, which build upon years of continuously refined methods, yield several interesting reference points applicable to managers tasked with delivering complex collaborative projects.

Diverse Team, Shared Goals

As a not-for-profit consortium, the TSCP is chartered with figuring out how to best implement a complex set of relationships in a digital setting. Current members include DoD, the U.K. Ministry of Defence, the Netherlands Ministry of Defence, BAE Systems, The Boeing Company, EADS/Airbus, Lockheed Martin, Northrop Grumman, Raytheon, and Rolls-Royce.

To effectively manage such a diverse team, the TSCP found it necessary to define a solution that met the needs and objectives of all partners for a particular collaborative capability. The consultation and exchange of views during this initial step of activity management ensures alignment between the participants and a shared understanding of the high-level goals as well as constraints on the ability of a solution to meet these goals.

Achieving this alignment and shared understanding is helped by carrying out the planning of the next phase of work alongside the definition of the high-level goals.

The TSCP has found that different interpretations of shared goals are uncovered by the discussion during the planning activity, which is not surprising, given the wider range of cultural backgrounds of the participants and the broad cross-discipline issues being addressed by the affiliation.

In order to proceed, consensus and agreement among participants is typically assured through a gate review, which is generally regarded as a best practice in project management. Gate reviews are used within the TSCP to manage the progressive maturing of a capability from concept to production and are conducted in a manner that meets the needs of all participants.

From Concept to Solution

At a high level, the maturing of a capability takes place in two stages, the development stage and the transition-to-production stage, each of which includes a number of gate reviews. Initial work in the development stage is concentrated within a single lab environment to facilitate rapid prototyping and learning before being replicated by participant organizations in their own lab facilities to assist knowledge transfer and detailed review.

Once the development stage has been completed, capabilities enter the transition-to-production stage. The process of moving activity to the participant organizations is continued throughout this stage. Once collabora-

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tive developments of design definition, documentation, and participation in risk-reduction test activities reach participants, the capabilities move to the next step of the production stage: testing.

Build-out of initial scale production systems are used by pilot user communities to confirm that the solution capability delivers the benefits in real-project activity. This is the last checkpoint beyond which participants proceed to full-scale production at the pace required to meet their business needs. As the transition-to-production stage continues, a central team acts as design authority, providing reference implementation to support test activity among participants.

Bitesize Management

The gate review approach enables the TSCP to take "one bite at a time" of the secure collaboration elephant. It provides short-term objectives needed to maintain the focus of teams that are drawn on a part-time basis from many organizations. It also provides the stability required to plan and manage the work of the team.

Plans are developed within this framework by defining a logical sequence of "chunks" of work to tackle and successfully pass through the next gate review. This network of chunks—the associated outputs and the downstream chunks that use these outputs—ensures a common understanding across the team of the work to be done and its sequence. It also clearly shows the impact of issues in one part of the work on other activities. The number of chunks and outputs is driven down as far as possible to ensure that the plan is easily visualized and communicated, yet remains sufficient to ensure that as soon as the inputs required for a chunk are available, the teams can complete the work and produce the outputs.

If required, more detailed planning within the chunk is entirely self-contained. This approach echoes good practices associated with the division of work breakdown into "control accounts" that are the basic units for management and reporting. The nature of the collaborative contribution of resources to the TSCP means that not all of the reporting is appropriate, but the planning approach provides the basis for simple and easy progress reporting.

The use of a shared information management system by the TSCP means that information sharing within individual work efforts and across teams is accomplished simply by the publication of evolving outputs and supporting information into the appropriate location in the shared environment. These shared environments are used not only to manage sharing of documents but also for meeting calendars, definition of work groups, and sharing of contact information for team members.

Setting a Roadmap

While the approach described above enables individual capabilities to be managed through to production in this progressive fashion, it also provides a framework that can be used to articulate the strategic roadmap for the TSCP. Each capability represents progress towards the eventual goal of secure collaboration, and this progress takes place in defined steps. Future capabilities can be planned to reuse some elements of existing solutions or to upgrade those solutions with new technologies and these linkages

across capabilities can easily be integrated into the roadmap.

The approach continues to evolve as the TSCP progresses. Currently, an effort is under way to implement a restructuring of work teams to provide greater focus on the integration of the wide range of skills required to manage the development of a capability through its life cycle. This restructuring is intended to provide a platform for delivery of the 2008 work plan.

The initial definition and development of a capability in the development stage will be the responsibility of the Enterprise Architecture Group. This group, which has been at the core of the TSCP since inception, will be expanded and strengthened. It will also bring together technology and process to define and develop viable capabilities that address the highest priority collaboration challenges.

When the development stage is complete and a prototype has been shown to work across participant organization lab facilities, the EAG will hand over leadership of the capability represented by that work package to the Business Delivery Group, which (like the EAG) is multidisciplinary and is formed specifically to take a single capability through the transition to production stage. This single capability focus ensures close engagement with the initial user community and the specialists involved in delivery of production systems for a quick and successful adoption of the capability leading to the delivery of business benefits.

Looking Ahead

Maintaining the engagement and utilizing the skills of participants in a distributed effort such as the TSCP is a continuing challenge. The management approach developed by the TSCP has proven effective; it continues to be refined to better meet the needs of participant organizations and individual team members.

The TSCP has begun to deliver important initial capabilities and will deliver improved collaborative capabilities for the aerospace and defense sectors throughout 2008 and beyond. Amazingly, the working approaches defined early this decade are still largely used today. Further progress has been made by the members through their commitment to translate goals into capabilities that will be used across the global aerospace and defense communities. To accomplish this, participants prioritized and bound executable segments of work based upon the common need and mission requirement. For each segment of work, international laws and rules impacting information mobility were assembled. These have been primarily in the areas of export controls and personal privacy.

Equally important, participants continuously address the self-regulation mechanism needed between members to establish and maintain trusted relationships for sharing of sensitive information. Only then can members successfully apply technology standards and solutions to enable secure collaboration and sharing.

The recent work of the participants has been to deal with the "devil in the details" of the journey toward these goals. Capabilities thus far include a federated identity management capability and the ability to send signed and encrypted e-mail using organic enterprise public key infrastructure.

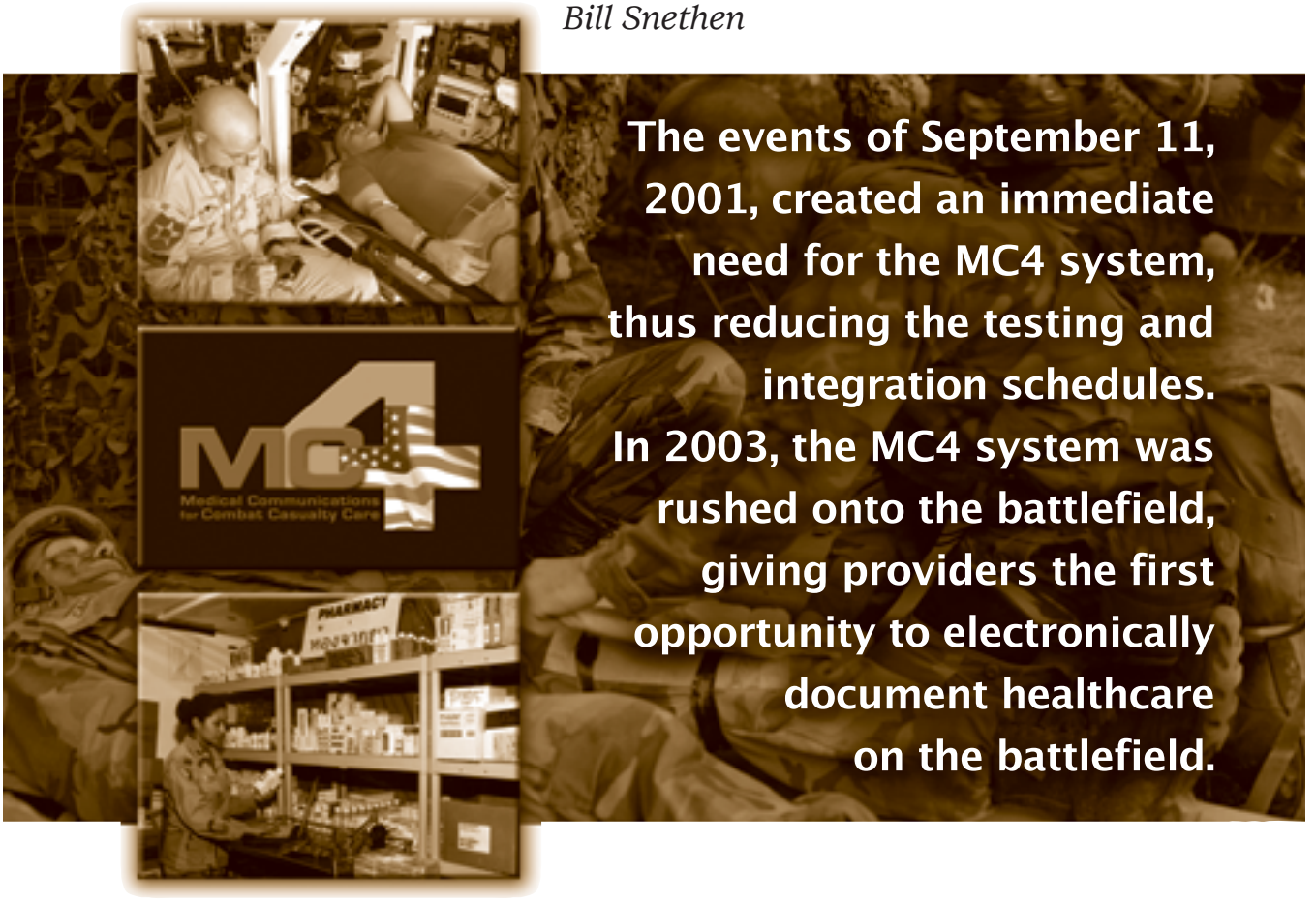
The move toward mature secure collaboration still has a long journey to make. However, the TSCP's collaboration efforts have been critical steps in the right direction. Today, the path is rather well-defined and the capabilities are beginning to move into the operational arena.

In the third and final installment, we will examine the implementations of the TSCP's specifications for information-sharing among member organizations for major programs.

The authors welcome comments and questions and can be contacted at richard.skedd@baesystems.com and paul.grant@osd.mil.

Commanders Institute New Standards for Quality Medical Data

Bill Snethen



The events of September 11, 2001, created an immediate need for the MC4 system, thus reducing the testing and integration schedules. In 2003, the MC4 system was rushed onto the battlefield, giving providers the first opportunity to electronically document healthcare on the battlefield.

During the first Gulf War, patient care on the battlefield was documented on paper field medical cards—DD Form 1380—that rarely accompanied the injured to the next level of care, let alone made it to the servicemember's permanent medical record. As a result, wounded warriors returned to the United States with undocumented injuries and care, leading to tremendous difficulty accessing their medical benefits from the Department of Veterans Affairs.

In 1997, presidential and congressional mandates chose to right this wrong by calling for a medical tracking system and a lifelong electronic medical record (EMR) for all servicemembers. The result was the MC4 program. The program began to take shape in 1999, integrating state-of-the-art, off-the-shelf hardware and software.

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The System in Action

The events of Sept. 11, 2001, created an immediate need for the MC4 system, and in 2003, the MC4 system was rushed onto the battlefield, giving providers the first opportunity to electronically document healthcare on the battlefield. Initially, the fledgling system took a beating on the battlefield, since the hardware and software did not perform as well as medical providers would have preferred. In time, the software applications improved, new handheld devices eased point-of-care data entry, and commanders began to take responsibility for integrating MC4 within their units as the only method of documenting heath records in a deployed environment. The use of paper records was cast aside for laptops and handheld devices.

Today, MC4 is an established, proven system in Southwest Asia. Units have moved past the point of simply using MC4 systems to enter medical data. Medical providers are developing methods to streamline the data

Photographs courtesy MC4

"We realized it was extremely important for our providers to electronically document every medical procedure so that service-members have a complete medical history of every procedure conducted while they are deployed. But it is just as important that the data be entered in a uniform manner so that commanders can review roll-up reports to make accurate analytical decisions regarding medical support within the AOR."

— Lt. Col. Darlene McCurdy
TF 146 commander

entry process, including the use of templates for injuries they see most often. Commanders look to uncover new ways to increase the quality of the information entered by providers and use the captured data to develop better reporting procedures. Task Force (TF) 146 Multifunctional Medical Battalion (MMB) in Iraq is one example of a unit that stepped up its efforts to accurately capture medical data and maximize the system to the fullest potential.

Incomplete Records

Shortly after their boots hit the ground in October 2006, TF 146 commanders discovered medical documentation missing from roll-up reports at the battalion's level I and II medical facilities, and they found discrepancies and inaccuracies with the way providers were entering data into the MC4 system.

"Within our first month in Iraq, we discovered that our medical providers only entered approximately 50 percent of the medical care performed into MC4," said Lt. Col. Darlene McCurdy, TF 146 commander. "We also learned that while the use of MC4 had been implemented throughout the area of responsibility before our arrival, a standardized method of entering data into the system had not been instituted."

This incomplete and inaccurate data entry seriously affected the quality of medical surveillance conducted by TF 146. More importantly, it contributed to incomplete medical records.

McCurdy and her chief of clinical operations officer in charge, Capt. Karen Sims, understood that it was imperative for medical providers to fully document the care given to servicemembers so the battalion could successfully manage its medical resources. To accomplish this, processes needed to be reviewed, steps that hindered efforts needed to be weeded out, and best practices needed to be implemented throughout the battalion.

"I made it known that the early efforts of recording medical data throughout the battalion were less than satisfactory and needed to improve immediately," McCurdy said. "This allowed the clinical operations section under the guidance of Maj. Leonard Kosicki, force health protection officer, to proceed and uncover any issues that obstructed the collection of quality data, as well as make recommendations for improvement."

One factor TF 146 discovered was that a number of medical providers within the unit resisted using laptops to document treatments administered. Their argument was that electronic documentation took too much time to enter, and this was time taken away from caring for patients. To overcome the provider resistance, meetings were held at every location within the area of responsibil-

ity to discuss the importance of electronically documenting the patient data. With the battalion distributed across an AOR approximately the size of Texas, this was no easy task. Many trips were needed to visit all of the medical treatment facilities (MTFs) and some remote forward operating bases.

"The face-to-face meetings proved to be very important since it showed the providers and local commanders that I am adamant about EMRs and that this was something that they had to do immediately," McCurdy said.

Changing the Process

As the clinical operations team examined the quality of EMRs, they discovered that the crux of the problem was that medical providers were not electronically capturing the majority of ancillary services administered, causing large information gaps in the amount of care MTFs provided. There was little doubt that this needed to be changed.

As Sims and 1st Lt. Alvin Vaughn met with providers at MTFs, they also examined the capabilities of the MC4 systems and monitored how the providers entered data. Once the observations and best methods were compiled, TF 146 MMB prescribed standard operating procedures to the MTFs, describing how every medical provider assigned to the task force must electronically capture the data within the MC4 systems. This included documentation for outpatient care, a patient category list of the most frequent treatments throughout the AOR, and guidance on the closure of EMRs.

"The mandates offered us the opportunity to institute and teach one standardized method of data collection and got us one step closer to our goal of achieving a higher quality of data collection," McCurdy said. "Through our efforts, we discovered TF 146 unleashed greater potential for the MC4 system in a deployed environment. We uncovered more efficient methods of using the system and added new tools, which in turn, improved our methods of reporting and tracking data."

One such tool monitors the number of encounters initiated within the various software applications on the MC4 system. This new tool allowed the battalion commanders to target data entry disparities and uncovered problems of closed network ports and loss of connectivity.

The monitoring tool also led to the discovery of orphan files that were properly completed and closed, yet had not been transferred to the network for reporting purposes and ultimately were not transferred to the central data repository in the United States. As a result, a servicemember's lifelong medical record could be incomplete. The TF 146 communication section—led by Capt. Andrea Mitchell, 1st Lt. Patrick Kolenic, Staff Sgt. John Porterm, and Spc. Robert Ferrall—played a vital role in this process.

Standardizing the Data

As providers followed the new mandates and used the monitoring tool to eliminate discrepancies, the uniformed information offered another benefit: improved medical surveillance data for the five area support medical company commanders. The data populated in theater databases, such as the Theater Medical Data Server and the Joint Medical Workstation, gave commanders a more accurate depiction of needs and activities within the AOR, covering more than 17 MTF locations.

Commanders had better insight of the efforts tackled by the battalion's healthcare providers. The daily and weekly roll-up reports offered the full picture, including complete patient, facility, and provider data to make better-informed analytical decisions.

"By having everyone enter the medical data in a uniform method, the surveillance reports improved exponentially," McCurdy said. "The roll-up surveillance reports are where we really see the fruit of the battalion's efforts. By having standardized data from every MTF, it offered us access to a plethora of reporting and analysis tools. We're able to generate reports showing the workload for each clinic as well as the providers."

McCurdy continued, "We can analyze trends for specific locations based on injuries and demographic trends. We can also report the number of U.S. servicemembers treated in our facilities compared to local Department of Defense employees and contractors as well as Iraqi citizens."

Calling in the Experts

As TF 146 initially embarked on the mission of quality control, the battalion commander realized that TF 146 would need some assistance. She turned to the resident experts—the deployed MC4 technical support team—who helped the brigade weave through the intricacies of the programs within the MC4 system and the network.

MC4's technical support team traveled to every MTF with TF 146's clinical operations group to help address concerns from providers and commanders as well as handle problems with the MC4 systems and network. The work of MC4's trainers began before the battalion deployed, setting the foundation of system capabilities and expectations. As the trainers traveled to the MTFs, they worked with the providers to create templates to ease the use of the system and to provide additional training.

Trying Out the "What Ifs"

"The MMB received training on the MC4 system before we deployed, and it set the foundation for our expectations

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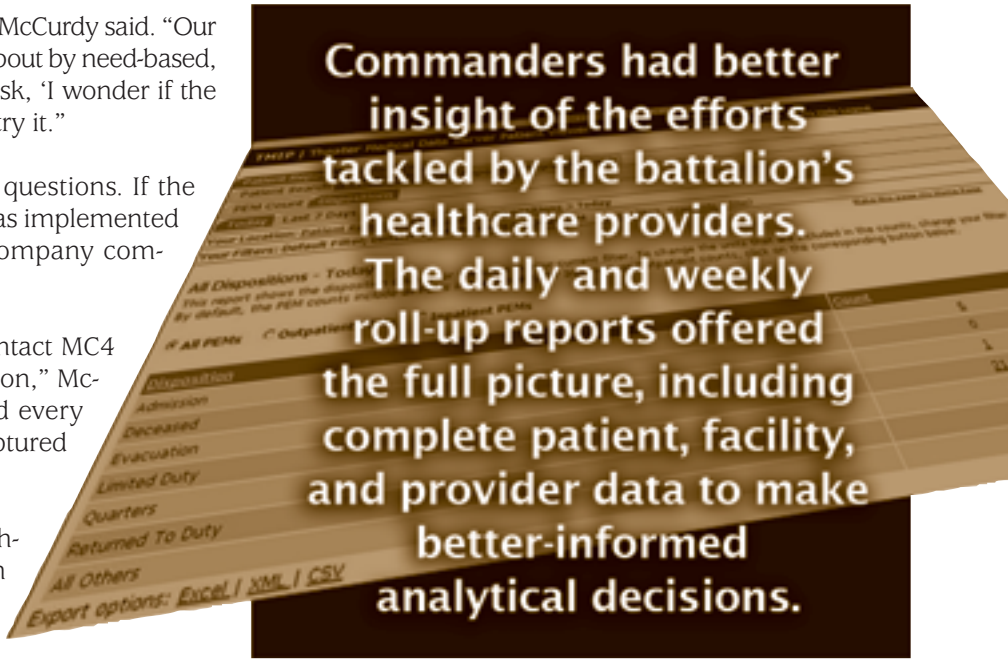
for what the system was meant to do," McCurdy said. "Our accomplishments have been brought about by need-based, on-the-job training. Someone would ask, 'I wonder if the MC4 system can do X task' and then try it."

Sims took the lead for the "what if" questions. If the task could be accomplished, then it was implemented throughout the battalion to all the company commanders.

"If a task did not work, we would contact MC4 support personnel to uncover a solution," McCurdy said. "This is how we ensured every aspect of medical encounters was captured in an EMR."

At the request of McCurdy, MC4's technical support team was involved in the policy development process. The team was also instrumental in updating the systems to better collect ancillary services and resolve network problems, including those with the ports preventing a facility's ability to send patient data to the central database.



"We view the MC4 support personnel as a valuable extension of the battalion," McCurdy said. "MC4's trainers provide valuable services, and we look to MC4's technical support team as our IT support to fix every issue that arises and to provide assistance when called upon.

"MC4's support team is always there when we need them," McCurdy added. "I think it would be hard to find IT support that has put in the number of face-to-face support hours that the MC4 team has done for us across our AOR. That is what has meant the most to us—the face-to-face support in the foxhole with us."

Successful Improvements

There is no question that TF 146 has been successful in its efforts to improve the use of MC4.

"Ten months after we began the process to improve the quality of medical data collected by the brigade's providers, more than 90 percent of the patient data that originate from our medical facilities are now captured within the MC4 system, and more than 80 percent of our patient visits have been recorded in EMRs," McCurdy said. "Lately, we've been working on the 'last mile' efforts to have 100 percent of the patient data captured."

The success achieved by TF 146 has not gone unnoticed outside of the AOR. The battalion and its company commanders are regularly asked to present on their efforts to improve the collection and reporting of medical data as well as address questions from other units regarding EMRs and use of the MC4 system. Additionally, some of the mandates implemented by TF 146 are currently under review for possible implementation throughout Iraq by the Multi-National Corps-Iraq.

"We were able to build upon TF 61's efforts and successes to advance the use of MC4 throughout the AOR," McCurdy said. "When we arrived, we realized it was extremely important for our providers to electronically document every medical procedure so that servicemembers have a complete medical history of every procedure conducted while they are deployed. But it is just as important that the data be entered in a uniform manner so that commanders can review roll-up reports to make accurate analytical decisions regarding medical support within the AOR."

Commanders then know if they need to reallocate assets, be it personnel or materials, a benefit often overlooked.

"This difference in how medical care is recorded hasn't reached the attention of the average servicemember yet," said McCurdy. "I expect they'll notice the efforts made by medical providers to properly document electronic health records when they are applying for VA medical benefits years from now. Actually, it might be better that they do not notice. Then it means we have achieved a completely seamless process and the entire electronic health record process works as it was intended."

For more information about MC4, please go to <www.mc4.army.mil/>.

The author welcomes comments and questions and can be contacted at bill.snethen@us.army.mil.

From Our Readers

***Point*: Without Risk, No Success**

I have to tell you how much I loved "The Danger of Caution" in the November-December issue of *Defense AT&L*. In our current fear-driven economic and political climate, it's easy to think we can play it safe by avoiding risks. Yet without risk, there is no meaningful success, and certainly no innovation.

I also enjoyed the untraditional comic book-style format. What an attention-getting way to deliver the story and message! Thanks for bringing us a fresh viewpoint, in such a fresh way.

Sally Hogshead
Author, *Radical Careering*

***Counterpoint*: It's Not Funny**

In the November-December 2007 issue of *Defense AT&L*, there is a cartoon entitled "The Danger of Caution." The cartoon presents "heroes" rescuing a program from peril and pushing Major Caution, the safety person, aside. I think the cartoon sends a bad message.

I have been a program manager and a safety professional. In both areas I find that we have to work with everybody to reconcile differences and build trust for executable alternatives. Sometimes there is a wide gulf between cost, schedule, performance, and safety requirements, and marginalizing hazards, before analysis can quantify risk. Hasty decisions without due process can relieve a short-term train wreck for the program office while leading to wrecks in the future for the warfighters. I think the cartoon not only does a disservice to acquisition and safety professionals, but also shortchanges an appreciation of the deliberative process that it takes to ensure the decisions we make include the best thinking to fulfill warfighter requirements within the funding and calendar parameters established by the Congress and signed into law by the president. While the cartoon does present a common misconception among the uninformed, it does not address the proper way to mitigate risk: Accept risk only when the benefits outweigh the cost; accept no unnecessary risk; anticipate risk by planning; make risk decisions at the right levels.

The Department of Defense provides a more detailed reference for recognizing and analyzing hazards in MIL-STD-882D, which all program managers, without regard to the acquisition category level of their program, have been directed to use to reduce preventable accidents. MIL-STD-882D requires program managers to recognize and analyze hazards, mitigate risk, and ensure risk is accepted at the appropriate level. Program managers may accept residual risk that is moderate or below. Serious risk must be reconciled at the program executive officer level. High risk must be reconciled at the component acquisition executive level. There is no place for cowboys and pirates in our acquisition professional community.

Phil Smiley, Ed.D.
Special assistant for safety in acquisition
Deputy Assistant Secretary of the Navy (Safety)

The Authors Respond: When using satire, there is always the danger of being misunderstood. Dr. Smiley's letter convinced us that a few clarifying comments are probably in order. The comic's message actually echoes our article in the March-April 2007 issue ("The Pursuit of Courage, Judgment, and Luck"), which asserted that risk management is about courage and judgment, not process or personal protection. As Dr. Smiley pointed out, risk management is done to ensure warfighter success, not to protect a program manager's career, so we are all in agreement on that point.

When The Adirondack Kid and Cap'n Cannonball saw a team in trouble, they heroically went to help, without regard for their own personal/professional safety, exemplifying the Air Force Core Value of "service before self." Mr. Timid's reaction, in contrast, was entirely self-serving. He wasn't trying to help the train-wrecked team at all. He was simply trying to protect himself.

Careful readers will have noted that Maj. Caution's *real* name is Mr. Timid, and he is only *masquerading* as the helpful safety guy. Clues to his true identity: His backside is marked "well covered"; he begins most of his sentences with the phrase, "I'm afraid"; and when action is called for, he offers instead an academic lecture on the risk management process. He's an archetype of safety done wrong, and he was never intended to represent *all* safety professionals.

Mr. Timid didn't understand—as a good safety professional does—that risk management is fundamentally a mission *enabler*, not a mission preventer, and as we said in "The Pursuit of Courage," for the sake of the mission, you sometimes "have to grab the scissors and run with them."

As much fun as it is to be described as "the uninformed," we should point out that Ward has extensive professional experience in risk management and is the recipient of a matching pair of "Risk Area Manager of the Month" awards. Quaid spent several years controlling nuclear missiles and in 2007, returned from a six-month tour of Afghanistan. Both experiences provided him with significant risk and safety expertise.

While we do not advocate hasty decisions without due process, we emphatically affirm that overdue decisions delayed by excessive process are worse. The ideal, of course, is good decisions made in a timely manner.

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MEDICAL COMMUNICATIONS FOR COMBAT CASUALTY CARE (MC4) NEWS RELEASE (OCT. 30, 2007)

ARMY AND AIR FORCE COMPLETE LARGEST FIELDING OF EMR SYSTEMS ON BATTLEFIELD

FORT DETRICK, Md.—In October, the Army and Air Force completed the largest training and equipping effort of digital medical recording systems—Medical Communications for Combat Casualty Care (MC4)—to date.

In six weeks, MC4 technical support teams trained 300 medical personnel of the 332nd Expeditionary Medical Support Group (EMDG) and equipped healthcare professionals at the Air Force Theater Hospital in Balad, Iraq, with more than 200 ruggedized systems to aid them in electronically capturing patient records.

The effort marked the completion of equipping all level three medical treatment facilities in Southwest Asia (SWA). Now, approximately 200 MTFs use MC4 to electronically document patient care on the battlefield. The Balad hospital is the most equipped trauma care facility in SWA. In February 2007, the 455th EMDG, Bagram Air Field in Afghanistan, became the first Air Force unit to use the MC4 system.

"Our partnership with the Army has enabled Air Force facilities to provide seamless care through a common medical software suite," said Maj. Gen. Charles B. Green, deputy surgeon general, U.S. Air Force. "The implementation of MC4 is now providing the capability, in the combat zone, to document patient care as a permanent part of the electronic medical record for all warfighters.

Currently, healthcare providers at Bagram and Balad can share a servicemember's individual patient record across the continuum of care."

Prior to using MC4, the Air Force accessed several different applications for tracking patient records and patient movement. These applications will soon be phased out, ensuring Army and Air Force medical treatment facilities are using the same joint software, provided by the Theater Medical Information Program, resulting in a comprehensive, lifelong medical record for all servicemembers.

Additionally, Air Force providers can exploit the already-established MC4 training and in-theater support structure, assuring system issues are resolved expeditiously and uniformly.

"By using MC4, electronic patient records are captured in the central DoD clinical data repository facilitating access for all healthcare providers," Green said. "This includes any follow-on care at a VA facility resulting in better healthcare for our wounded warriors. Commanders are assured that their servicemen and women are provided documented, consistent, high-quality care anywhere they are treated."

To date, MC4 has fielded more than 21,000 systems and trained more than 22,000 deployed healthcare professionals throughout Iraq, Kuwait, Afghanistan, Qatar, Europe, and South Korea, leading to the capture of more than 2.5 million electronic health records on the battlefield.

Air Force Maj. Vikhyat S. Bebarta checks patient data in the new MC4 system installed at the 332nd Air Force Hospital in Balad, Iraq.
Photograph courtesy MC4

"We've seen the benefits of providers in the Army, Navy, Special Forces, and even the U.S. Embassy in Iraq, using MC4," said Lt. Col. Edward Clayson, MC4's product manager. "With the Air Force utilizing the system, we—the armed forces—are getting that much closer to providing a complete medical picture for commanders and a lifelong health record for all servicemembers."

MC4 integrates, fields, and supports a medical information management system for Army tactical medical forces, enabling a comprehensive, lifelong electronic medical record for all servicemembers, and enhancing medical situational awareness for operational commanders. Headquartered at Fort Detrick, Md., MC4 is under the oversight of the Army Program Executive Office, Enterprise Information Systems (PEO EIS) at Fort Belvoir, Va.

For more information on MC4, visit <http://www.mc4.army.mil/>.

AMERICAN FORCES PRESS SERVICE (NOV. 2, 2007)

DEFENSE TRANSFORMATION EFFORTS GAIN MOMENTUM, OFFICIALS SAY

Gerry J. Gilmore

WASHINGTON—Ongoing efforts to transform the Defense Department into a leaner, more efficient 21st-century organization are gaining momentum, senior officials involved with transformation said Nov. 1.

Deputy Defense Secretary Gordon R. England's business acumen, gained from years of experience as a private-sector executive, complement his role as quarterback for departmental transformation, Paul A. Brinkley, deputy under secretary of defense for business transformation, told reporters during a roundtable discussion at the Pentagon.

Improving efficiency throughout the department's business operations is one of England's key focal areas, Brinkley said. The deputy secretary's "drive and leadership" have accelerated transformation and related change across the department, he added.

The annual Enterprise Transition Plan submitted to Congress at the end of September 2007 reported that 81 percent of 282 overall transformation milestones from last year were met, said David M. Fisher, director of DoD's Business Transformation Agency, which was established in October 2005. The report, he said, serves as a metric of progress.

Unmet milestones are checked to determine why they weren't achieved, Fisher explained, noting that some may be discarded based on decisions reflecting changed circumstances.

On April 30, England instructed Brinkley's office to implement state-of-the-art Lean Six Sigma management processes across the Office of the Secretary of Defense, Fisher said. Lean Six Sigma is a total quality management type of business methodology that, among other things, addresses wasteful practices that squander resources and hinder organizational efficiency and agility.

The military services have been extremely successful in applying Lean Six Sigma principles, Elizabeth McGrath, principal deputy under secretary of defense for business transformation, said.

For example, the application of Lean Six Sigma principles trimmed 5,000 pounds of weight from the KC-135 tanker airplane, which resulted in considerable fuel savings for the Air Force, McGrath said.

Lean Six Sigma methodology was also employed by U.S. Army Materiel Command at Fort Knox, Ky., to reduce the backlog of M1 Abrams tanks to be repaired from 85 to zero over a six-month period, according to the latest transformation transition plan report submitted to Congress.

And the Air Force's 58th Maintenance Squadron reduced the time required to inspect MH-53J Pave Low helicopters by 43 percent thanks to Lean Six Sigma, according to the report.

Lean Six Sigma principles, according to the annual report, are now being applied to streamline the security clearance process, to improve medical care for wounded servicemembers, and to improve the efficiency and effectiveness of departmental correspondence.

The Defense Department is also working to establish Lean Six Sigma training courses for managers, McGrath said.

The Defense Integrated Military Human Resources System, which employs modern business processes and information technology to improve military pay operations, is among the department's biggest transformational initiatives, Fisher said.

This system replaces several outmoded, non-integrated systems and is slated to be implemented across the Army

on Oct. 1, 2008, Fisher noted. Air Force implementation of the new system, he said, is scheduled Feb. 1, 2009.

DIMHRS is just one of 27 new information technology systems contained within the Business Transformation Agency's portfolio, Fisher said.

Another contracting-related initiative called "Iraqi First" is used by overseas-deployed U.S. forces to obtain needed supplies while boosting the Iraqi economy, Brinkley said.

"If you're buying something within the [Middle East] region and it can be bought from Iraqi businesses, you should buy it from Iraqi businesses, because that stimulates the economy," Brinkley explained.

More than 5,000 private Iraqi companies have registered in the program, he said, adding that more than $400 million in U.S. contracts have been let to Iraqi-owned firms.

The National Security Personnel System that's being implemented to manage and assess the Defense Department's civilian workforce is another part of transformation, Brinkley said. NSPS outlines departmental goals and recognizes individual achievement made toward meeting those goals, he explained.

"You have to give your employees clearly articulated requirements for what they have to do," he said. "There's a contract on both sides to this."

NSPS "forces you to have a strategy," while linking employee pay to performance, McGrath said. "It is something that outside industry does all the time," she said.

Gilmore writes for American Forces Press Service.

ARMY NEWS SERVICE (NOV. 1, 2007)
ARMY ACCEPTS GANSLER COMMISSION REPORT ON CONTRACTING; COMMITS TO ACTION

Secretary of the Army Pete Geren accepted Nov. 1 the report of an independent commission citing structural weaknesses and organizational shortcomings in the U.S. Army's acquisition and contracting system used to support expeditionary operations.

Dr. Jacques Gansler, former under secretary of defense for acquisition, technology and logistics, presented "The Commission on Army Acquisition and Program Management in Expeditionary Operations" report to Geren, who earlier this year formed the commission to assess the Army's acquisition system. Geren said the report offered the "blunt and comprehensive assessment we asked for and needed, and a plan for the way ahead."

Gansler was named chairman of the commission on Sept. 12 by Geren, who determined the Army's acquisition system needed a comprehensive review to examine its role in support of large-scale expeditionary operations. Geren sought an uncompromising, big-picture review of the system. He wanted recommendations addressing how to best ensure that the Army is properly equipped for a future characterized by persistent conflict.

Complementing the commission's strategic review, Geren also formed a task force to review current contracting operations and take immediate action where appropriate. The Army Contracting Task Force, co-chaired by Lt. Gen. N. Ross Thompson, military deputy to the assistant secretary of the Army for acquisition, logistics, and technology; and Kathryn Condon, executive deputy to the commanding general of Army Materiel Command, has already made actionable recommendations and is implementing improvements.

Operations in Iraq and Afghanistan have demonstrated the demand that expeditionary military operations place on the contracting system and contracting personnel, Geren pointed out. The U.S. Army has never fought an extended conflict that required this much to be outsourced. Approximately half of the personnel currently deployed in Iraq are contractor employees who provide food services, interpreting, communications, equipment repair, and other important services.

"Contracting and procurement must be an Army core competency," Geren said. "I deeply appreciate the good work of Dr. Gansler and his commission. We are responding positively and quickly to the commission's findings and recommendations."

Gansler's commission and the Army Contracting Task Force's efforts followed investigations and audits, which have cited contractors and government contracting officials for corrupt activity related to contingency contracting. The investigations continue. As of Oct. 23, the U.S. Army Criminal Investigation Command is conducting 83 investigations relating to contract fraud in Iraq, Kuwait, and Afghanistan.

Dr. Jacques Gansler reported findings of his six-member special commission Nov. 1, recommending that the Army hire almost 2,000 additional contracting officers and provide more training to its acquisition workforce.
Photograph by Gary Sheftick

While the cases vary in severity and complexity, most involve bribery. There are confirmed bribes in excess of $15 million. As of Oct. 24, 23 U.S. government employees, both military and civilian, have been charged or indicted in federal court. Contracts valued at more than $6 billion are affected. The Army reorganized its contracting office in Kuwait, replaced its leaders, increased the size of the staff, and provided more ethics training.

"The overwhelming majority of our contracting workforce, civilian and military, is doing an outstanding job under challenging circumstances," Geren said. "But we must do a better job of organizing, resourcing, and supporting them in their critical work. We will take the steps necessary to ensure that we execute our responsibility effectively, efficiently, and consistently with Army values."

The commission outlined four areas as critical to future success: (1) increased stature, quantity, and career development for contracting personnel—both military and civilian, particularly for expeditionary operations; (2) restructure of the organization and responsibility to facilitate contracting and contract management; (3) training and tools for overall contracting activities in expeditionary operations; and (4) obtaining legislative, regulatory, and policy assistance to enable contracting effectiveness—important in expeditionary operations.

Commission members include David J. Berteau, former principal deputy assistant secretary of defense for resource management and support; retired Gen. Leon Salomon, former commander, Army Materiel Command; retired Gen. David M. Maddox, former commander, U.S. Army Europe; and retired Rear Adm. David R. Oliver Jr., former director, Office of Management and Budget, Coalition Provisional Authority, Iraq.

The Gansler report traced many of the difficulties to post-Cold War cuts in the Army acquisition budget, which led to an undersized acquisition workforce in the face of an expanding workload.

"This workforce has not been properly sized, trained, structured, or empowered to meet the needs of our warfighters, in major expeditionary operations," Geren said. "We also need to do a better job in training our commanders on their responsibilities for requirements definition and contractor performance."

AIR FORCE PRINT NEWS (NOV. 5, 2007)
DLA-WARNER ROBINS SHOP HUMMING ALONG FOLLOWING TRANSITION

Amy Clement

ROBINS AIR FORCE BASE, Ga.—At a glance, you can't differentiate between Defense Logistics Agency employees and Air Force civilians in the F-15 Eagle wing shop here.

Yet work continues to run smoothly following the mid-October activation of DLA-Warner Robins in which DLA gained 240 employees from the Air Force.

The new aviation supply chain detachment is part of the 2005 Base Realignment and Closure supply and storage mandate. New DLA employees provide supply, storage, and distribution support to the maintenance activities for Warner Robins Air Logistics Center. DLA-Warner Robins employees are located throughout the air logistics center in areas of support for aircraft flight, electronics product support, commodities product support, and depot product support.

The BRAC 2005 decision called for the Department of Defense to reconfigure its supply, storage, and distribution infrastructure into one integrated provider—DLA. The activation of DLA-Warner Robins marks Air Force Materiel Command's first air logistics center to implement

the BRAC mandate, with Air Force positions in the 702nd Maintenance Support Squadron transferring in place to DLA.

DLA-Warner Robins is the first of 13 such supply, storage, and distribution activations scheduled to take place during the next several years at Air Force air logistics centers and aviation depots of other Services. Similar transitions will take place in February 2008 at Tinker Air Force Base, Okla., and in April at Hill AFB, Utah.

The F-15 wing shop has eight cells set up where DLA and Air Force employees work jointly. The wings are brought into the shop on trailers to the cells where robotic machinery removes the screws so the skin of the panels can be opened.

Once the panels are opened, an Air Force maintainer removes the old foam and does a shakedown, which includes examining the wing to see what needs to be replaced, and compiles a shakedown parts list, said Mike Abbott, director of the materiel control unit and newly transferred DLA employee.

"The Air Force portion is located on the bottom floor where orders are placed. DLA's portion of the materiel inventory center, or MIC, is located upstairs," Abbott said. "DLA works with its contractor, Lockheed, to keep stock bins with DLA consumables in the production area full with items requested."

Once the wing panel is open, it goes out to be steam cleaned. This gives DLA employees a short time period, or build-up phase, in which they can get the items into the bins before repair work begins. The shakedown list gives DLA lead time to get the part ordered from Richmond, Va., or New Cumberland, Pa., if it's not in stock in the materiel inventory center.

The shakedown parts list is sent electronically from the Air Force people to DLA employees on the second floor. DLA employees pull the lists, called a print stuffer list, and then go to the stock bins area and pull the parts and materials. The items are collected in carts and sent down to an Air Force expediter on the first floor who then takes the items to the requesting maintainer. If the items are not in stock, DLA orders the parts.

Clement writes for Defense Supply Center Richmond Public Affairs.

Gene Manns, Air Force sheet metal mechanic, programs the robotic machinery to remove screws from the top panel of an F-15 Eagle wing in the F-15 wing shop at Robins Air Force Base, Ga. DLA photograph by Amy Clement

ARMED FORCES PRESS SERVICE (NOV. 15, 2007)

ARMY SECRETARY SEES OPPORTUNITY FROM 'CALAMITIES'

Jim Garamone

WASHINGTON—Out of calamity comes opportunity, Army Secretary Pete Geren told Congress Nov. 15.

Geren and Army Chief of Staff Gen. George W. Casey Jr. testified before the Senate Armed Services Committee about the state of the Service.

The secretary said that when crisis comes it gives both Congress and the Service the political opportunity to do some things that wouldn't get done without the crisis.

"It gives us the political energy, the bureaucratic energy, to take on some hard issues and make some changes that we would never get around to were it not for that," he said.

Two "calamities" have highlighted weaknesses in the Army, and the Service is using those to make changes, Geren said. Shortcomings in soldier health care make up one of those calamities; contracting is the second.

In regard to health care, the Army made immediate changes to conditions at Walter Reed Army Medical Center, the Service's flagship medical facility, after shortcomings were brought to light in media reports, the secretary said. The Service has established wounded warrior units throughout the United States and is working to reform the disability system. The secretary put great store in a pilot program that begins Nov. 26 to experiment with a single physical for both the departments of Defense and Veterans Affairs.

Contracting is another calamity the Service is acting upon. "We have learned—unfortunately, the hard way—that our contracting system was not up to the needs of our Army in this century," Geren said. "In 2007, the Army did 25 percent of all contracting for the government—$111 billion."

When shortcomings were brought to light, the Service put a task force in place "to immediately stop the bleeding," he said. As a result of studies, the Service has learned that contracting is a problem throughout government.

"We need to do a better job of developing professional acquisition and contracting officers (and to) provide the resources, the training, and valuing the invaluable role that these contracting officers provide to our government," Geren said.

The Service needs more contracting personnel, they need to be better trained, and leaders need to listen to their conclusions, Geren said. The secretary also told the Senate panel that the Service must do more for military families. "We are in the seventh year of war in Afghanistan and over four-and-a-half years of war in Iraq; this is the third-longest conflict in U.S. history," he said. "It's the longest conflict we've ever fought with an all-volunteer force by quite a long shot.

"We are in uncharted waters, both for the soldiers and for the families," he continued.

This all-volunteer Army is a different force from any the country has fielded before. "More than half of the soldiers are married; more than half of their spouses work outside the home," he said. "The support that we provided to those key members of the all-volunteer force over the first 35 years of the force doesn't work as we move into the seventh year of the conflict."

Army leaders at all levels have signed a covenant with the families "to recognize the importance of our families to the all-volunteer force." Geren said that families volunteer too, and the military must do a better job supporting them.

"We moved $100 million out of our budget last summer into family programs," he said. "In '08 in the supplemental, we moved $1.4 billion into family programs. We ask your help as we look to support families, that critical part of our all-volunteer force."

Garamone writes for the American Forces Press Service.

ARMY NEWS SERVICE (NOV. 16, 2007)
NEW BLACK HAWK UNVEILS LATEST HELO TECHNOLOGY

J.D. Leipold

WASHINGTON—The Army's latest version of the Black Hawk helicopter, the UH-60M, paid a call on the Pentagon Nov. 16 to show off its various upgraded technical capabilities.

While this was the "M" model's maiden flight into the Washington area, the newest version was introduced to the Army in late October when a single bird flew from the Sikorsky factory in Connecticut directly to Fort Campbell, Ky., as a preview of the 30 Black Hawks that begin delivery to the 159th Combat Aviation Brigade, 101st Airborne Division next month.

The UH-60M will gradually replace the 25-year-old "L" model and become the Army's medium-lift helicopter, capable of assault, medevac, and cargo missions as well as command and control, aerial sustainment, and search and rescue. It will also be looked at as a follow-on helo to special operations units according to Chief Warrant Officer 4 Gene McNeill, who is presently serving as a test pilot and trainer on the "M" model at Sikorsky.

McNeill, with two Iraq tours behind him and a 20-year veteran of the "L" model, has made four cross-country trips and logged some 40 hours of cockpit time. He's impressed, and he's a believer in the new technology, particularly the digital avionics suite that makes the bird more user-friendly to crew and passengers regardless of mission.

"The Mike model will do everything the Lima will do … but the 'M' will do it so much better," he said. "What I like about this aircraft is the extreme precise accuracy of navigation using imbedded GPS and INS technologies. That translates to increased situational awareness on the battlefield at all times.

"With a digital moving map, you know exactly where you are with relationship to the earth. It enables you with ease and comfort to navigate, fly, and execute your mission a lot better because you also don't have to do manual calculations. The aircraft's digital suite makes everything faster, and they can be done while the aircraft is on the fly," McNeill said. "That also allows one pilot to fly the aircraft while the other serves as the mission operator."

Another digital advantage "M" pilots will have at their disposal is the capability of downloading all flight information from an office computer to a two-gigabyte PCMCIA (Personal Computer Memory Card International Association) card, which can then be inserted into one of four slots for up to eight gigabytes of data, then downloaded to the Black Hawk's computer system.

"What that means is I can walk out to my aircraft with a flight plan and my entire mission loaded onto the card … all my intelligence data, my frequencies, my waypoints, then dump them into my aircraft and load it into the flight management system," McNeill said. "You can't do that in the "L" model."

Another element to the new Black Hawk is its "threat intervisibility" system. This system allows for terrain data and known enemy in the field plotted on the map via a grid location. It allows the pilot to keep the aircraft masked below terrain at stand-off distances or threat engagement zones.

"If I climb too high, the system will flash red, meaning that I'm within range of various bad-guy weapons systems, so it assists me by telling me to fly lower and keeps me out of harm's way," McNeill said. "The classified system contains known capabilities of friendly and enemy weapons systems. That means we can plan our routes and have a decreased probability of being shot at. … That's a huge advantage."

The multi-function display can be switched almost as quickly as it takes to press the button—from cautionary advisory pages, to maps, pilot instrumentation, calculator pages—all those screens are interchangeable and compressed into computers without needing to have extra gauges or having to spend valuable time making calculations such as fuel burn-rate.

"I can now determine, based on head winds, whether I'm going to make it there, which allows me to plan alternate routes on the fly. Those are things that would have taken several minutes on the "L," but now I can do them in a matter of seconds," McNeill said.

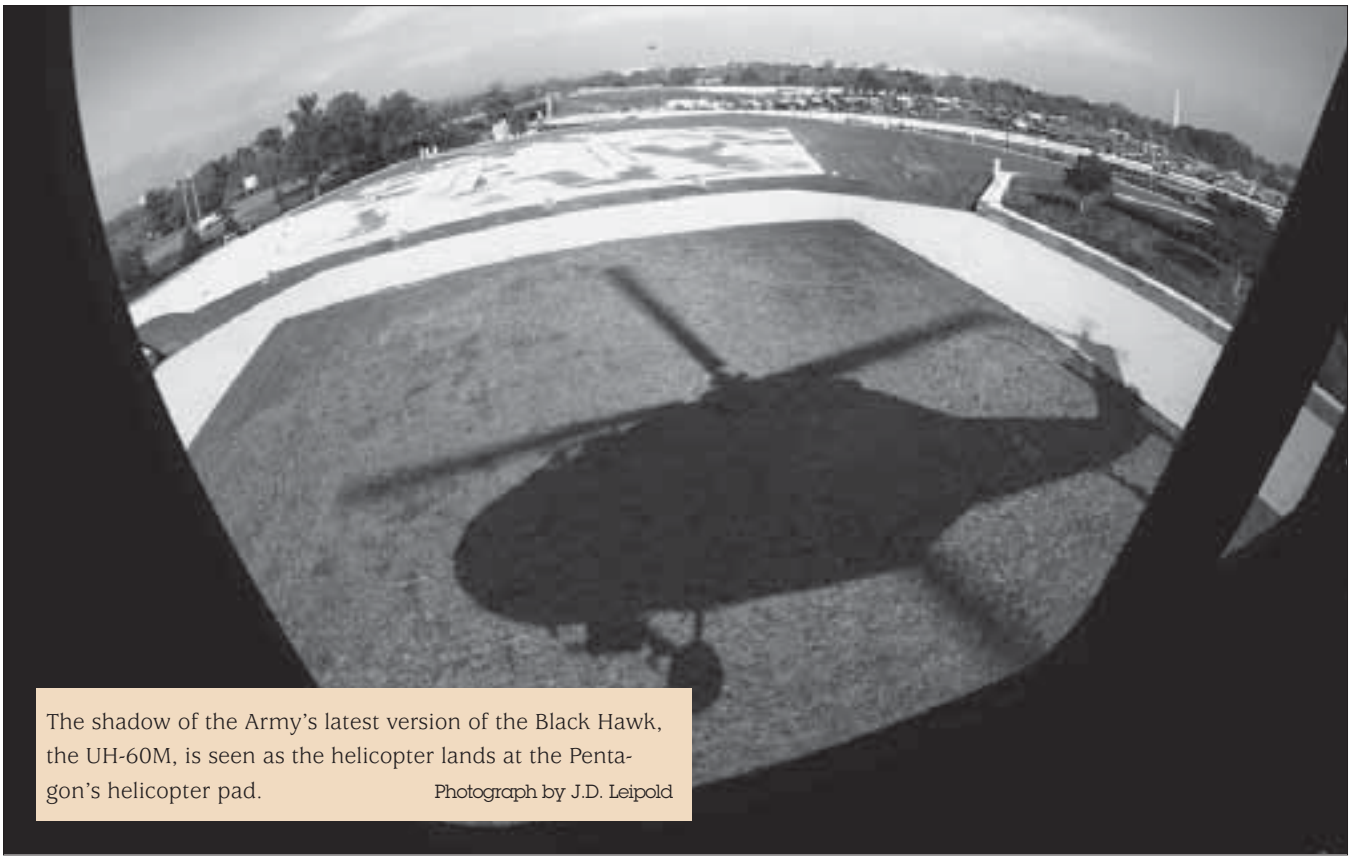
McNeill, who is also a maintenance officer, said another major difference between the "L" and "M" models is the onboard Integrated Vehicle Health Management System, or IVHMS, a series of sensors throughout the aircraft that constantly collect information crucial to the Black Hawk's health.

"If it rotates, gyrates, vibrates, it's been processed by the IVHMS and can be downloaded and extracted," he said. "To do my routine maintenance balancing adjustments, all I have to do is hit buttons, and the computers come up with vibration diagnostics, so I no longer have to bring ancillary gear; the aircraft will do a self-diagnosis.

"So, if there's a transmission ready to blow, we'll know before it happens. That system in itself will pay for itself down the road as the Army moves toward conditioned maintenance, where we may change something out before it breaks rather than after," he said.

Comparing the old to the new, the "L" and "M" models look similar, he said. The shape is pretty much the same, though the "M" rotor blades are different. The new helicopter has what are called anhedral blades, which generate more lift and hover capability. The rotor system also has a wide-cored composite blade, which can stand up better to enemy gunfire, and the antenna configuration is a little different. Each of the two General Electric 701D engines generates 2,000 shaft horsepower versus 1,900 horsepower from the "L." Yet the "M" is lighter.

The "M" model also has new seats for the crew and pilots who sometimes suffer from back injuries as a result of hard landings. Crash survivability is also better for the crew, McNeil said. Pilot seats contain variable-load energy



The shadow of the Army's latest version of the Black Hawk, the UH-60M, is seen as the helicopter lands at the Pentagon's helicopter pad. Photograph by J.D. Leipold

attenuators—basically customized shock absorbers that allow the pilots to digitally dial in their weight. The pilot and crew seats will then "stroke" on seat support poles.

"In an unfortunate crash or hard landing sequence, everyone on board is going to be a lot safer because the seats are designed to go up, down, left, right, forward, aft, and they swivel," McNeill said. "The seat will actually stroke all the way down to prevent spinal injuries; they work like shock absorbers."

McNeill believes "L" model pilots will find the transition to the "M" to be smooth, easy, and that it will take about 15 hours of flight time.

Leipold writes for Army News Service.

DEPARTMENT OF DEFENSE NEWS RELEASE (NOV. 19, 2007)

DEPARTMENT OF DEFENSE RELEASES SELECTED ACQUISITION REPORTS

The Department of Defense has released details on major defense acquisition program cost, schedule, and performance changes since the June 2007 reporting period. This information is based on the Selected Acquisition Reports submitted to Congress for the September 2007 reporting period.

SARs summarize the latest estimates of cost, schedule, and performance status. These reports are prepared annually in conjunction with the president's budget. Subsequent quarterly exception reports are required only for those programs experiencing unit cost increases of at least 15 percent or schedule delays of at least six months. Quarterly SARs are also submitted for initial reports, final reports, and for programs that are rebaselined at major milestone decisions.

The total program cost estimates provided in the SARs include research and development, procurement, military construction, and acquisition-related operation and maintenance (except for pre-Milestone B programs, which are limited to development costs pursuant to 10 U.S.C. §2432). Total program costs reflect actual costs to date as well as future anticipated costs. All estimates include anticipated inflation allowances.

The current estimate (see chart) of program acquisition costs for programs covered by SARs for the prior reporting period (June 2007) was $1,693,773.4 million. After adding the costs for one new program—B-2 EHF (Extremely High Frequency) Increment 1 from the June 2007 reporting period—the adjusted current estimate of program acquisition costs was $1,694,479.5 million. For the September 2007 reporting period, there was a net cost increase of $7,653.5 million (+0.5 percent), due primarily to revised cost estimates for the Armed Reconnaissance Helicopter and the C-5 Reliability Enhancement and Reengining Program.

For the September 2007 reporting period, there were quarterly exception SARs submitted for nine programs. The reasons for the submissions are provided below.

	Current Estimate (in millions)
June 2007 (93 programs)	**$1,693,773.4**
Plus one new program (B-2 EHF)	+706.1
June 2007 Adjusted (94 programs)	**$ 1,694,479.5**

Changes Since Last Report	Current Estimate (in millions)
Economic	$ 0.0
Quantity	+370.1
Schedule	+292.4
Engineering	+276.1
Estimating	+6,391.4
Other	0.0
Support	+323.5
Net Cost Change	**$ +7,653.5**
September 2007 (94 programs)	**$1,702,133.0**

Army

Armed Reconnaissance Helicopter (ARH)—The SAR was submitted to report a unit cost increase of approximately 20 percent higher than the current baseline estimate, which resulted in a "significant" Nunn-McCurdy breach. Program costs increased $1,009.1 million (+18.7 percent) from $5,390.2 million to $6,399.3 million, due primarily to an increase in airframe manufacturing labor and material costs (+$345.5 million), higher system development and demonstration costs (+$290.9 million), and implementation of an upgrade to the main rotor system (+205.5 million).

Excalibur—The SAR was submitted to rebaseline the report from a development to a production estimate following approval of low rate initial production (Milestone C) for the increment Ia-2 in July 2007. Program costs increased $161.6 million (+7.0 percent) from $2,302.8 million to $2,464.4 million, due primarily to additional funding to support a higher Army cost position for the revised acquisition program baseline approved at Milestone C.

Warfighter Information Network-Tactical (WIN-T) Increment 1—This is the initial SAR for WIN-T Increment 1 Program. Following a Nunn-McCurdy breach certification in June 2007 that restructured the original WIN-T program, the WIN-T Increment 1 Program (formerly Joint Network Node) was initiated in October 2007.

WIN-T Increment 2—This is the initial SAR for the WIN-T Increment 2 Program. Following a Nunn-McCurdy breach certification in June 2007 that restructured the original WIN-T program, the WIN-T Increment 2 Program (Initial Networking on the Move) was initiated in October 2007.

Navy

EA-18G—The SAR was submitted to rebaseline the report from a development to a production estimate following approval of low rate initial production (Milestone C) in July 2007. Program costs increased $321.5 million (+3.8 percent) from $8,368.0 million to $8,689.5 million, due primarily to a quantity increase of five aircraft from 80 to 85 aircraft.

Remote Minehunting System (RMS)—The SAR was submitted to report schedule delays of more than six months. That is, Operational Evaluation slipped 15 months from June 2007 to September 2008 because the only Navy platform capable of performing RMS OPEVAL (DDG-96) is unavailable due to the ship's deployment schedule. There were no cost changes reported.

Air Force

C-5 Reliability Enhancement and Reengining Program (RERP)—The SAR was submitted to report a unit cost increase of more than 25 percent to the current baseline estimate and more than 50 percent to the original baseline, which resulted in a "critical" Nunn-McCurdy breach. Program costs increased $6,168.3 million (+54.4 percent) from $11,337.9 million to $17,506.2 million, due

primarily to a revised program estimate based on an analysis of prime contractor production proposal data, system development and demonstration actuals, and commercial pricing data.

Evolved Expendable Launch Vehicle (EELV)—This will be the final SAR submission for the EELV program because the under secretary of defense for acquisition, technology and logistics placed the program into sustainment and removed it from the active Major Defense Acquisition Program list. There were no cost changes reported.

Mission Planning System (MPS)—The SAR was submitted to report schedule delays of more than six months. Specifically, the start of system development and demonstration (Milestone B) for Increment IV slipped 10 months from February 2006 to December 2007. Program costs decreased $7.0 million (-0.4 percent) from $1,589.5 million to $1,582.5 million, due primarily to a revised estimate to complete development.

New SARs (As of September 2007)

The Department of Defense has submitted two initial SARs for the following programs for the September 2007 reporting period. These reports do not represent cost growth. The baselines established on these programs will be the point from which future changes will be measured.

Program	Current Estimate (in millions)
Warfighter Information Network-Tactical (WIN-T) Increment 1	$ 3,879.7
Warfighter Information Network-Tactical (WIN-T) Increment 2	$ 3,907.0
Total	**$ 7,786.7**

AIR FORCE PRINT NEWS (NOV. 27, 2007)
AIR FORCE LEADER DISCUSSES ACQUISITION FOCUS AREAS

Staff Sgt. Monique Randolph, USAF

WASHINGTON—People in the Air Force acquisition office are focusing on the workforce, product improvement, and acquisition processes, said Sue C. Payton, assistant secretary of the Air Force for acquisition.

The acquisition office is composed of 24,183 people responsible for 127 major programs. They are working to improve training, depth, and manpower for systems engineers, cost estimators, and contracting officers, she said.

"We're working to ensure that we have enough people, and that they're trained for the right skills at the right time for the key leadership positions in acquisition," Payton said. "We're also making sure that whenever we have a competitive source selection, that our contracting officers are the interface between industry and the source selection teams."

Another focus area is product improvement, said Payton. "We're looking at the game changers—the key things that we can leave behind from this administration that will be a real disruptive technology to counter and surprise our adversaries, and to give our warfighters an advantage."

One way to accomplish this is through directed energy, she said.

"We are transitioning the technology and prototyping efforts that have been going on in the Electronic Systems Center at Hanscom Air Force Base [Mass.], down to our Air Armament Center [at Eglin Air Force Base, Fla.]. The airmen there are skilled in getting effects-based weapons systems on the battlefield that will cause our adversaries to think twice before they attack," said Payton. "We're investing in how to transfer directed energy into our warfighters' hands, to have the capability to employ a directed energy—like an advanced tactical laser—on a soft target in the future."

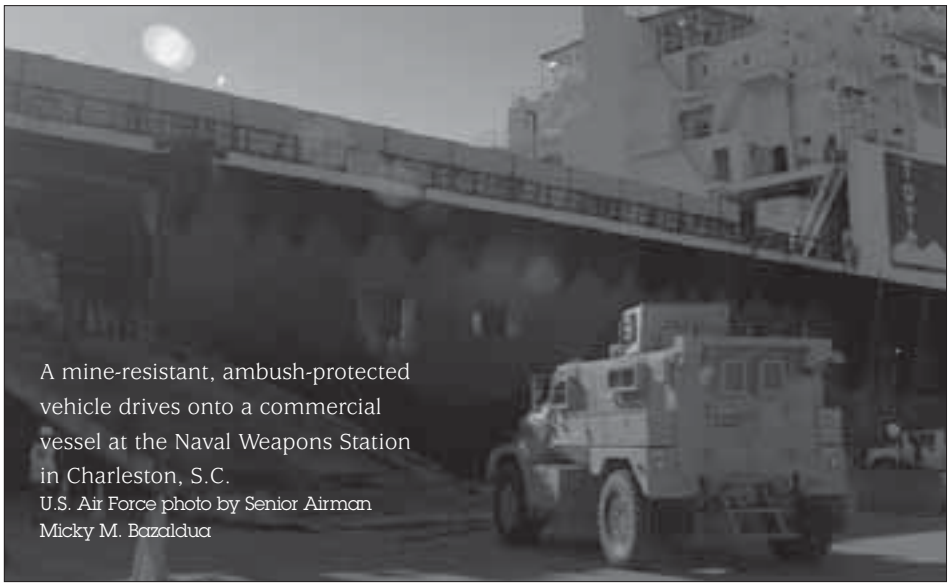
Other "game changers" discussed included open systems architecture and alternative fuels. Open systems architecture refers to software, hardware, communications, or other system architectures for which anyone can design programs that help build upon and improve the system. Understanding where open systems exist in weapons systems will give the Air Force the advantage of a more competitive environment.

"We think that open systems technology and open software methodology could be major game changers for our Air Force as we face some of the diminishing budgets that we're going to see in the future," she said.

"Another area we're really focused on is alternative fuels. We have certified a (synthetic) blend of fuel on the B-52, and we're starting the certification for the C-17 and

B-1," Payton said. "If we can achieve a 50 percent blend of (traditional) JP-8 fuel to synthetic fuel, we could see a decrease in the amount of money we spend on fuel."

Payton stressed the importance of finding ways to use acquisition funds more efficiently through open systems technology and alternative fuels, to allow for the recapitalization of the Air Force's aging aircraft. "We're between requirements that continue to go up, and a budget that is in effect going down," she said.



A mine-resistant, ambush-protected vehicle drives onto a commercial vessel at the Naval Weapons Station in Charleston, S.C.
U.S. Air Force photo by Senior Airman Micky M. Bazaldua

As far as processes, acquisition is incorporating lessons learned from the combat search and rescue replacement vehicle, or CSAR-X program.

"Probably one of the areas we could have done better in CSAR-X is to have a more thorough debriefing earlier in the cycle before the final proposals came in of where each one of the offerers stood relative to their cost and capabilities."

To rectify this, the acquisition office will have several interim debriefs with all offerers so they know exactly where their strengths and weaknesses are, and exactly where they stand in reference to capabilities and cost at the time they submit final proposals, she said. "We are putting in many more continuous dialogue opportunities with all the offerers."

Acquisition has also begun to have "industry days," in which they meet with industry and customers to discuss acquisition priorities and document any questions and concerns to ensure they are addressed. "We are making sure, through conversation and continuous feedback—for CSAR-X we'll meet with all offerers at least four times—they understand their strengths and weaknesses. Not only are we talking more, we're documenting more."

Randolph writes for Secretary of the Air Force Public Affairs.

U.S. TRANSPORTATION COMMAND NEWS SERVICE (NOV. 30, 2007)

SEALIFT OF MRAP VEHICLES BEGINS

Cynthia Bauer

A commercial cargo ship carrying more than 100 mine-resistant, ambush-protected vehicles for troops in Iraq set sail the last week in November from Naval Weapons Station Charleston, S.C.

The vehicles, known as MRAPs, are designed to protect occupants against armor-piercing roadside bombs, known as "explosively formed penetrators." The shipment marks the largest shipment at one time to date of these life-saving vehicles to America's warfighters in Iraq and the expansion of MRAP transportation to include both airlift and sealift—a major milestone for the program, officials said.

Army Lt. Col. John Hanson, chief of the U.S. Transportation Command's MRAP end-to-end distribution team, was at the Port of Charleston to observe the ship's loading. "By adding sealift, we can effectively use concurrent strategic airlift and sealift to the U.S. Central Command area of responsibility and meet that command's priority requirements," he said.

TRANSCOM is responsible for planning and synchronizing shipment of the vehicles. The increase in both production of the vehicles and the number of vehicles through the Space and Naval Warfare Systems Center at Charleston has contributed to the need for the Defense Department to expand transportation, officials said.

Airlift has been responsible for moving the majority of MRAPs up to now. Hanson said the overall plan is to continue airlifting hundreds of the vehicles each month while increasing the number of MRAPs shipped by sea to ports in the U.S. Central Command area of operations. In general, it takes 22 to 30 days for a ship to reach its destination in the CENTCOM area. Sealift is an efficient form of transportation, and a ship has the capacity to carry more than a month's worth of the vehicles brought in by air, TRANSCOM officials said. The command makes efficient use of all modes of strategic transportation to meet warfighters' needs. Once the vehicles arrive in theater, CENTCOM theater distribution system will engage to move the vehicles to receiving units, TRANSCOM officials said.

In Charleston, the 841st Transportation Battalion of the Army's Military Surface Deployment and Distribution Command managed port operations for loading the MRAPs aboard ship, officials said.

Bauer writes for U.S. Transportation Command Public Affairs.

ARMY NEWS SERVICE (DEC. 20, 2007)

ARMY TO GET MORE STRYKER NBC RECON VEHICLES

C. Todd Lopez

WASHINGTON—The Army now has authorization to purchase 95 more Stryker nuclear, biological, and chemical reconnaissance vehicles, in addition to 10 already in Iraq and several others used for testing and training.

During a press conference Dec. 19 at the Pentagon, Brig. Gen. Thomas W. Spoehr, chief, U.S. Army Chemical Corps, said existing NBCRVs have proven important for Army commanders in the field and that the Army requested and received approval to purchase more of them.

"The Stryker NBCRV represents a powerful tool for commanders to protect U.S. interests from weapons of mass destruction," Spoehr said. "And this month, after careful consideration, the Department of Defense gave the authorization for 95 more Stryker NBCRVs."

For now, the NBCRV is in low-rate initial production, but the Army eventually hopes to have as many as 355 NBCRVs.

The Stryker NBCRV is an NBC testing lab on wheels. It is intended as a replacement for the Fox NBC Reconnaissance System and demonstrates improvement in several key areas over the Fox. It also provides improved communication to ground commanders, said Spoehr.

"The Stryker NBCRV represents a vast increase in capability over its predecessor, the Fox, in terms of biological sensing, accuracy, speed, lethality, survivability, and digital communications—it is a true leap ahead," he said. "The Stryker NBCRV gives combatant commanders an unmatched capability to sense, mark, and warn U.S. forces about weapons of mass destruction threats in near real time."

The NBCRV, as a moving NBC sensor, provides to ground commanders information about where it is safe to move their soldiers. The vehicle could be used, for instance, to determine the safest route for troop movement or for supplies.

The Army recently received authorization to purchase an additional 95 Stryker nuclear, biological and chemical reconnaissance vehicles, like this one displayed Dec. 17, at the Pentagon.
U.S. Army photo by C. Todd Lopez

Spc. Christopher A. Case, a chemical operations specialist with the 23rd Chemical Battalion, Fort Lewis, Wash., was on hand at the Pentagon to discuss the capabilities of the NBCRV and to enlighten civilian press about the features of the vehicle. He says he believes the Army was right to ask for more NBCRVs.

"This is a good vehicle, with a lot of sensors and a lot of capability," he said. "It can run in multiple situations and purposes. For example, one of the better capa-

bilities it has over the Fox is the weapons system. Instead of being mounted and outside of the vehicle, you have a remote weapon system. You sit inside the vehicle with a joystick and aim a .50-caliber machinegun. At the same time, you remain protected inside a pressurized compartment even if there is a chemical environment on the outside."

The NBCRV features a suite of nuclear, chemical, and biological sensors that enable it to test for a wide range of contaminants that could prove hazardous for ground troops. One such feature is a set of two tiny rubber wheels on robotic arms that roll along the ground behind the vehicle. As the NBCRV moves, the wheels automatically lift up off the ground and transfer to an external sensor any dust they have accumulated. In turn, the sensor determines if that dust contains any potential contaminates. The effect of such a sensor is that the vehicle doesn't have to stop moving to do spot checks along a route.

"While we are rolling down the route, the wheels come up to the probe, then it gets vaporized and put into a sensor," Case said. "So instead of having to stop each time, we can keep rolling until we get a hit."

Another feature of the NBCRV is its automated connection to a larger communications grid. That connection makes the vehicle a moving, net-centric warfare enabled sensor that can clear routes for ground troops or alert commanders to places where they shouldn't send their soldiers without appropriate protection.

"When this thing runs into a contaminate, it plugs that information into a preformatted message without anybody even touching it," Spoehr said. "It includes weather data, the time, and the location in that message. The vehicle commander simply needs to press a button and that information is out there on the grid for everybody else to see. All you have to do is push one button and a ground or operation commander's situational awareness will be populated with knowledge of that hazardous material."

Being able to put that kind of information on tap for commanders is what makes the NBCRV a key component in ensuring soldiers remain safe and effective while executing their mission, Spoehr said.

AMERICAN FORCES PRESS SERVICE (DEC. 7, 2007)

ARMY PREPARES TO LAUNCH NEW PAY, PERSONNEL SYSTEM

Sgt. Sara Moore, USA

WASHINGTON—The Army is getting ready to launch a new pay and personnel system next year that will streamline personnel processes and integrate the active-duty, National Guard, and Army Reserve components, the Army representative for the new program said today.

The Army Defense Integrated Human Resources System, which is part of a Defense Department initiative, will be implemented Oct. 1, 2008, at all Army installations and within all Service components, Army Col. Patrick Devine, program director of DIMHRS, told online journalists and "bloggers" during a conference call.

DIMHRS is a commercial product that will take the pay and personnel data from all three components of the Army and put it in a single database accessible online 24 hours a day. A key feature of DIMHRS is that it integrates the pay and personnel systems, which means that when a personnel action is taken, the system automatically will trigger any associated pay change, Devine said.

DIMHRS goes toward solving the problem of multi-component units, or those units made up of soldiers from the active duty, National Guard, and Army Reserve, Devine said. In the past, these units had to deal with six different personnel systems and three pay systems, he noted, and DIMHRS will consolidate those into one system.

A big benefit that DIMHRS will give National Guard and Army Reserve soldiers is continuity of pay when they are mobilized, Devine said. In the current environment, National Guard soldiers go through five different sites from mobilization to deployment and have to complete paperwork and be certified at each location, he said. When DIMHRS is launched, all military pay will be handled in the one system, and is coordinated with personnel data, so problems can be avoided.

"In a DIMHRS environment, it's one record per soldier for military personnel and pay, so all that information is shared, and it further expedites his entitlements and getting his compensation," Devine said.

A unique aspect of DIMHRS is that it will allow soldiers to access their records and make certain self-service changes, such as a change of address or requesting a personnel action, Devine said. In this way, every soldier will be a user of the system, and all supervisors, including Army civilians who supervise soldiers, will be required to know the system so they can process leave requests, awards, and evaluations, he said.

To prepare for the implementation of this new system, the Army is launching an ambitious training program designed to reach all installations, Devine said. The training team starts by briefing senior leadership on the program, he said, then moves to battalion- and brigade-level leadership, and then briefs the human resources personnel who will be using the system the most.

The Army also is making distance-learning materials available for DIMHRS, and will be training soldiers to be instructors on the system, Devine said. The DIMHRS Web site at <www.armydimhrs.army.mil> also will have all the training materials available to soldiers, he said.

The Web site also includes other helpful materials such as a universal translator to help with commercial terms soldiers may not be familiar with, and workforce readiness packages, which describe how each action was done under the old system and how it will be done under DIMHRS.

The Air Force also is set to launch DIMHRS in February 2009, and although the Navy has not set a date for implementation, Navy officials have appointed a program director.

Moore writes for American Forces Press Service.

AIR FORCE PERSONNEL CENTER
(DEC. 19, 2007)

AFPC RETOOLS PERSONNEL SERVICES DELIVERY

RANDOLPH AIR FORCE BASE, Texas—Immediate access and ease of use form the foundation of the Air Force Personnel Center's ongoing efforts to refine its personnel products available for Air Force customers.

In the wake of significant cutbacks to the personnel career field, the center has leveraged technology to improve customer service via 24/7 access to Web-based personnel information. With information technology solutions, commanders have instant access to management products allowing them to determine the health of their squadron from their desktop.

One product new to the commander's portfolio is a Base Level Service Delivery Model Dashboard. The Dashboard enables commanders to access information like their unit personnel management or duty status rosters right from their own computers. They can also request actions such as decoration RIPs (Reports on Individual Personnel) or a change in rater.

"We're working towards more automation in the personnel business, because that's what commanders need in today's Air Force," said Col. Bill Foote, AFPC director of personnel services. "Commanders are our primary customers since they are tasked with executing the mission. As the BLSDM Dashboard matures, it promises to provide the personnel information commanders need to accomplish the mission."

AFPC targeted squadron commanders with dashboard access initially and is reviewing wing, group, and major command requirements for later implementation. Lt. Col. Jody Ogea, commander of the 5th Force Support Squadron at Minot Air Force Base, N.D., said the Dashboard provides a variety of data required for day-to-day operation.

"Because of this tool, the days I waited for a RIP, report, or roster have passed," said Ogea. "Although computer systems will never replace having your own personnelists at the squadron level, the Base Level Service Delivery Dashboard and centralized support at AFPC will allow squadron commanders to maximize resources to meet our customer's basic personnel needs."

Base-level BLSDM administrators can grant commanders access to the new tool. They, in turn, may delegate access to as many unit military and civilian members as necessary. Commanders or designated representatives can also provide feedback and suggest dashboard enhancements to AFPC.

In addition to hands-on products, AFPC is also refining the processes and products within the center to enhance services provided, referred to as Personnel Services Delivery. One improvement is in how information is transmitted to the field. The Military Personnel Flight Memorandum will become Personnel Services Delivery Memorandums in January. The name change is in line with the recent addition of an executive summary and a briefing slide on all messages released to aid the personnel community in explaining and briefing upcoming changes.

"As we go down this road, our personnel services need to be simple for customers to use, integrated with base personnelists, and marketed clearly and coherently to our customers," said Foote.

Spotlight on DAU Learning Resources

CORE CERTIFICATION STANDARDS HIGHLIGHTED IN DAU 2008 CATALOG

The under secretary of defense for acquisition, technology and logistics has approved the Core Certification Standards contained in an appendix to the Defense Acquisition University 2008 Catalog <http://www.dau.mil/catalog/default.aspx>. The standards were published under the authority of DoD Directive 5000.52, "Defense Acquisition Education, Training, and Career Development Program." DoD components are responsible for ensuring that workforce personnel are trained and qualified for their current assignment, prepared for more responsible jobs, and cross-trained for assignments in other acquisition career fields. The authorized acquisition career fields/paths are:

- Auditing
- Business, Cost Estimating, and Financial Management
- Contracting
- Facilities Engineering
- Industrial/Contract Property Management
- Information Technology
- Life Cycle Logistics
- Production, Quality, and Manufacturing
- Program Management
- Purchasing
- Systems Planning, Research, Development, and Engineering—Program Systems Engineer
- Systems Planning, Research, Development, and Engineering—Science and Technology Manager
- Systems Planning, Research, Development, and Engineering—Systems Engineering
- Test & Evaluation.

Core Plus

The Core Plus construct was designed to advance the DoD AT&L competency management model by providing a "roadmap" for the development of acquisition workforce members beyond the minimum certification standards required for their position. Accordingly, the Core Certification Standards and Core Plus Development Guide provided in the 2008 catalog provide acquisition workforce members a listing of:

- Core Certification standards by acquisition career field and level
- Core Plus knowledge and skills that are delivered through coursework that targets functions or tasks directly related to specific types of job assignments.

Core Plus Attributes

Core Plus helps identify the right learning for the right people at the right time during their professional development. It does this by connecting workforce members not only to their career field and level but also to their particular job assignment needs. Core Plus also identifies targeted training that relates to specific tasks in a given assignment type. As Core Plus matures, learners can expect:

- "Scrap learning," i.e., wasted or irrelevant course content, to be minimized
- Repetitive course content to be minimized
- development of more well-rounded acquisition core coursework
- Shorter functional courses required for certification
- An increase in modular course content
- An increase in courses targeted to workforce job assignments
- More flexibility, focus, and guidance in the construction of Individual Development Plans (IDPs).

Navigating the Guides

Similar to the former career field certification standards, there is a Core Certification and Core Plus Development Guide for each career field at each level—Level I (Entry), Level II (Intermediate), and Level III (Advanced). Each guide, as displayed in the sample on page 97 of the *DAU 2008 Catalog*, is also broken down into four or five major sections:

- Types of Assignments
- Core Certification Standards
- Unique Position Training Standards (if applicable)
- Core Plus Development Guide
- Footnotes.

Learn more about Core Plus at <www.dau.mil/workforce/index_sub1_CorePlus.asp?eventid=1583> or view the Core Plus Q&A video at <http://view.dau.mil/dauvideo/view/eventListing.jhtml?eventid=1583>.

DAU AND NDIA TO SPONSOR DEFENSE SYSTEMS ACQUISITION MANAGEMENT COURSE OFFERINGS FOR INDUSTRY MANAGERS

DAU and the National Defense Industrial Association will sponsor offerings of the Defense Systems Acquisition Management (DSAM) course for interested industry managers at the following locations during fiscal 2008:

- March 10-14, 2008, Pointe Hilton Squaw Peak Resort, Phoenix, Ariz.
- June 9-12, 2008, Hyatt Regency Denver–Colorado Convention Center, Denver, Colo.
- Sept. 8-12, 2008, Loews Annapolis Hotel, Annapolis, Md.

DSAM presents the same acquisition policy information provided to DoD students who attend Defense Acquisition University courses for acquisition certification training. It is designed to meet the needs of defense industry acquisition managers in today's dynamic environment, providing the latest information related to:

- Defense acquisition policy for weapons and information technology systems, including discussion of the DoD 5000 series (directive and instruction) and the CJCS 3170 series (instruction and manual)
- Defense transformation initiatives related to systems acquisition
- Defense acquisition procedures and processes
- The planning, programming, budgeting, and execution process and the congressional budget process
- The relationship between the determination of military capability needs, resource allocation, science and technology activities, and acquisition programs.

For further information see "Courses Offered" under "Meetings and Events" at <http://www.ndia.org>. Industry students contact Phyllis Edmonson at 703-247-2577 or e-mail pedmonson@ndia.org. A limited number of experienced government students may be selected to attend each offering. Government students must first contact Bruce Moler at 703-805-5257, or e-mail bruce.moler@dau.mil prior to registering with NDIA.

INTEGRATED DEFENSE AT&L LIFE CYCLE MANAGEMENT FRAMEWORK CHART

The Defense AT&L Life Cycle Management Framework Chart Version 5.2 will be revised in early 2008 to reflect changes in the acquisition process that are now being finalized. DAU will reprint the new framework chart as soon as it receives the approved version. The university currently anticipates availability of the new chart for general distribution around April 1, 2008. Because DAU has a very limited quantity of the existing 5.2 version, distribution is currently limited to students attending DAU courses. The 5.2 online version, however, remains available for viewing and printing at <https://akss.dau.mil/ifc/>.

Defense Acquisition University Strategic Partnerships

Through the years, the Defense Acquisition University has established strategic partnerships with universities and colleges, defense-sector corporations, professional associations, other government agencies, and international organizations. Such partnerships with academic institutions allow DoD AT&L workforce members to transfer DAU course work toward college and university degrees and certificates. Partnerships with industry, professional societies, government agencies, and international organizations focus on sharing training materials, tools, modules, and training opportunities. A complete database of DAU Strategic Partnerships can be found at <http://www.dau.mil/about-dau/partnerships.aspx>. In November and December 2008, two more partnerships were added to the database:

Davenport University, of Caledonia Township, Mich., has been selected by DAU as a partner university to provide mandatory, assignment-specific, continuing education courses in the acquisition, technology, and logistics military and civilian workforce. DAU Midwest Region Acting Dean Carl Hayden; Davenport University President Randolph K. Flechsig; Provost Tom Brown, Ph.D.; and Dean of the School of Technology and Davenport University Online Reid Gough, took part in a signing ceremony on Nov. 20, 2007. The articulation agreement, which outlines the terms under which Davenport University and DAU will work together, was signed at the Gerald R. Ford Presidential Museum. The agreement will ultimately facilitate the transfer of DAU course credits that have been certified by the American Council on Education toward Davenport University degree programs in the field of Business and Technology. More information is available at <www.Davenport.edu>.

Directorate of Contracting, Aeronautical Systems Center and the Defense Acquisition University Midwest Region, signed a Learning Organization Agreement on Dec. 20, 2007, validating their mutual long-term commitment to the discipline and education of contract pricing in defense acquisition. Under this learning organization agreement, the organizations will share tools and educational resources to make improvements in the contract pricing discipline for the acquisition, technology, and logistics workforce. ASC Director of Contracting Air Force Col. Jeffrey E. Schmidt and Acting Midwest Region Dean Carl D. Hayden signed the agreement at the DAU Midwest Campus in Kettering, Ohio. Also in attendance were Chief of ASC Pricing Bill Chandler, Chief of Analysis and Negotiation Branch B Janice Muskopf, and DAU Midwest faculty and staff members.

TOBYHANNA ARMY DEPOT (OCT. 24, 2007)

TOBYHANNA EMPLOYEES ATTEND FIRST CERTIFIED IN PRODUCTION AND INVENTORY MANAGEMENT PROGRAM

Jacqueline Boucher

Fifteen Tobyhanna employees took part in the first Association for Operations Management training course, which was an accelerated nine-month study program.

The members of the Master Production Scheduling (MPS) team participated in the Certified in Production and Inventory Management (CPIM) program as part of a continuing process to educate front-line employees on the "hows and whys" of the Web-based enterprise resource planning system.

The ERP is a framework for organizing, defining, and standardizing business processes. It's a one-stop-shop concept that replaces hours of research and information verification with accurate, real-time data.

"The course teaches people how to run a business using best business practices by means of an ERP system," said Jim Antonelli, assistant program officer, Logistics Modernization Program (LMP), MPS office. "It's more of an education than training," he said, explaining that students learned the whys behind the system, how the system operates in the background, as well as the benefits of the system.

The CPIM program is internationally recognized as the standard for individual assessment in the field of production and inventory management. It incorporates a business process orientation rather than individual techniques. The individual modules are integrated and follow a progression of increased understanding.

Jack Merkel said he will use the information learned to influence decisions that are being made related to the MPS project being implemented on the depot. Merkel is an electronics engineer on the MPS prototype team.

"It was a challenging course, but I'd definitely recommend it to others," he said.

Over the span of various presentations and discussions, the phrase echoed by class participants was "we can do this," according to Jim Ciliberti, CPIM instructor, Lehigh Valley Chapter of the Association for Operations Management. Course work included meeting once a week in the classroom and up to 20 hours of self-study.

"I've been conducting this training for over 18 years, and this has been a most rewarding experience," Ciliberti said. "The students came to class prepared and eager to learn. They soon realized that the education and learning does not stop here, and everyone agreed that CPIM training is part of life-long learning.

"I know that as Tobyhanna continues its quest to be the best it can be, these 15 men and women will be critical to the success of the facility," he said.

Officials here are using an ERP system to link the depot's business practices so that users can share information with the click of a mouse.

"This program [CPIM] is important for Tobyhanna in that it provides industry standard, best practice techniques and information that will help us to better understand where we are going and what we are trying to achieve with the implementation of master production scheduling," said Dennis Foster, deputy director, Production Management Directorate. "Understanding the whats and whys of ERP and Material Requirements Planning will make us better at managing our programs and achieving more reliable delivery schedules in the Logistics Modernization Program," he said.

"The implementation of MPS is the single most important operational change we [the depot] have ever made," said Foster. "For it to be as effective as it can be, we need to provide our entire workforce the best education possible. That is what we are trying to do with this certification program." The LMP multi-year transformation was begun in December 1999 to modernize logistics and the supporting information technology to meet current and future military readiness requirements.

Since introducing the system in 2003, LMP team members have overcome obstacles such as trying to alter the ERP to fit existing business processes before realizing that change was necessary for the depot to get the most out of the complex system.

"Education is just another step in reinforcing the new philosophy," Antonelli said. "CPIM is a big part of getting through the cultural change that comes from redoing the way we do business."

Gary Roberts understands that it's difficult for people to step away from their comfort zone, but explained that the net result of change is worth the risk. Roberts is a production controller on the MPS team.

"It's not a matter of improving one facet of a business, but rather improving the entire business process," he said. "As more and more employees embrace CPIM, the clearer our collective understanding of ultimate customer satisfaction, quality, and best business practices becomes.

"Our customers, the warfighters, should get what they need, when they need it, at the price they expect to pay," he said. "And Tobyhanna should be able to deliver that product more efficiently and safely."

There are 50 participants scheduled to attend the next CPIM course in January. The course will contain the same five study modules, but has been extended to 11 months.

Tobyhanna Army Depot is the Defense Department's largest center for the repair, overhaul, and fabrication of a wide variety of electronics systems and components, from tactical field radios to the ground terminals for the defense satellite communications network.

Tobyhanna's missions support all branches of the Armed Forces. About 5,100 personnel are employed at Tobyhanna, which is located in the Pocono Mountains of northeastern Pennsylvania. The depot is part of the U.S. Army Communications-Electronics Life Cycle Management Command. Headquartered at Fort Monmouth, N.J., the command's mission is to research, develop, acquire, field, and sustain communications, command, control, computers, intelligence, electronic warfare, and sensors capabilities for the Armed Forces.

AIR FORCE PRINT NEWS (NOV. 2, 2007)
OFFICIALS SELECT CIVILIANS FOR STRATEGIC LEADER PROGRAM

WASHINGTON—Air Force officials have selected 84 civilians for the Civilian Strategic Leader Program, formerly known as the GS-15 Leadership Development Program.

"The CSLP is designed to help institutionalize the total force development," said Lt. Gen. Roger Brady, chief of manpower and personnel for the Air Force at the Pentagon. "Our goal is to identify, develop, and support a leadership cadre that will successfully execute the evolving Air Force mission and be prepared to successfully lead at the senior executive level."

Although the name of the program has changed, the goal remains the same: to develop eligible GS-15, Pay Band 3, or equivalent-level civilian employees for senior leadership positions.

"We have a responsibility in the Air Force to maintain a viable civilian workforce, and that involves growing competent civilian leaders and preparing them properly to assume senior civilian positions," said Tim Beyland, assistant deputy chief of staff for Air Force manpower and personnel.

CSLP was designed to bring civilian senior leader development and career management practices in line with current general officer, senior executive corps, and colonel practices.

"The Air Force tries to identify high-potential officers early, and we try to develop them deliberately and move them into senior leader jobs," Beyland said. "The civilian side is no different. We try to identify high-potential people, develop them deliberately, give them an opportunity to demonstrate leadership, and grow them into senior leadership positions at either the Pay Band 3 level, or above that at the senior executive service level."

Under the program, civilian employees applied to compete for senior leadership positions based on experience, cross-functional broadening, and geographical preference. Any civilian employee currently in a GS-15, Pay Band 3, or equivalent-level position can apply annually for CSLP online. As part of the application process, participants receive a personalized assessment of past accomplishments and a recommended career vectoring based on their education, professional foundation, and future goals.

To see a complete list of the selectees, visit the Air Force Portal link: <https://www.afsl.hq.af.mil/dps/cslp/2007cslpselects.htm>.

Conferences, Workshops & Symposia

24TH ANNUAL NATIONAL LOGISTICS CONFERENCE AND EXHIBITION

The 24th Annual National Logistics Conference and Exhibition will be held March 10–13, 2008, at the Hyatt Regency Miami, Miami Convention Center, in Miami, Fla. This year's theme will be "Synchronizing Global Defense Logistics: Partners, Performance, and People." Share insights with senior DoD leadership, top industry executives, project directors and program managers, information technology providers and developers, government policy makers and regulators, defense contractors and design professionals, third party logistics providers, and equipment suppliers and manufacturers. For more information on the 2008 conference, contact Kari Deputy, meeting planner, kdeputy@ndia.org or call 703-247-2588. To register online, visit <http://eweb.ndia.org/eweb/DynamicPage.aspx?Site=ndia&Webcode=EventList>.

DLA STRATEGIC PARTNERS CONFERENCE

The Defense Logistics Agency Strategic Partners Conference will be held March 19–20, 2008, at Waterford Receptions in Springfield, Va. As it becomes available, conference information will be posted online at <http://www.acq.osd.mil/dpap/ops/outreach_and_communications.html>. Media contact is Britt Bommelje, meeting planner, at bbommelje@ndia.org or 703-247-2587.

6TH U.S. MISSILE DEFENSE CONFERENCE AND EXHIBIT

The 6th U.S. Missile Defense Conference and Exhibit will be held March 31–April 3, 2008, at the Ronald Reagan Building and International Trade Center in Washington, D.C. The conference—hosted by the American Institute of Aeronautics and Astronautics in cooperation with The Boeing Company and supported by the Missile Defense Agency—will provide delegates access to the current state of the Ballistic Missile Defense System, including a review of national policies, Service priorities, technical advances, and related issues that may affect the deployment of a BMDS able to meet stated requirements. Conference participation will be restricted to delegates from U.S. government and industry who have demonstrated a valid need-to-know and who have a valid SECRET or higher security clearance. For instructions on submitting a paper or to learn more about the 2008 conference, visit the conference Web site at <http://www.aiaa.org/content.cfm?pageid=230&lumeetingid=1810>.

DOD ENTERPRISE ARCHITECTURE

The Department of Defense Enterprise Architecture Conference will be held April 14–18, 2008, at the Florida Hotel and Conference Center in Orlando, Fla. Sponsored by the Association for Enterprise Integration in cooperation with the director of Architecture and Interoperability, Office of the Deputy Chief Information Officer, DoD, and co-hosted by U.S. Central Command, this year's event focuses on "DoD Missions and the Architectural Vision." The purpose of the conference is to provide the DoD architecture community with a way to bridge the gap between architecture and programs and drive architecture into DoD organizations. For more information on the conference, contact Nicole Peterson at 703-247-9474. Register online at <http://www.afei.org/brochure/8a05/index.cfm>.

9TH ANNUAL SCIENCE & ENGINEERING TECHNOLOGY CONFERENCE DOD/TECH EXPOSITION

The 9th Annual Science & Engineering Technology Conference DoD/Tech Exposition will be held April 15–17, 2008, at Embassy Suites Hotel/Charleston Convention Center in North Charleston, S.C. Registration information will be posted as it becomes available at <http://eweb.ndia.org/eweb/DynamicPage.aspx?Site=ndia&Webcode=EventList>.

43RD ANNUAL ARMAMENT SYSTEMS: GUN & MISSILE SYSTEMS CONFERENCE & EXHIBITION

The 43rd Annual Armament Systems: Guns and Missile Systems Conference and Exhibition will be held April 21–24, 2008, in New Orleans, La. The 2008 conference will present topics that demonstrate how our nation's current gun, munition, and missile system technologies can be adapted and evolved to meet tomorrow's missions and operations. For more information on the conference, contact Casi Antolock, meeting planner, at cantolock@ndia.org or 703-247-2570. To register online, visit <http://eweb.ndia.org/eweb/DynamicPage.aspx?Site=ndia&Webcode=EventList>.

DOD PROCUREMENT CONFERENCE

The next DoD Procurement Conference will be held May 12–15, 2008, in Orlando, Fla. Conference information will be posted online as it becomes available at <http://www.acq.osd.mil/dpap/ops/outreach_and_communications.html>. Media contact is Chris Isleib at 703-695-6294 or chris.isleib@osd.mil.

INSTITUTE OF INDUSTRIAL ENGINEERS CONFERENCE AND EXPO 2008

The most significant industrial engineering event of the year is the Institute of Industrial Engineers Conference and Expo 2008. This is the ideal place to gather your tools for today, fuel for tomorrow, and network with the best and brightest in your field. Educational sessions will address virtually every aspect of the profession, and awards will be presented to recognize superior achievement of top professionals and students. An exhibit hall will feature products from companies that value industrial engineers. Enjoy opportunities to build your network and reconnect with professional acquaintances. This year's conference will be held in Vancouver, Canada, May 17–21, 2008. For more information, contact the Institute of Industrial Engineers at 1-800-194-0460 or fax 770-449-0460.

OUSD(AT&L) BUSINESS MANAGERS' CONFERENCE

This year's Business Managers' Conference is scheduled for May 20–21, 2008, at the Defense Acquisition University, Fort Belvoir, Va. Sponsored by the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, in cooperation with the business, cost estimating, and financial management functional advisor, the annual conference is targeted toward senior DoD acquisition and comptroller executives as well as program executive office/program manager/systems command business managers and Service headquarters program and business staff. It offers two full days of high-level speakers, training opportunities, and exhibits, with valuable information and demonstrations of a variety of tools for managing organizational challenges. The yearly conference is an excellent way to stay abreast of current acquisition and business initiatives, and it provides opportunities for wide-ranging discussions with key leaders. Registration information for the 2008 conference will be published as it becomes available at <http://www.acq.osd.mil/dpap/ops/docs/procurement-conference-2008.pdf>.

AIR FORCE PRINT NEWS (NOV. 23, 2007)
AMC COMMANDER DISCUSSES MODERNIZATION, RECAPITALIZATION ISSUES

Maj. Dave Huxsoll, USAF

WASHINGTON—Modernization of its aging fleet is one of the top priorities for Air Force leaders, but it is complicated by program delays and budget limits, the commander of Air Mobility Command told members of the Logistics Officer Association in a speech recently.

The rising costs of modernizing the C-5 Galaxy fleet, congressional prohibitions on retiring some older aircraft, and the urgent need for a new tanker were among the topics Air Force Gen. Arthur Lichte covered during his remarks.

"When program timelines start slipping, we start losing money. We have to move our programs along on time and get them right the first time," the general said. "I'm tired of seeing our programs drag on and on, then having the Air Force have to respond to 'Why didn't you have this done sooner?'"

Using the KC-10 Extender as an illustration, he explained the impact program delays and cost overruns can have on the mission.

"Ten years ago we said 'If we modernize the KC-10, that will be our bridge to the next KC-X (aerial tanker),'" he said. "(But) we attempted that, and we failed three times.

"$153 million dollars has gone into a black hole, and KC-10 hasn't been modernized. We can't do that anymore. We need to play hardball," Lichte said.

The general said he favors modernizing and re-engining all of the command's C-5B aircraft, if they can be delivered at a reasonable cost; and acquiring a commensurate number of C-17 Globemaster IIIs to maintain a congressionally mandated fleet of inter-theater airlfters to meet worldwide mission requirements.

"I think we've passed the window to [modernize C-5A aircraft], because they will be too old, and we won't get much payback out of them," he said.

Lichte also said the C-5 and C-17 are inextricably linked "because if we can't modernize the C-5s, we have to get more C-17s. It's our only alternative to meet our nation's airlift needs."

Lichte said another challenge facing the Air Force and Air Mobility Command officials is congressional restrictions on retiring some older aircraft.

"This is tough," the general said. "This is affecting each and every one of us, and it's affecting the airmen responsible for maintaining these aircraft out in the field. We need the authority to manage our inventory. For example, we need to retire our KC-135 [Stratotanker] E models—their struts need repair. At the end of this year, we'll have 85 of them parked on our ramps, and we don't fly them."

Despite the aircraft being parked, he said, every seven days their tires must be rotated and every 45 days they must be towed and their engines run to keep them in a flyable status, as directed by law.

"This type of maintenance of old aircraft is costing money. As a matter of fact, it costs about $100,000 per aircraft per year. We need some relief from this," the general said.

Lichte also addressed the importance of the KC-X, the replacement for KC-135 tankers, which has an average age of 46 years.

He said that even if the first (KC-X) aircraft is delivered on time in 2011, and 15 a year are delivered after that, the last KC-135 will leave the fleet in 2048, at an age of about 87 years. However, if the program runs into any problems and slips by just three years, and if Air Force officials are unable to procure 15 aircraft a year, the last KC-135 will retire in the year 2082, when it is more than 120 years old.

Air Force Capt. Matt Poisson (left) tries out some of the newest technology on an F-35 Joint Strike Fighter simulator while Air Force Maj. Jeff Simons studies his fellow pilot's actions Nov. 30 during the Interservice/Industry Training, Simulation and Education Conference in Orlando, Fla. Simons and Poisson are F-16 Fighting Falcon pilots from Luke Air Force Base, Ariz.
U.S. Air Force photograph by Tech. Sgt. Larry A. Simmons, USAF

"Each of us needs to articulate to our communities and our elected officials: tanker modernization is vitally important to national security," Lichte told the officers.

Air Force tankers, he said, give the United States the unique ability to hold any target at risk, anywhere in the world, or reach out with an open hand to provide humanitarian aid.

Huxsoll writes for Air Mobility Command Public Affairs.

AIR FORCE PRINT NEWS (DEC. 4, 2007)
TECHNOLOGY CONFERENCE POWERS DOWN

Tech. Sgt. Larry A. Simmons, USAF

ORLANDO, Fla.—More than 500 exhibitors set up various displays to show off their cutting-edge technology to American military members the last week of November at the Interservice Industry Training, Simulation and Education Conference at the Orange County Convention Center.

The latest in simulation and virtual reality from all over the world merge each year at this conference—the largest technology exhibition of its kind anywhere.

"The goal of the conference is to share with [military and industry] and other government agencies the types of expertise that is out there in modeling and simulation from learning how to fly an airplane to driving a tank [and responding to] emergency situations and medical situations," said June Taylor, the director of the 677th Aeronautical Systems Group at Wright-Patterson Air Force Base, Ohio.

Officials from the 677th AESG helped sponsor this year's conference. Together, military and industry professionals demonstrated how simulation technology is rapidly becoming indispensable to human learning for all situations.

Military and industry leaders are also learning from each other. Events such as natural or man-made disasters can be predicted in a simulation and modeled in advance.

Authorities can now learn from the virtual world how best to plan for the real thing.

Many airmen at the conference were interested in the latest advances in airplane simulation.

"The technology is way ahead of what we are using right now," said Capt. Matt Poisson, an F-16 Fighting Falcon pilot at Luke AFB, Ariz. "I was checking out the avionics usage and the systems they have to see how they integrate in the future. Currently, we have several different displays that you have to look at individually. In the future, so much information will be displayed to you. It will all be sensor management for the pilot."

Simulators also offer very valuable training opportunities for today's Air Force pilots who continually prepare to support America's ongoing war effort.

"There are things an aircrew can do in simulators that they absolutely cannot do in the airplane. It is very difficult to train an engine out scenario and have the pilot come back alive unless it is in a simulated environment," Taylor said.

The conference is in its 29th year. This year's theme was "Maintaining the Edge—Transforming the Force." The information shared between military, industry, contractors, and countries will quickly get to its main objective—the warfighter, Taylor said. "The technology is already out there on the battlefield, and the cutting-edge technology will be there in the near future."

Simmons writes for Air Force News Agency.

AMERICAN FORCES PRESS SERVICE (OCT. 29, 2007)

INDUSTRY, ACADEMIC LEADERS POOL BRAINPOWER TO ADDRESS IED THREAT

Donna Miles

COLLEGE PARK, Md.—The head of the Defense Department's counter-improvised explosive device effort challenged some of the best minds in industry, academia, the national laboratories, and the military to come up with better ways to thwart these deadly weapons.

Retired Army Gen. Montgomery C. Meigs, director of the Joint Improvised Explosive Device Defeat Organization, opened a two-day conference Oct. 29 designed to spark better solutions to the IED problem.

The conference is focusing on three parts of the attack plan against what's become terrorists' weapon of choice in Iraq and, increasingly, in Afghanistan: attack the network, defeat the device, and train the force. Meigs thanked the roughly 750 participants for technological advances they've helped develop, particularly in the intelligence and training realms. What's needed now, he said, are better technologies so troops can identify IEDs sooner, before they inflict damage.

Defense Department officials say IEDs have caused nearly half of all casualties in Iraq and nearly 30 percent of those in Afghanistan since the start of combat operations. "I am so convinced that the way you take the initiative away from the enemy is to find the IED, locate it before the soldier, sailor, airman, or Marine, or perhaps in the future, a civilian, gets within the blast range of the thing," Meigs said during the unclassified opening session. "When the individual is within the blast range of an IED, we have lost all opportunity for our initiative. The initiative is in the hands of the enemy," he said.

Meigs acknowledged that the easy answers already have been explored. "We have all picked the low-hanging fruit in this area," he said. "If we are going to develop that capability, it is going to require a full-court press by the scientific and technical base of our country and our allies."

Robin L. Keesee, deputy director of the Joint IED Defeat Organization, told reporters technical conferences like this one help focus some of the best brainpower in the country and among U.S. allies on the scope and complexity of the IED challenge. The sessions promote information sharing that generates the broadest range of plausible solutions, reduce redundancy of effort, and help weed out initiatives that already have been tried, he said.

JIEDDO's past two industry conferences yielded better-quality, more-focused technological proposals, many within the first week of the session, Keesee said.

Speed is critical in an environment where insurgents, unrestricted by any formal hierarchy, are able to quickly alter their tactics, techniques, and procedures, he said. "They are watching what works and doesn't in a neighborhood and are adapting on that basis," Keesee said. "Our soldiers and Marines and others are adapting their tactics and techniques at that level. The challenge for us is how do we adapt the technology as well to support the Marines and soldiers?"

Another challenge is getting an acquisition system based on annual budgets and usually focused three to five years ahead to respond to circumstances that morph within days, weeks, or months. "We need to work toward adapting our acquisition practices to the global war on terror," Keesee said.

JIEDDO has come a long way toward that end, reducing time to get funding approval for a new idea to as little as three weeks. That's the time it takes to run the idea through a panel of scientists and engineers who verify it makes operational sense, military experts to ensure it makes tactical and operational sense, and Service-level and Defense Department levels to agree it makes investment sense. Investing in an effort that can amount to millions or even tens of millions of dollars "is really unheard of in the rest of the Department of Defense," Keesee said. "That's usually a process that takes years."

Keesee credited the combination of better technology; better tactics, techniques, and procedures; and better troop protection with helping to reduce IED casualties. "It all goes together to make it more difficult for insurgents, and to make our soldiers and Marines and others more survivable [and] more surviving when attacked," he said. He reiterated Meigs' assertion that insurgents now have to work four to six times harder to inflict the level of damage they once did.

Retired Army Gen. John Abizaid, former commander of U.S. Central Command and the opening day keynote speaker, told conference participants he's "absolutely, 1,000 percent convinced" that cooperation between JIEDDO and industry has helped reduce the IED threat troops face on the battlefield. Abizaid said the threat isn't likely to go away any time soon, because the enemy views IEDs as their opportunity to gain high ground over an enemy they can't confront any other way.

"We need to continue to close this gap," with an eye to future battlefields as well as those troops are fighting on today, he said.

Miles writes for American Forces Press Service.

AIR FORCE PRINT NEWS (NOV. 20, 2007)
LOGISTICS INNOVATIONS IMPACT WARFIGHTERS

Maj. Dave Huxsoll, USAF

WASHINGTON—The commander of Air Mobility Command thanked members of his organization in attendance Nov. 14 at the national conference of the Logistics Officer Association, noting their initiatives are resulting in needed fuel and equipment being delivered to warfighters faster and more efficiently. "In fighting and winning the war on terrorism and preparing for the next war, you loggies have stood up and helped immensely," Air Force Gen. Arthur J. Lichte said.

One example he highlighted is AMC's C-5 Galaxy regionalized isochronal inspection program. "We used to do these [inspections] at eight different locations and spent a lot of money on support equipment," the general said. The program consolidates C-5 ISO at three locations, one of which is already up and running at Dover Air Force Base, Del. When the program is fully realized, it will save the Air Force almost 60 manpower positions and more than $80 million in support equipment. Most important, the general said, it will return aircraft to operations an average of 28 days earlier. "It's increased the flow days, which effectively means we get airplanes flowing through the system faster and better," Lichte said, adding this change will also allow the transport of an additional 10,000 pallets a year. "This is some tremendous innovation that the loggie community has brought to us to help not only win the war we are engaged in now, but help prepare for the next war," he said.

Other resource-saving initiatives the general showcased: a streamlined 60K loader inspection process, which reduces inspection times from almost 90 minutes to 25 minutes; an effort to shift some C-5 and C-17 Globemaster III loading responsibilities from loadmasters to aerial porters, which allows aircraft to "turn" in two hours or less; and both C-17 and KC-10 Extender thrust reverser process changes, which cut repair times by up to 79 percent. "I credit the [Air Force Smart Operations] 21 mindset that is throughout Air Mobility Command, as well as people like you for coming up with these ideas that make the mission better," the general said.

Lichte discussed these reforms in the context of AMC efforts to meet the Air Force's top three priorities—fighting and winning the global war on terrorism and preparing for the next war; taking care of airmen and their families; and recapitalizing and modernizing the force.

Huxsoll writes for Air Mobility Command Public Affairs.

FALL 2007 PEO/SYSCOM COMMANDERS' CONFERENCE

PROGRAM EXECUTION EXPECTATIONS

Perform • Execute • Succeed

Communicating his highest expectation of the defense acquisition workforce, newly confirmed Under Secretary of Defense for Acquisition, Technology and Logistics John Young said, "Acquisition must operate under the brightest light, able to withstand all scrutiny."

Young served as one of two keynote speakers at the fall 2007 Program Executive Officers/Systems Command Commanders' Conference, held Nov. 6–8, 2007, at the Defense Acquisition University, Fort Belvoir, Va. Deputy Secretary of Defense Gordon England served as the second day's keynote speaker, while Deputy Under Secretary of Defense for Acquisition and Technology James Finley presided over a number of forums and activities.

The presence of acquisition's three most senior leaders at the fall conference represented a profound show of leadership support, marked by candid exchange and communication of expectations to the more than 300 acquisition and defense industry leaders and professionals attending the fall conference.

Newly confirmed Under Secretary of Defense for Acquisition, Technology, and Logistics John Young speaks at the fall 2007 PEO/SYSCOM Commanders' conference on Nov. 7 at the Defense Acquisition University, Fort Belvoir, Va.
Photograph by DAU Video Services

USD(AT&L) John Young

Young began his remarks by announcing that he will gradually be rolling out a source document across the acquisition enterprise containing sets of principles that reflect his thoughts on managing the acquisition process. Three sets of principles he discussed were: 1) how DoD's acquisition professionals interact with others outside of the team, 2) how DoD acquisition professionals work within their own acquisition family, and 3) how the acquisition workforce interacts cooperatively within their neighborhoods and communities.

"The defense acquisition team, in my view, has special capabilities and responsibilities in today's new world," Young said. "I believe we have a unique and privileged role as the integration point for everything."

Those capabilities and responsibilities, Young said, encompass understanding operational concepts, understanding technology and informing requirements that assist in enabling the warfighters' concept of operations, understanding industry, being able to define realistic budgets and schedules, and ensuring interoperability and jointness across the enterprise. On jointness Young added his personal perspective—that although he knows it's an unusual thought, he personally believes that the responsibility exists at the Service levels to pursue jointness.

"I want you to use your unique understanding of acquisition, of technology, of industry to work with warfighters and requirements officers—push on requirements to rationalize them in order to get the best value for every tax dollar we spend. No one ever counts the cost and the risk of what we did not buy and could not provide for the troops because we went overboard in another area—on requirements, on excessive technical authority—but these are real costs and these are real risks today. I hope that we will all take that as our responsibility going forward."

He reminded the conferees that they work for the taxpayers and should spend each dollar as if it was their own. "This is how I approach the business," he said, "and this is how I ask each of you to approach the business."

When the debate is over, and the last push opportunity is there to save several million dollars or to accept the industry offer and move on to the difficulties of signing a contract, Young urged everyone to make that push.

"Make the push with industry, make the push with the programmers, make the push with the comptrollers, make the push with the requirements sponsors so that you have a program that is properly funded and delivers best value to the taxpayers to an appropriate set of requirements.

He called those assembled "the conscience of the enterprise" and cautioned them that they will be the scapegoat for the fact that we pay more money for no additional capabilities.

"We have to stop accepting cost growth as inevitable in our own family, letting it invisibly multiply by a factor of two or more as we take dollars from other programs to fix a broken program." He emphasized that DoD acquisition needs to spend every single dollar building the most diverse and robust tool kit possible for the warfighter.

Young was clear in his expectations regarding ethics.

"We must be open minded and fair in everything we do." Seek competition wherever possible, he said, and value in every instance.

Young said that DoD's acquisition leadership has to be more conscious than ever of not failing to give program managers tools to manage—tools such as contract structures, incentive strategies, technology maturity, off ramps, and alternate technologies.

Knock down the barriers, eliminate the non-value-added activities, and get to the core business of the business, he said.

Discussing unpaid bills being bumped to the next POM [program objective memorandum], Young said that no longer would DoD's senior acquisition leadership agree to execute programs above the budgeted level.

He spoke of the inability to easily access information across the acquisition enterprise—an area for which Young said he had no tolerance.

"The taxpayer pays for the information that we generate. … This, for me, is a zero tolerance policy on any refusal by the Services or agencies to expeditiously work together and share all the information." Another area Young cited for which he has zero tolerance is illegal activity of any kind.

Young also talked about the hardships and pressures on program managers.

"I realize that within our system we place a lot of pressures and responsibilities on our program managers. We ask them to balance and control costs, schedules, performance, and risk. The system surrounds program managers and their teams with a lot of processes that absorb their time and energy. We have a fickle authorization and appropriations process that can derail even the best laid out program and the best program manager's attention."

Even though the congressional budget cycle is beyond a program manager's control in terms of stability, Young said that acquisition leaders should work to change and improve those processes that they can.

Deputy Secretary of Defense Gordon England

"We are a nation at war," England stated. "I am convinced that the reason we lost 3,000 people on 9/11 is because the people who attacked America did not know how to kill 30,000 or 300,000. If they could have, they would have. … This is not just about what we're doing in Iraq and what we're doing in Afghanistan … this is the front end of a very long war." For that reason, he added, "we have to be successful every single day on every single program that we're involved in."

England empathized with the assembled program and product managers, telling them he knew that they are working in a very tough part of the government for which there is no silver bullet. He likened the acquisition process to blocking and tackling with experience as the key defense.

Referring to the defense budget, England spoke of "controlling our own appetite" and not spending money that we don't have. That takes leadership and disciplined program management, he emphasized.

England said that at the end of the day, the contract is a tool to execute the program, not a substitute for disciplined program management.

"It's about leadership in my view. And the program manager has the authority, and he also has the personal responsibility to make the program successful."

England stated that for a program to be successful, you have to be able to manage the environment around the program. Program managers, he advised, have to be good at public affairs, speaking, and sensing things.

"Make sure you know what's going on in the environment. What's going on with the customer. What's going on with the contractor. What's going on with the building. You have to manage the whole environment if you're going to have a successful program."

He also spoke of teamwork, especially with industry.

"We cannot do this without industry. … Government can lead, but they need to lead with industry in the room and participating."

On ethics, he left no room for gray areas.

"Shine a bright light on every single thing you do," he told the conference participants. "If you have one [ethical dilemma], then you already know the answer. It isn't gray—it's either black or white. Be open and honest with everybody in every circumstance. Resolve it early—it isn't going to get better with time."

He spoke of immature technology and the benefits of prototyping to counteract the negative aspects of fielding technology before it's of lasting benefit to the warfighters. England said that prototyping does work.

"You're going to hear more about this. John Young and I are both believers in prototypes. We are going to be pushing very, very hard to have prototypes across the board because ultimately we are also convinced that by having prototypes we end up with the end product faster than if we don't have prototypes.

England also talked about joint capability portfolios, program stability, and commercial technology.

"Joint capability portfolios," said England, "give us a better look at jointness across the department. Our experiments so far have shown that we've had a lot of overlap—we've been able to move money and things around because we've had a number of programs that duplicate, a number of programs don't quite match, a number of programs don't have quite the right interface."

Stability, England said, is probably the most important thing to have in a successful program. But those kind of issues are also dependent on Congress.

"We can not totally solve the program stability issue," he said, "but once the money comes in, it is our obligation to make sure we have stability in our accounts."

Commercial technology is another key area of concern to England and his staff.

"It changes very rapidly," he noted. "This is an area that is hugely important for the department to better understand as we go forward. We're going to have to find some way to better tap into the commercial sector than we do today. There's a lot of areas that we don't tap into, and that could be very harmful to us in the future."

Concluding his remarks, England revisited his opening statement. "This nation is at war. There are a lot of people in the U.S. military who count on us doing this job every single day, and doing it right and to the best of our ability every single day."

Outreach

Other distinguished speakers throughout the conference included Vice Chairman of the Joint Chiefs of Staff Marine Corps Gen. James Cartwright; Under Secretary of Defense for Personnel and Readiness David Chu; Director, Portfolio Systems Acquisition David Ahern; Commander, Marine Corps Systems Command Brig. Gen. Michael Brogan; Chairman and CEO Raytheon Company William H. Swanson; and President and CEO, BAE Systems, Inc. Walt Havenstein.

Panels, workshops, forums, roundtable discussions, networking, and exhibits all helped participants establish a clear understanding of the scope and problems associated with successful program execution and the program execution expectations of the acquisition community's most senior leaders. As in past years, the conference expanded its reach by providing webcasts of keynote speeches and panels to the field.

*To review other conference presentations delivered at the fall 2007 PEO/SYSCOM Commanders' Conference, visit DAU's Video Services Web site at <http://view.dau.mil/dauvideo/view/channel.jhtml?stationID=276204165>. For information on awards presented at the conference—Packard Awards and USD(AT&L) Workforce Development Awards—**see p.77 of this issue.*

THE PERSISTENT SURVEILLANCE DISSEMINATION SYSTEM OF SYSTEMS

Michael Petty ■ Joe Snodgrass

The sound of an explosion rocks the command post. Another mortar round impacts the compound—fortunately without harmful effect to the good guys. The bad guys would not be so lucky. Using location data from fire-detection radars, the fire effects coordinator announces the nature of the explosion and reports the point of origin. However, unlike fighting a conventional war, no counter-battery fire is immediately ordered. Thousands of innocent civilians live in the nearby urban area near the point of origin. The division chief of operations needs more information. He needs to see what's happening.

Autonomously receiving and processing the same fire detection data as the fire effects coordinator is the Persistent Surveillance and Dissemination System of Systems (PSDS2), which compares the point of origin to the fields of view for dozens of cameras and imagers. Within seconds, everyone in the operational command center watches—on a 110-inch plasma screen—the near-real-time video of the enemy hastily tossing a mortar tube into the back of a pickup truck. The command center watches every move as the enemy drives beyond the range of one unit's tower-mounted cameras, PSDS2 sensor information is re-allocated to a nearby sensor, so the vehicle can continue to be monitored via video. When the vehicle stops, the shooter is tracked by an aerial sensor. Simultaneously, PSDS2 archives the full-motion video and creates video snapshots for later intelligence analysis. For nearly an hour, the command center has continuous eyes on the pickup truck. Crews take video clips and snapshots, each with corresponding grid coordinates, making it easy for armed forces to send in troops. Concurrently, other analysts, battle staff, and commanders at every echelon view the video using computers hooked up to the Secure Internet Protocol Routing Network (SIPRNet). Eventually, total common situational understanding enables not only the shooter to be detained, but identifies accomplices, hide-outs, and weapons caches.

Creating the Big Picture

The above scenario is typical of the value of video-enabled situational awareness to counter asymmetric threats. The U.S military employs an increasing number of intelligence, surveillance, and reconnaissance sensors that provide a continuous sensing of the battlefield to support real-time, responsive decisions. The challenge is to turn this avalanche of sensor data into a comprehensive picture, rapidly disseminate this information, and provide an almost intuitive level of situational awareness. PSDS2 meets this challenge as a quick-reaction capability program managed by the product manager for Robotic and Unmanned Sensors under the project manager for Night Vision/Reconnaissance, Surveillance, and Target Acquisition. The program is an integration of commercial off-the-shelf networking tools with situational awareness software applications. It integrates existing sensor system information from sensors dispersed throughout an area of operations, and it puts the gathered information into context. PSDS2 disseminates this intelligence, surveillance, and reconnaissance data through multiple means, including the SIPRNet via Web-based applications. The principal and most popular Web-based application is called Live Video Portal (LVP2) and is a key capability of PSDS2.

The Persistent Surveillance and Dissemination System of Systems (PSDS2) Marine Corps photo by Cpl. Michael P. Snody

Unprecedented Situational Awareness

PSDS2 provides the commander with the tools necessary to rapidly establish common situational understanding through the use of full motion video, from both ground and aerial systems across the area of operations. One intelligence officer called it "unprecedented situational awareness." Coupled with full development of the doctrine, organizational structure, and training necessary to optimize its use, PSDS2 provides a robust capability to proactively interrupt and effectively respond to enemy activity.

The authors welcome questions and comments and can be contacted at michael.petty5@us.army.mil and joseph.snodgrass@us.army.mil.

USD(AT&L) RECOGNIZES DOD WORKFORCE DEVELOPMENT EFFORTS

The fourth annual Under Secretary of Defense for Acquisition, Technology and Logistics Workforce Development Awards ceremony was held at the Officer's Club, Fort Belvoir, Va., in conjunction with the Program Executive Officers'/Systems Command Commanders' Conference. David Chu, the under secretary of defense for personnel and readiness, presided over the event and recognized five AT&L field organizations as award winners.

Twenty-one AT&L large and small field organizations submitted applications to showcase their best practices and contributions for the development of their workforce.

Gold Award Winner

The Gold Award Winner in the large organization category was the **Defense Information Systems Agency**. DISA developed an Emerging Leaders Program, targeted for personnel at grades GS-5 through 12 and designed to enhance leadership and management capacity. The agency also developed an Executive Leadership Development Program, which is a competitive, three-year program that supports the development of technical, professional, and leadership talent.

Silver Award Winners

The Silver Award Winner in the large organization category was the **Defense Logistics Agency Human Resources Strategy and Training Center**. DTC provides a structured roadmap for supervisors at all stages of their careers through their Enterprise Leader Development Program (ELDP). The ELDP is a competency-based program providing a continuum of assessments, developmental, and continuous learning activities for all leaders of the organization.

The Silver Award Winner in the small organization category went to **J-6 Philadelphia Information Operations, DLA**. J6P Strategic Direction Integrated Process Team, composed of all JP6 managers, has been instrumental in the clarification of their strategic plan. They are directly aligned with the DLA Strategic Plan, setting specific goals geared to the benefit of the workforce.

Bronze Award Winners

The Bronze Award was presented to both the **U.S. Army Aviation and Missile Life Cycle Management Command** and the **Air Force Research Laboratory**. AMCOM established the "AMCOM Leader Development Life Cycle," which is designed to enhance the leadership depth of all levels of the workforce. AMCOM also chartered its Acquisition Center University to facilitate the training needs of acquisition personnel. AFRL implemented several programs to enhance leadership development. Its Junior Force Council exists at each command's centers and is composed of civilian and military employees under the age of 30 with fewer than eight years of government service. The council allows junior workers to identify areas of concern, research topics, and make suggestions for improvement. AFRL's Personnel Policy Boards identify and prepare the best leadership teams for the present and future, and also help identify core technical competencies and forecasting demands for those competencies as well as methods for obtaining them.

The USD(AT&L) Workforce Development Award was established on May 28, 2004, for the purpose of recognizing those organizations that are achieving excellence in learning and development for their employees. Additionally, the award program identifies best practices for other USD(AT&L) organizations to adopt.

AIR FORCE PRINT NEWS (NOV. 2, 2007) AIR FORCE ENERGY GROUP WINS PRESIDENTIAL AWARD

WASHINGTON—Every year, the president recognizes outstanding teams of federal employees for their support, leadership, and efforts in promoting and improving federal energy management.

This year, the Air Force Senior Focus Group on Energy, a top-level leadership organization focused on energy programs for the Air Force, received the Presidential Award for Leadership in Federal Energy Management during a special ceremony Nov. 2 at the White House.

"The work of the [senior focus group] is impressive." said William C. Anderson, assistant secretary of the Air Force for installations, environment, and logistics. "The results are indicative of the level of effort all airmen put towards our national security, our Air Force priorities, and the imperative of pursuing the president's goals for reducing our nation's dependence on foreign sources of energy."

The federal energy management awards recognize outstanding achievements in the categories of conservation and efficient water and energy use; new and emerging energy technologies; innovative strategies, best practices, and applications; renewable energy sources; alternative financing; and energy-efficient mobility by the federal government.

In 2006, the Air Force remained the largest green power purchaser in the federal government and the fifth largest in the U.S. Additionally, 74 Air Force bases are dispensing alternative vehicle fuels, and water consumption was down by 5.6 percent compared to 2005. The group also issued seven policies to reduce energy consumption, and tested a 50/50 blend of conventional jet fuel and synthetic fuel from natural gas in a B-52 Stratofortress bomber.

Members of the senior focus group:
- Ronald M. Sega
- William C. Anderson
- Michael A. Aimone
- William H. Budden
- B.J. White-Olsen
- Air Force Col. Anne Dunlap
- Brian J. Lally
- Paul Bollinger
- Air Force Lt. Col. Brian Weidmann
- Air Force Lt. Col. Mark Bednar
- Air Force Lt. Col. James McClellan
- Air Force Lt. Col. Anne Gorney
- Pat G. Mumme
- Gerald E. Doddington
- Air Force Maj. Morshe D. Araujo

DEPARTMENT OF DEFENSE NEWS RELEASE (NOV. 7, 2007)

DOD ANNOUNCES CIVILIAN AWARDS

The 52nd annual DoD Distinguished Civilian Service Awards and the 3rd Annual DoD David O. Cooke Excellence in Public Administration Award were presented in a Pentagon ceremony on Nov. 7, 2007, by Gordon England, deputy secretary of defense. The ceremony was hosted by Michael B. Donley, the director, administration and management.

DoD David O. Cooke Award

The DoD David O. Cooke Excellence in Public Administration Award recognizes a DoD employee with three to 10 years of federal service who occupies a non-managerial DoD position and exhibits great potential as a future federal executive. This employee will emulate Cooke's dedication to service while helping to effect and promote cooperation and improvement in the department. The recipient of this award was **Joshua R. Fairley**, Department of the Army. Fairley is responsible for researching in the Countermine Phenomenology, Joint Antiterrorism/Force Protection, and Antiterrorist Barrier programs.

DoD Distinguished Civilian Service Award

The DoD Distinguished Civilian Service Award (DCSA) is the highest DoD-level award that a career civil servant can earn. This prestigious competitive award recognizes career employees at all levels for their exceptional contributions. Nominees must have shown exceptional devotion to duty and extremely significant contributions of a broad scope in the operation of DoD. The following DoD employees received this award:

William Mackie, deputy division chief, Engineer Division, OSD/Joint Staff; **Michael Krieger,** director of information policy, OSD/Chief Information Officer; **Ellen Embrey,** deputy assistant secretary of defense for force health protection and readiness; **Hari Bezwada**, director of the Information Technology Systems Project Office, Department of the Army; **Reed Mosher**, technical director for Survivability and Protective Structures, Army; **Pasquale Tamburrino**, assistant deputy Chief of Naval Operations, Fleet Logistics and Readiness, Department of the Navy; and **William Borger**, Propulsion Directorate, Air Force Research Laboratory, Department of the Air Force.

AIR FORCE OFFICE OF SCIENTIFIC RESEARCH PUBLIC AFFAIRS (NOV. 14, 2007)

RESEARCHER EARNS SCIENTIFIC RECOGNITION

Maria Callier

ARLINGTON, Va.—For distinguished contributions to the fields of chemistry and biochemistry, an Air Force Office of Scientific Research program manager was named a Fellow of the American Association for the Advancement of Science, or AAAS.

According to a Nov. 7 news release, the association honored **Dr. Hugh C. DeLong** for his efforts "particularly in the management of the areas of corrosion, ionic liquids, and directed self-assembly."

Election as a fellow is an honor bestowed upon AAAS members by their peers. In 2007, AAAS honored 471 people because of their scientific or socially distinguishable efforts to advance science or its applications.

Air Force officials say the Service has significantly benefited from DeLong's research. His coatings and corrosion work resulted in producing paint that is on current (F-15, C-17) and future aircraft (F-35). Currently, he is focused on having ionic liquids improve the manufacturability of nanocomposites.

"I am hopeful future research would solve the problem of repair, and that systems would self-repair any damage sustained," DeLong said. "The ionic liquid work will give us access to materials that are too difficult to manufacture currently and that will give the Air Force more options for materials performance."

New Fellows will receive an official certificate and a gold and blue (representing science and engineering, respectively) rosette pin in February 2008 during the AAAS meeting in Boston.

Callier writes for Air Force Office of Scientific Research Public Affairs.

AIR FORCE PRINT NEWS (NOV. 15, 2007)
HEAD OF PROPULSION DIRECTORATE EARNS DOD HONOR

Capt. Greg Justice, USAF

WRIGHT-PATTERSON AIR FORCE BASE, Ohio—The director of the Air Force Research Laboratory's Propulsion Directorate has earned the highest honor given by the Secretary of Defense to career civilian personnel.

Deputy Secretary of Defense Gordon England presented the Defense Distinguished Civilian Service Award to Dr. William U. Borger during a Pentagon ceremony Nov. 7.

The award highlights Department of Defense civilians whose service reflects exceptional devotion to duty and extremely significant contributions of broad scope to the efficiency, economy, or other improvements in the operation of the DoD.

Borger, who has a doctorate in philosophy, fostered crucial communications across the Services in coordinating the nation's aeronautics science and technology program to assure maximum technology development for the nation's warfighters.

He led the Air Force science and technology participation during the Joint Base Realignment and Closure process in 2005 by coordinating Air Force needs with other Services. Borger currently is leading the development of alternative jet fuels and high efficiency engines to address the DoD's $10 billion annual fuel costs.

Borger also is leading a team to develop key turbine engine, scramjet engine, and rocket propulsion technologies, along with power technology for directed energy weapons. Officials say these propulsion and power advancements are vital to ensuring the Air Force's continued air supremacy.

"I have been very lucky to have worked alongside of some of the brightest and most dedicated people in my 36 years of working for the Air Force," said Borger. "The folks here at Wright-Patterson [Air Force Base] are clearly defining the future of the next Air Force and the Air Forces after that."

Justice writes for 88th Air Base Wing Public Affairs.

DEPARTMENT OF DEFENSE NEWS RELEASE (NOV. 26, 2007)
DOD ANNOUNCES 2007 MAINTENANCE AWARD WINNERS

The Department of Defense announced today the winners of the 2007 Secretary of Defense Maintenance Awards. Each year the secretary of defense recognizes excellence in both field-level and depot-level maintenance by presenting eight awards, including the Phoenix and the Robert T. Mason Awards.

The field-level maintenance awards honor military maintenance organizations for outstanding performance. The awardees—two from each category of small, medium, and large organizations—are chosen from active and reserve organizations that perform unit- or field-level maintenance. Of these organizations, one is singled out as the best of the best and is recognized with the Phoenix Award.

Phoenix Award Winner

The 2007 winner of the Phoenix Award for field-level maintenance is the **Marine Corps 1st Maintenance Battalion, Camp Pendleton, Calif**. The 1st Maintenance Battalion deployed two maintenance companies for separate seven-month rotational assignments to Iraq. Despite its resources being widely dispersed, the 1st Maintenance Battalion continued to meet its mission responsibilities, increasing its readiness rates for deployed equipment from 94 percent to 97 percent in six months. They also installed fragmentation kits on 112 vehicles and conducted 825 maintenance support team visits to garrison units.

Field-Level Maintenance Awards

The other field-level maintenance organizations receiving secretary of defense Maintenance Awards are: **Aircraft Intermediate Maintenance Detachment, Naval Station, Mayport, Fla**., for the Navy, and **Charlie Company, 501st Military Intelligence Battalion, Wackernheim, Germany,** for the Army in the small category; **Marine Avia-**

tion Logistics Squadron 16, Marine Corps Air Station, Miramar, Calif., and **1st Aircraft Maintenance Squadron, Langley Air Force Base, Va**. in the medium category; and **1st Maintenance Battalion, Marine Corps Base, Camp Pendleton, Calif.**, and **56th Maintenance Group, Luke Air Force Base, Fla.**, in the large category.

Robert T. Mason Award

The Secretary of Defense Maintenance Award for depot-level maintenance, the Robert T. Mason Award, is presented to the major organic depot-level maintenance facility that exemplifies responsive and effective depot-level support to DoD operating units. It is named after a former assistant deputy under secretary of defense for maintenance policy, programs, and resources, who served as a champion for excellence in organic depot maintenance operations.

The 2007 winner of the Robert T. Mason Award for depot maintenance excellence in support of DoD operating units is the **Dedicated Design and Prototype Effort (DDPE), Maintenance Center Albany, Ga.**, U.S. Marine Corps. Established to help meet the continually changing equipment requirements of warfighters engaged in Operation Iraqi Freedom, the DDPE focuses on shortening the time from when an urgent need for new or modified equipment is first identified to when the required equipment is in the field.

Through this program, the DDPE designed and built a training device to help Marines exit from overturned vehicles; fabricated an explosive device roller for mounting on seven-ton tactical trucks; upgraded armor and configured a gunner protection kit for other tactical systems; and designed, prototyped, and prepared for production a lightweight multiple weapons platform gunner shield. The DDPE undertook many of these projects using nothing more than photographs, sketches, or brief descriptions of warfighter needs as starting points.

All awards were presented Nov. 15 at the 2007 DoD Maintenance Symposium and Exhibition in Orlando, Fla.

AMERICAN FORCES PRESS SERVICE (NOV. 29, 2007)

PENTAGON HONORS BUSINESS LEADERS FOR EFFORTS IN IRAQ

Lisa Daniel

WASHINGTON—Deputy Secretary of Defense Gordon England honored 21 American business leaders Nov. 29 in a ceremony at the Pentagon, citing their efforts to revitalize Iraq's economy.

England honored the group—mostly private defense industry executives and some former military members—in the Pentagon's Hall of Heroes for their role in adding stability to the war-torn nation.

"This is about security and economic development, and you can't have one without the other," England said. He praised the group for its role in reopening factories and making economic assessments in Iraq.

The honorees are the first volunteers to return from the Defense Department's Task Force for Business and Stability Operations in Iraq. The task force was created in June 2006 under the direction of Paul Brinkley, deputy under secretary of defense for business transformation. Thirty-five participants remain in Iraq.

"These business executives were under fire on a daily basis," Brinkley said. "Their contribution is really remarkable."

Honorees, though, said any hesitation they had about working in a war zone was overshadowed by their desire to improve conditions in Iraq.

"People are dying over there," William Duncan, a factory lead from a technology corporation in St. Louis, said. "If we put people back to work, they won't plant [roadside bombs] for $200. These people, mostly, are just like us: they want to earn a living and feed their families."

Duncan signed on to the task force after receiving a call from Brinkley, with whom he worked previously. Duncan's role was to pull people from various sectors of American manufacturing to go into Iraq's closed, state-owned factories to determine what each needed to reopen.

"For every person I took over there, 80 people volunteered to go," Duncan said. "People don't realize how much the American people want to help out."

While the Iraqis initially distrusted the American workers, they soon came to realize that the American business people were helpful, Duncan said. "One man cried and kissed me on both cheeks when we got his factory reopened," he said.

Andrew Erdmann, a consultant from St. Louis, said he and other task force participants had the perfect backgrounds of public- and private-sector and military experience to improve the economic situation in Iraq. The consulting company required that its employees have military or

war zone experience to participate on the task force. Erdmann worked for the State Department in Iraq in 2003 and 2004.

"I have friends in Iraq, so this was a personal commitment for me," Erdmann said. "Everyone on the team was motivated by wanting to contribute to this 'greatest problem.'"

David Adams, a consultant from Chicago, agreed. "I was very excited to be part of the solution of the biggest problem on the planet."

The task force has caused a "tremendous turnaround" for Iraqis, some 60 percent of whom were unemployed when the task force was created, Brinkley said. The unemployment rate now is below 50 percent, he said.

England reiterated comments Defense Secretary Robert M. Gates made last week in saying that "war is not strictly about the kinetics of warfare."

"You've been the nonmilitary instruments of power to make a difference in Iraq," he told the honorees. "You'll always be able to say, 'I did, personally, make a difference in Iraq.'"

England also declared that "the surge is working" and said Iraq is "coming back to a stable, rational state."

Daniel writes for American Forces Press Service.

NAVY NEWSSTAND (NOV. 30, 2007)
NAVAL FACILITIES ENGINEERING COMMAND SELECTS ENGINEERS OF THE YEAR FOR 2008

Naval Facilities Engineering Command Headquarters Public Affairs

WASHINGTON—Naval Facilities Engineering Command (NAVFAC) announced Nov. 26 the selection of Civilian and Military Engineers of the Year for 2008.

"The remarkable achievements of these individuals made this year's competition very challenging," said Rear Adm. Greg Shear, commander, NAVFAC. "Everyone demonstrated the highest degree of engineering professionalism and technical expertise."

From an elite group of nominees, NAVFAC Pacific's **Florence Ching** was selected as the Civilian Engineer of the Year, and **Lt. Cmdr. Scott King**, from NAVFAC Southwest, was selected as the Military Engineer of the Year.

"Both engineers have been active members of several technical associations, have received numerous awards, and have given generously of their time to their communities," said Shear. "These examples of their superior work have truly distinguished them as outstanding members of the engineering profession and the Navy team."

Civilian Engineer of the Year

"I was surprised and honored to find out that I was the NAVFAC Civilian Engineer of the Year," said Ching. "This honor is a reflection of all of the extremely talented individuals from the various business and support lines that I have the privilege of working with as a project manager at NAVFAC Pacific."

Ching is a registered engineer in the state of Hawaii. Her outstanding organizational and fiscal management skills, combined with her customer focus, resulted in on-time completion of 97 design projects valued at $67 million for work to be accomplished by Navy construction forces in California, Nevada, Washington, Hawaii, and overseas areas such as Okinawa, Japan, Korea, Singapore, and Guam.

Her exceptional program-project management skills included the management of more than $167 million worth of military construction projects. Two projects under her oversight, the Pacific Warfighting Center on Ford Island and the Helicopter Flight Training Facility at Marine Corps Base Hawaii, were identified as critical projects in the military construction program. Major challenges included the need to reduce the construction cost within budget, maintain project scope to provide a complete and useable facility, and award the contract on time to meet the client's mission requirements schedule.

"The execution schedule was critical to meet operational goals. These challenges were overcome through the hard work, determination, and teamwork of the entire project team," said Ching.

Ching's leadership, dedication, and commitment resulted in cost savings to the government by reducing administrative contract requirements, minimizing the projects' reduction in scope, and coordinating the design and procurement actions that enabled the construction contracts to be awarded on time and within budget.

Military Engineer of the Year

The award recognized King for his distinguished service while deployed to Iraq with the U.S. Army and NAVFAC Southwest.

"This U.S. Navy Civil Engineer Corps lieutenant commander is a superb facilities engineering leader in wartime and peacetime environments," said Capt. Steve Wirsching, commanding officer of NAVFAC Southwest.

During a six-month deployment to Iraq in 2006 to 2007, King served as the resident engineer for the U.S. Army Corps of Engineers (USACOE). He was responsible for the successful transition of a $150 million children's hospital project in Basrah, Iraq, from the United States Agency for International Development to USACOE.

His duties included awarding engineering, construction, and medical equipment installation contracts; establishing a local project office; and completing over $50 million of accident-free construction in one of the most hostile areas in Iraq.

Despite small-arms fire, indirect fire, rocket-propelled grenade attacks, kidnappings, and improvised explosive device placements in the vicinity of the project site, King kept hospital construction on schedule without mishap.

King returned to NAVFAC Southwest after his deployment, becoming the investments officer for Navy Region Southwest. He coordinated the execution of a facilities program valued at $400 million annually that supported 175,000 personnel on 10 installations.

He optimized the facilities budgets and created a regional business plan that provided innovative project financing through enhanced use leasing, reduced 13 percent of the regional footprint through demolition and consolidation, procured 83 megawatts in photovoltaic and geothermal power through power purchase agreements, reduced water consumption by 80 million gallons through "smart landscape" master planning, and increased regional alternative fuels transportation capability to over 3,000 vehicles.

"King managed the $245 million sustainment, restoration, and modernization program; the $700 million military construction program; the $34 billion asset management program; and life cycle management for 21 Navy Operational Support Centers in support of 10,000 Reserve military personnel during periods of limited manning of regional engineer staff," said Wirsching.

Ching and King will be the NAVFAC nominees for the National Society of Professional Engineers Federal Engineer of the Year award.

For more news from Naval Facilities Engineering Command, visit <www.news.navy.mil/local/navfachq/>.

DEPARTMENT OF DEFENSE NEWS RELEASE (DEC. 4, 2007)

DOD ANNOUNCES NEW MANUFACTURING TECHNOLOGY PROGRAM

Today the Department of Defense announced its new Manufacturing Technology (ManTech) Program for 2008 at the Defense Manufacturing Conference in Las Vegas. John J. Kubricky, deputy under secretary of defense for advanced systems and concepts, explained that the Army, Navy, and Air Force have successfully managed their individual ManTech programs for decades; this is the first year for DoD's defense-wide program.

"The Services have realized billions in savings and cost avoidance over the years by applying ManTech to production and sustainment of their major systems," said Kubricky. "Now, the department and Congress want to apply ManTech to a broader set of defense technologies where prudent investments will yield benefits to all of the armed services."

Beginning in the federal government's fiscal 2008, the program expects to fund investments that will mature ceramic matrix composites manufacturing processes, system-on-chip packaging technology and design guidelines, and advanced manufacturing processes for prosthetics for our wounded warriors. "Other project candidates are being evaluated, and we anticipate returns-on-investment that range from 6:1 to 12:1 in terms of procurement and operating costs, improved operational availability rates, and faster availability for deployment," said Kubricky.

The defense-wide ManTech program aims to mature cross-cutting manufacturing processes in parallel with new and emerging technologies that are inserted into DoD systems. ManTech enables a cost-efficient and collaborative development process that concurrently retires cross-cutting manufacturing risk with technology risk to enable product-ready technology insertion. Equally important, the program aligns research and development investments with suitable levels of technology maturity or calls for corrective options in advance of Milestone B decisions.

"The ManTech processes that are developed, demonstrated, and deployed through this program will be used to produce increasingly complex defense systems so our nation maintains superior equipment that is more affordable to acquire, operate, and maintain," added Kubricky. ManTech generally measures results in decreased cycle time for production, lower manufacturing costs, more predictable performance, and improved reliability that yields reductions in life-cycle costs.

Over the longer term, DoD anticipates the defense-wide ManTech program will transition to the Services to execute cross-cutting manufacturing projects that benefit all of the armed services.

More information regarding the Defense Manufacturing Conference can be found at <http://www.dmc.utcdayton.com/>.

ARMY NEWS SERVICE (DEC. 20, 2007) FIRST DOD ORGANIZATION TO WIN BALDRIGE AWARD

Andricka Thomas

ABERDEEN PROVING GROUND, Md.—There's nothing like being the first in anything. The Green Bay Packers were the first to win the Super Bowl. Neil Armstrong was the first to walk on the moon. Now the U.S. Army Armament Research and Development Center can lay claim to being one of the first nonprofit organizations to receive the Malcolm Baldrige National Quality Award.

ARDEC, located at Picatinny Arsenal, a 6,500-acre military installation located in the northwest corner of New Jersey, is the first Department of Defense organization to win the Baldrige Award, known globally for setting the standard in performance excellence. The award is managed by the Commerce Department's National Institute of Standards and Technology in collaboration with the private sector.

"Winning the award means a great deal," said Joseph Lannon, ARDEC director. "The soldiers are the real winners of this award. Following the principles of the Baldrige, we are able to deliver equipment to the warfighter faster, and that is what motivates our workforce."

The Baldrige Award, presented by the President of the United States, recognizes small and large businesses, health care and educational organizations, and nonprofits who have achieved excellence in seven key areas: leadership; strategic planning; customer and market focus; measurement, analysis, and knowledge management; human resource focus; process management; and results.

The award and its recipients mark an effort of continuous improvement in quality management among U.S. organizations. In 2007, the Baldrige program added a new category for nonprofits to officially compete for the award, according to Michael Newman, NIST senior communications officer. As a result, government organizations were able to compete for the honor. Out of 13 nonprofit applicants, among them other government agencies, ARDEC was chosen as one of only two nonprofit recipients.

"We are thrilled that not only one, but two nonprofits won the award in the first year eligible," said Newman. "We encourage other nonprofits to apply."

ARDEC leadership is excited and confident in their role in maintaining industry excellence. "ARDEC winning this award demonstrates that government organizations can be competitive with the best industry has to offer," said Lannon.

The application process included submitting a package summarizing the organization's achievements in seven focal areas, a site visit by a team of examiners comprised of independent private-sector experts in quality and business, and a final review of the organization's strengths and weaknesses as they relate to the seven areas.

ARDEC, an element of the U.S. Army Research, Development and Engineering Command, has an overall mission of improving already fielded items; developing new ones; maintaining a strong armament technology base in government, industry, and academia; and providing technical support to the soldier in the field.

"ARDEC is internationally known for the advancement of armaments technology and engineering innovations. ARDEC provides 90 percent of the Army's suite of armaments," said Donelle Denery, chief, Strategic Management and Process Office.

ARDEC works on a variety of technologies and products supporting the current and future forces to include small, medium, and large caliber weapons, guidance systems, explosives, ammunition, and related support systems.

The ARDEC organizational culture is customer-focused, team-based, and dedicated to continuous improvement and innovation through streamlined work system processes and practices. Employees are focused on the needs

Adam Nappi, a technician at the U.S. Army Armament Research, Development and Engineering Center's Rapid Prototyping Facility, cuts into a sheet of metal as part of the production of a Gunner Protection Kit at Picatinny Arsenal, N.J. ARDEC is the first Department of Defense organization to receive the Malcolm Baldrige National Quality Award.
Photograph by Steve Rochette

of customers and rapidly developing the best products possible, said Denery.

Through in-house business practices such as strategic workout sessions, Lean Six Sigma, and Enterprise Excellence, ARDEC demonstrates a longstanding commitment to performance excellence and improvement in business practices.

The quarterly strategic workout sessions use strategic management system maps to focus on the actions required to meet the organization's objectives, improve performance, and achieve the goals.

Enterprise Excellence is an initiative developed by the ARDEC director and former deputy director. Enterprise Excellence integrates practices such as the Capability Maturity Model Integration and the International Organization for Standardization 9001. Enterprise Excellence integrates the Quality Management System, "Voice of our Customer" concept, and Lean Six Sigma to accomplish the mission and strategic objectives.

Continuous improvement is on the minds of ARDEC's leaders and employees. The ARDEC vision and strategies are posted throughout buildings on Picatinny Arsenal so that every employee can see them everyday as they work to support the warfighter. With customer-driven excellence embedded in the ARDEC culture, listening and communicating with the customer—the soldier—is at the forefront of ARDEC processes leading to continuous improvement for the current and future needs of the warfighter.

"What I do every day may have an impact on whether a soldier lives or dies. … That is my driving force to being efficient and producing quality products," said Leroy McGuire, ARDEC mechanical engineering technician.

ARDEC employees take pride in their part in winning the Baldrige. ARDEC has continually strived for working toward being the best in industry.

"We have set the standard for private industry through projects like Excalibur [a 155mm precision guided extended range artillery projectile]," said Matthew Condit, production manager, ARDEC Prototype Hardware Fabrication Branch. "They've [ARDEC leadership] always tried to bring a streamlined process to ARDEC," said Condit who has worked with ARDEC for 38 years. "ARDEC has really advanced through the years."

In the Prototype Hardware Fabrication Branch, employees work to provide a quality product delivered in a timely fashion. From concept to delivery, ARDEC provides the warfighter with products such as Gunner Protection Kits through using in-house engineers to write programming for prototype production.

"Someone could come in with something as simple as a sketch," said Condit. "We have in-house engineers that make detailed drawings so we produce the product from conception to completion to delivery."

ARDEC's efficiency is just one of the many reasons it achieved such a great honor. Its innovative approach to business reflects in its product development by being on the cutting edge of the armament industry.

Thomas writes for U.S. Army Armament Research, Development and Engineering Center.

AT&L Workforce—Key Leadership Changes

DEPARTMENT OF DEFENSE NEWS RELEASE (NOV. 21, 2007)

DOD NAMES UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY AND LOGISTICS

The Department of Defense today announced John J. Young Jr. has taken over the duties as the under secretary of defense for acquisition, technology and logistics.

Young, who has been acting in the position since July of 2007, was nominated to be the Pentagon's acquisition chief by President Bush on June 20, 2007, and confirmed by the Senate on Nov. 16, 2007.

Before his appointment to USD(AT&L), Young served at the Department of Defense as the director, defense research and engineering. As the director, Young was the principal advisor to the secretary of defense on technical matters and acted as the department's chief technology officer.

Young is also the former assistant secretary of the Navy for research, development, and acquisition. As the Navy's senior acquisition executive, Young implemented a wide range of innovative organizational and business practices to increase the effectiveness and efficiency of Navy and Marine Corps procurement and research programs.

Prior to joining the Defense Department, Young served as a professional staff member of the Senate Defense Appropriations Subcommittee. He also previously worked for Lockheed Martin and for Rockwell International Corporation.

Young earned a bachelor's degree in engineering from the Georgia Institute of Technology and a master's degree in aeronautics and astronautics from Stanford University.

His complete biography is available at <http://www.defenselink.mil/osd/topleaders.aspx>.

DEPARTMENT OF DEFENSE NEWS RELEASE (NOV. 1, 2007)

GENERAL OFFICER ANNOUNCEMENTS

The Air Force chief of staff announces the assignments of the following general officers:

Brig. Gen. Duane A. Jones, director, logistics, Headquarters U.S. Air Forces in Europe, Ramstein Air Base, Germany, to director, global combat support, deputy chief of staff, logistics, installations, and mission support, Headquarters, U.S. Air Force, Pentagon, Washington, D.C.

Col. Dave C. Howe, deputy director, installations, mission support, and the U.S. Air Forces in Europe Civil Engineer, Headquarters U.S. Air Forces in Europe, Ramstein Air Base, Germany, to director, logistics, installations, and mission support, Headquarters, U.S. Air Forces in Europe, Ramstein Air Base, Germany.

AIR FORCE PRINT NEWS (NOV. 13, 2007)

GENERAL BOWLDS TAKES COMMAND OF ELECTRONIC SYSTEMS CENTER

Chuck Paone

HANSCOM AIR FORCE BASE, Mass.—Lt. Gen. Ted Bowlds took command of the Electronic Systems Center in a change of command ceremony held at Hanscom AFB's Aero Club Hangar Nov. 7.

Lt. Gen. Chuck Johnson, who had commanded the center since December 2003, passed the reins to Bowlds. Then, in a follow-on ceremony, Johnson officially retired after more than 35 years of Air Force service.

Gen. Bruce Carlson, commander of the Air Force Materiel Command, officiated both ceremonies.

Bowlds thanked Carlson for his confidence in selecting him for the job, and commended Johnson for building such a solid organizational foundation.

He also recognized Assistant Secretary of the Air Force for Acquisition Sue Payton, who was in attendance, and said he very much looked forward to joining her team.

Bowlds will serve as the program executive officer for the Air Force's command and control and combat support portfolio of programs, in addition to his role as center commander.

"I am truly honored to be given the opportunity to command a high-performing organization," Bowlds said. "It's truly a once-in-a-lifetime opportunity."

He listed four focus areas: people, acquisition, communication, and listening and learning.

"While it's a trite phrase, I truly believe people are our most important asset," he said. He emphasized the responsibility leaders have to "grow the next generation of leaders," and spoke about the importance of proper training and career development.

"These things must not be left to chance," he said.

Stating that he'd spent his entire career in one form or another of acquisition—research, flight test, Pentagon staff work, and direct program responsibilities—he noted that it's a "difficult and very important business.

"With precious few modernization dollars, the criticality of what we do is even greater," he said. "When you add in the Global War on Terrorism, you have an acquisition perfect storm."

All of that only adds to the criticality of vigorously communicating with all relevant stakeholders, Bowlds said.

"Acquisition is a bureaucratic contact sport. It requires constant dialogue and engagement with everyone involved—and not a one-way, once-in-awhile conversation, but what I would characterize as analogue leadership: constant, face-to-face contact and involvement."

Bowlds said he intended to spend most of his early weeks on the job listening to and learning from the people of ESC. He said his time with the Air Force Research Laboratory, which he commanded until two weeks ago, has given him some familiarity with ESC programs, but that he has much to learn.

"That extends beyond the acquisition business to all aspects of Team Hanscom," the general said.

Carlson, during his remarks, lauded Johnson for a list of major accomplishments and for "continuing to raise the level of excellence" of the center.

He then assured the crowd packed into the hangar that they were being placed in good hands.

"[General Bowlds] has the right experience and the right skill, and he has a strong set of core values," Carlson said. "He's the right airman to take this job at this time."

Bowlds entered the Air Force in 1975, earning his commission through the Reserve Officer Training Corps program. In early assignments, he served as an engineer in an Air Force laboratory and as a flight test engineer on the F-117. He has worked as avionics program manager on the B-2, bomber branch chief at the Pentagon, chief of Advanced Medium Range Air-to-Air Missile development in the AMRAAM System Program Office, and as commander of the Rome Laboratory in Rome, N.Y.

Bowlds also served as the deputy director of Global Power Programs with the office of the assistant secretary of the Air Force for acquisition. Prior to assuming his position as AFRL commander, he was assigned to the Aeronautical Systems Center, Wright-Patterson Air Force Base, Ohio, as deputy for acquisition.

The general holds a bachelor of science degree in electrical engineering from Mississippi State University, a master's degree in electrical engineering from the Air Force Institute of Technology at Wright-Patterson, and a master's in engineering management from the University of Dayton, Ohio.

Paone writes for 66th Air Base Wing Public Affairs.

GENERAL SERVICES ADMINISTRATION NEWS RELEASE (NOV. 27, 2007)

MOLLY WILKINSON TO BECOME SBA CHIEF OF STAFF

WASHINGTON—Molly Wilkinson, the General Services Administration's Chief Acquisition Officer, will become the U.S. Small Business

Administration's chief of staff starting January 2008, the two agencies announced today. Wilkinson will replace Joel Szabat, who has been named deputy assistant secretary for policy at the U.S. Department of Transportation.

Wilkinson will be responsible for implementing Administrator Steve Preston's agenda to improve SBA's efficiency, transparency, and accountability. She will lead the agency's efforts to improve procurement opportunities for small business, including new recertification requirements preventing large corporations from being credited with small business contracts and scrubbing $4.6 billion in miscoded contracts out of the contracting database. She will also play a major role in personnel decisions, act as a key advisor to the administrator and deputy administrator, and will oversee agency staff operations.

"Molly's impressive ability to enact procurement reform within GSA make her a good fit for the SBA as we strive to improve operational efficiency," said Preston. "I believe she will be an exceptional leader who will help us make significant progress towards our goal of becoming more customer-focused and results-driven. I look forward to having Molly join SBA in 2008."

Since joining GSA in March, Wilkinson re-engineered the Office of Chief Acquisition Officer to impressive results. Employee morale in her office has greatly improved, resulting in the office receiving one of the highest satisfaction ratings within GSA in a recent internal survey.

"The improvements Molly made will greatly help the Office of the Chief Acquisition Officer achieve its mission and will help GSA reach its goal of providing the best products and services to federal agencies at the best value to American taxpayers," said GSA Administrator Lurita Doan. "The leadership and energy she exhibited at GSA make her the perfect person to take on her new challenge at SBA."

Since Wilkinson joined GSA, she filled 15 of the 22 vacancies in the office, filled all four of the acting directorships with permanent directors, and rebuilt entire offices, including the Suspension and Debarment Office. Wilkinson also chaired an internal GSA Acquisition Workforce Steering Committee, which focused on three major initiatives; recruitment, retention, and hiring of re-employed annuitants.

"Molly has demonstrated key leadership on several critical CAO initiatives—specifically working to ensure data integrity and address training challenges faced by FPDS-NG [Federal Procurement Data System–Next Generation], expand the CAO Emergency Contracting Cadre, and develop acquisition workforce development policies as a member of the Board of Directors for the Federal Acquisition Institute," said Paul Dennett, Administrator of OMB's Office of Federal Procurement Policy. "She also worked to solidify relationships with Defense Acquisition University and with the Department of Defense and Acquisition Policy Office. I am happy to see that Molly is remaining with the administration, and I know she will continue to be successful in her new role. "

A 1989 graduate of the College of the Holy Cross in Worcester, Mass., Wilkinson earned her law degree from New York's Albany Law School in 1996 and is a member of the New York State Bar.

ARMY NEWS SERVICE (NOV. 30, 2007)
TOP ARMY ACQUISITION CHIEF TO STEP DOWN

WASHINGTON—Secretary of the Army Pete Geren today received and accepted the resignation of Claude M. Bolton, assistant secretary of the Army for acquisition, logistics, and technology.

Bolton had served six years in that capacity as assistant secretary. His resignation is effective Jan. 2.

"I sincerely appreciate the efforts of our military, the civilian employees, and contractors that have supported our mission during the past six years," Bolton said. "Their dedicated efforts are a tribute to the strength of our nation, and I am honored and humbled to have served with them."

"We thank him for more than 38 years of dedicated service to our nation," Geren said. "Claude has been a valuable leader in Army acquisition for the past six years; his presence will be deeply missed. He always strove to meet the needs of the soldier while innovating to respond to a rapidly changing environment. We wish Claude all the best as he moves on to the next chapter in his life."

Bolton was sworn in as assistant secretary of the Army Jan 2, 2002, and has served longer than any of his predecessors as ASA(ALT). In this capacity, he serves as the Army acquisition executive, the senior procurement executive, and the science advisor to the secretary.

During his tenure as ASA(ALT), Bolton guided the transformation of Army acquisition into a more responsive

and best business practice process, allowing rapid fielding of critical equipment and technology. He spearheaded the Army's modernization efforts, including the further development of the Future Combat System and the restructuring of Army Aviation acquisition after the cancellation of the Comanche program.

"Mr. Bolton always kept our soldiers as his foremost priority," said Gen. Richard A. Cody, vice chief of staff of the Army. "He strove every day to give them a technological edge over an aggressive asymmetrical enemy, and focused his considerable energy and leadership on soldier force protection. He fought hard to get the best equipment, as quickly as possible, into the fight. I will miss him as we continue to build on his accomplishments and modernize our Army."

DEPARTMENT OF DEFENSE NEWS RELEASE (DEC. 10, 2007)

FLAG OFFICER ASSIGNMENT

Chief of Naval Operations Adm. Gary Roughead announced the following flag officer assignment: **Rear Adm. (lower half) Kathleen M. Dussault** is being assigned as commander, Joint Contracting Command, Multi-National Force Iraq. Dussault is currently serving as deputy assistant secretary of the Navy, acquisition management, Washington, D.C.

DEPARTMENT OF DEFENSE NEWS RELEASE (DEC. 19, 2007)

GENERAL OFFICER ANNOUNCEMENT

Secretary of Defense Robert M. Gates announced today that the President has made the following nomination: **Marine Corps Brig. Gen. Anthony L. Jackson** has been nominated for appointment to the rank of major general. Jackson is currently serving as the director of operations and logistics, U.S. Africa Command, Germany.

DEPARTMENT OF DEFENSE NEWS RELEASE (DEC. 21, 2007)

GENERAL OFFICER ASSIGNMENT

The Army chief of staff, will announce the following general officer assignment: **Army Maj. Gen. John A. Macdonald** to commanding general, Family and Morale, Welfare, and Recreation Command/deputy commanding general, Installation Management Command, Arlington, Va. He is currently serving as deputy commanding general, Installation Management Command, Arlington, Va.

Acquisition & Logistics Excellence

An Internet Listing Tailored to the Professional Acquisition Workforce

Surfing the Net

Acquisition Central
http://acquisition.gov
Shared systems and tools to support the federal acquisition community and business partners.

Acquisition Community Connection (ACC)
http://acc.dau.mil
Policies, procedures, tools, references, publications, Web links, and lessons learned for risk management, contracting, system engineering, TOC.

Aging Systems Sustainment and Enabling Technologies (ASSET)
http://asset.okstate.edu/asset/index.htm
Government-academic-industry partnership. ASSET program-developed technologies and processes expand the DoD supply base, reduce time and cost of parts procurement, enhance military readiness.

Air Force (Acquisition)
www.safaq.hq.af.mil
Policy; career development and training opportunities; reducing TOC; library; links.

Air Force Institute of Technology
www.afit.edu
Graduate degree programs and certificates in engineering and management; Civilian Institution; Center for Systems Engineering; Centers of Excellence; distance learning.

Air Force Materiel Command (AFMC) Contracting Laboratory's FAR Site
http://farsite.hill.af.mil
FAR search tool; *Commerce Business Daily* announcements (CBDNet); *Federal Register*; electronic forms library.

Army Acquisition Support Center
http://asc.army.mil
News; policy; *Army AL&T* Magazine; programs; career information; events; training opportunities.

Army Training Requirements and Resources System
https://www.atrrs.army.mil
Army system of record for managing training requirements.

Assistant Secretary of the Army (Acquisition, Logistics & Technology)
https://webportal.saalt.army.mil
ACAT Listing; ASA(ALT) Bulletin; digital documents library; links to other Army acquisition sites.

Association for the Advancement of Cost Engineering International (AACE)
www.aacei.org
Planning and management of cost and schedules; online technical library; bookstore; technical development; distance learning.

Association of Old Crows (AOC)
www.crows.org
News; conventions, courses; *Journal of Electronic Defense*.

Association of Procurement Technical Assistance Centers (APTAC)
www.aptac-us.org
PTACs nationwide assist businesses with government contracting issues.

Central Contractor Registry
http://www.ccr.gov/
Registration for businesses wishing to do business with the federal government under a FAR-based contract .

Committee for Purchase from People Who are Blind or Severely Disabled
www.abilityone.gov
Information and guidance to federal customers on the requirements of the Javits-Wagner-O'Day (JWOD) Act.

Defense Acquisition University (DAU) and Defense Systems Management College (DSMO)
www.dau.mil
DAU Course Catalog; *Defense AT&L* magazine and *Defense Acquisition Review Journal*; DAU/DSMC course schedules; educational resources.

DAU Alumni Association
www.dauaa.org
Acquisition tools and resources; links; career opportunities; member forums.

DAU Distance Learning Courses
www.dau.mil/registrar/enroll.asp
DAU online courses.

Defense Advanced Research Projects Agency (DARPA)
www.darpa.mil
News releases; current solicitations; *Doing Business with DARPA*.

Defense Business Transformation Agency (BTA)
www.acq.osd.mil/scst/index.htm
Policy; newsletters; Central Contractor Registration (CCR); assistance centers; DoD EC partners.

Defense Information Systems Agency (DISA)
www.disa.mil
Defense Information System Network; Defense Message System; Global Command and Control System.

Defense Modeling and Simulation Office (DMSO)
www.dmso.mil
DoD modeling and simulation master plan; document library; events; services.

Defense Technical Information Center (DTIC)
www.dtic.mil/
DTIC's scientific and technical information network (STINET) is one of DoD's largest available repositories of scientific, research, and engineering information. Hosts over 100 DoD Web sites.

Deputy Under Secretary of Defense for Acquisition, Technology and Logistics (DUSD(AT&L))
www.acq.osd.mil/at
Acquisition and technology organization, goals, initiatives, and upcoming events.

Director, Defense Procurement and Acquisition Policy (DPAP)
www.acq.osd.mil/dpap
Procurement and acquisition policy news and events; reference library; acquisition education and training policy, guidance.

DoD Defense Standardization Program
www.dsp.dla.mil
DoD standardization; points of contact; FAQs; military specifications and standards reform; newsletters; training; nongovernment standards; links.

DoD Enterprise Software Initiative (ESI)
www.esi.mil
Joint project to implement true software enterprise management process within DoD.

DoD Inspector General Publications
www.dodig.osd.mil/pubs/
Audit and evaluation reports; IG testimony; planned and ongoing audit projects of interest to the AT&L community.

DoD Office of Technology Transition
www.acq.osd.mil/ott
Information about and links to OTT's programs.

DoD Systems Engineering
www.acq.osd.mil/se
Policies, guides and information on SE and related topics, including developmental T&E and acquisition program support.

Earned Value Management
www.acq.osd.mil/pm
Implementation of EVM; latest policy changes; standards; international developments.

Electronic Industries Alliance (EIA)
www.eia.org
Government relations department; links to issues councils; market research assistance.

Federal Acquisition Institute (FAI)
www.fai.gov
Virtual campus for learning opportunities; information access and performance support.

Federal Acquisition Jumpstation
http://prod.nais.nasa.gov/pub/fedproc/home.htm
Procurement and acquisition servers by contracting activity; CBDNet; reference library.

Federal Aviation Administration (FAA)
www.asu.faa.gov
Online policy and guidance for all aspects of the acquisition process.

Federal Business Opportunities
www.fedbizopps.gov
Single government point-of-entry for federal government procurement opportunities over $25,000.

Federal R&D Project Summaries
www.osti.gov/fedrnd/about
Portal to information on federal research projects; search databases at different agencies.

Federal Research in Progress (FEDRIP)
http://grc.ntis.gov/fedrip.htm
Information on federally funded projects in the physical sciences, engineering, life sciences.

Fedworld Information
www.fedworld.gov
Central access point for searching, locating, ordering, and acquiring government and business information.

Government Accountability Office (GAO)
http://.gao.gov
GAO reports;policy and guidance; FAQs.

General Services Administration (GSA)
www.gsa.gov
Online shopping for commercial items to support government interests.

Government-Industry Data Exchange Program (GIDEP)
www.gidep.org
Federally funded co-op of government-industry participants, providing electronic forum to exchange technical information essential to research, design, development, production, and operational phases of the life cycle of systems, facilities, and equipment.

GOV.Research_Center
http://grc.ntis.gov
U.S. Dept. of Commerce, National Technical Information Service (NTIS), and National Information Services Corporation (NISC) joint venture single-point access to government information.

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An Internet Listing Tailored to the Professional Acquisition Workforce

Surfing the Net

Integrated Dual-Use Commercial Companies (IDCC)
www.idcc.org
Information for technology-rich commercial companies on doing business with the federal government.

International Society of Logistics
www.sole.org
Online desk references that link to logistics problem-solving advice; Certified Professional Logistician certification.

International Test & Evaluation Association (ITEA)
www.itea.org
Professional association to further development and application of T&E policy and techniques to assess effectiveness, reliability, and safety of new and existing systems and products.

Joint Capability Technology Demonstrations (JCTD)
www.acq.osd.mil/jctd
JCTD's accomplishments, articles, speeches, guidelines, and POCs.

U.S. Joint Forces Command
www.jfcom.mil
"Transformation laboratory" that develops and tests future concepts for warfighting.

Joint Fires Integration and Interoperability Team
https://jfiit.eglin.af.mil
USJFCOM lead agency to investigate, assess, and improve integration, interoperability, and operational effectiveness of Joint Fires and Combat Identification across the Joint warfighting spectrum. (Accessible from .gov and .mil domains only.)

Joint Interoperability Test Command (JITC)
http://jitc.fhu.disa.mil
Policies and procedures for interoperability certification; lessons learned; support.

Joint Spectrum Center (JSC)
www.jsc.mil
Operational spectrum management support to the Joint Staff and COCOMs; conducts R&D into spectrum-efficient technologies.

Library of Congress
www.loc.gov
Research services; Copyright Office; FAQs.

MANPRINT (Manpower and Personnel Integration)
www.manprint.army.mil
Points of contact for program managers; relevant regulations; policy letters from the Army Acquisition Executive; briefings on the MANPRINT program.

National Aeronautics and Space Administration (NASA)'s Commercial Technology Office (CTO)
http://technology.grc.nasa.gov
Promotes competitiveness of U.S. industry through commercial use of NASA technologies and expertise.

National Contract Management Association (NCMA)
www.ncmahq.org
Educational products catalog; publications; career center.

National Defense Industrial Association (NDIA)
www.ndia.org
Association news; events; government policy; *National Defense* magazine.

National Geospatial-Intelligence Agency
www.nima.mil
Imagery; maps and geodata; Freedom of Information Act resources; publications.

National Institute of Standards and Technology (NIST)
www.nist.gov
Information about NIST technology, measurements, and standards programs, products, and services.

National Technical Information Service (NTIS)
www.ntis.gov
Online service for purchasing technical reports, computer products, videotapes, audiocassettes.

Naval Sea Systems Command
www.navsea.navy.mil
TOC; documentation and policy; reduction plan; implementation timeline; TOC reporting templates; FAQs.

Navy Acquisition and Business Management
www.abm.rda.hq.navy.mil
Policy documents; training opportunities; guides on risk management, acquisition environmental issues, past performance; news and assistance for the Standardized Procurement System (SPS) community; notices of upcoming events.

Navy Acquisition, Research and Development Information Center
www.onr.navy.mil/sci_tech
News and announcements; publications and regulations; technical reports; doing business with the Navy.

Navy Best Manufacturing Practices Center of Excellence
www.bmpcoe.org
National resource to identify and share best manufacturing and business practices in use throughout industry, government, academia.

Naval Air Systems Command (NAVAIR)
www.navair.navy.mil
Provides advanced warfare technology through the efforts of a seamless, integrated, worldwide network of aviation technology experts.

Office of Force Transformation
www.oft.osd.mil
News on transformation policies, programs, and projects throughout DoD and the Services.

Open Systems Joint Task Force
www.acq.osd.mil/osjtf
Open systems education and training opportunities; studies and assessments; projects, initiatives and plans; library.

Parts Standardization and Management Committee (PSMC)
www.dscc.dla.mil/programs/psmc
Collaborative effort between government and industry for parts management and standardization through commonality of parts and processes.

Performance-based Logistics Toolkit
https://acc.dau.mil/pbltoolkit
Web-based 12-step process model for development, implementation, and management of PBL strategies.

Project Management Institute
www.pmi.org
Program management publications; information resources; professional practices; career certification.

Small Business Administration (SBA)
www.sba.gov
Communications network for small businesses.

DoD Office of Small Business Programs
www.acq.osd.mil/osbp
Program and process information; current solicitations; Help Desk information.

Software Program Managers Network
www.spmn.com
Supports project managers, software practitioners, and government contractors. Contains publications on highly effective software development best practices.

Space and Naval Warfare Systems Command (SPAWAR)
https://e-commerce.spawar.navy.mil
SPAWAR business opportunities; acquisition news; solicitations; small business information.

System of Systems Engineering Center of Excellence (SoSECE)
www.sosece.org
Advances the development, evolution, practice, and application of the system of systems engineering discipline across individual and enterprise-wide systems.

Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L))
www.acq.osd.mil
USD(AT&L) documents; streaming videos; links.

USD(AT&L) Knowledge Sharing System (formerly Defense Acquisition Deskbook)
http://akss.dau.mil
Automated acquisition reference tool covering mandatory and discretionary practices.

U.S. Coast Guard
www.uscg.mil
News and current events; services; points of contact; FAQs.

U.S. Department of Transportation Maritime Administration
www.marad.dot.gov
Information and guidance on the requirements for shipping cargo on U.S. flag vessels.

Links current at press time. To add a non-commercial defense acquisition/acquisition and logistics-related Web site to this list, or to update your current listing, please fax your request to *Defense AT&L*, 703-805-2917 or e-mail datl(at)dau.mil. Your description may be edited and/or shortened. DAU encourages the reciprocal linking of its home page to other interested agencies. Contact: webmaster(at)dau.mil.

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Defense AT&L Writer's Guidelines in Brief

Purpose

The purpose of *Defense AT&L* magazine is to instruct members of the DoD acquisition, technology & logistics (AT&L) workforce and defense industry on policies, trends, legislation, senior leadership changes, events, and current thinking affecting program management and defense systems acquisition, and to disseminate other information pertinent to the professional development and education of the DoD Acquisition Workforce.

Subject Matter

We do print feature stories that include real people and events. Stories that appeal to our readers—who are senior military personnel, civilians, and defense industry professionals in the program management/acquisition business—are those taken from real-world experiences vs. pages of researched information. **We don't print** academic papers, fact sheets, technical papers, or white papers. We don't use endnotes or references in our articles. Manuscripts meeting these criteria are more suited for DAU's journal, *Defense Acquisition Review*.

Defense AT&L reserves the right to edit manuscripts for clarity, style, and length. Edited copy is cleared with the author before publication.

Length

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

Author bio

Include a brief biographical sketch of the author(s)—about 25 words—including current position and educational background. We do not use author photographs.

Style

Good writing sounds like comfortable conversation. Write naturally; avoid heavy use of passive voice. Except for a rare change of pace, most sentences should be 25 words or less, and paragraphs should be six sentences. Avoid excessive use of capital letters and acronyms. Define *all* acronyms used. Consult "Tips for Authors" at <www.dau.mil/pubs/damtoc.asp>. Click on "Submit an Article to *Defense AT&L*."

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

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

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

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www.dau.mil/pubs/damtoc.asp

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