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Program Manager, Armaments e-Portal Project
Délégacion Générale pour l'Armement (DGA)
(French Procurement Agency)

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Acquisition Reform and the French Armaments e-Portal Project

www.ixarm.com

BERTRAND JOURLIN • FRANÇOIS COURSAULT

If you cast a glance at the e-environment as it was two or three years ago, you can easily assess how quickly and widely the Internet has succeeded in becoming a truly essential tool of international business. Yet, the explosion of e-business is not brand new. In 1994, the U.S. Federal Acquisition Streamlining Act mandated establishment of the Federal Acquisition Computer Network architecture to enable U.S. Federal Agencies and vendors to do business electronically in a standardized fashion. Rapid evolution in the technology provided alternative electronic purchasing methods, and in November 1997, the U.S. Department of Defense was allowed to pursue other means of implementing Electronic Commerce (EC). This led, a couple of months later, to the creation of the Joint Electronic Commerce Program Office, now renamed the Defense Electronic Business Program Office.

In France, during approximately the same period, la Délégation Générale pour l'Armement (DGA), or the French Procurement Agency, was on the verge of going through a major reform of its organization and revamping of its business practices. The conclusions of this reform endorsed the compelling outcomes of EC on our current working methods, notwithstanding the fact that the revolution and proliferation of Web technology was definitely going on – with or without us.

Therefore, the DGA decided to adopt some of the commercial best practices embraced by the United States and started to experiment with some of the new tools associated with EC. In March 2000, the Chief of DGA set up a task force for this experimentation, located in DGA Headquarters, Paris. The objective of the task force was to establish an Armaments e-Portal with four major goals:

- Simplify the relations between DGA and its suppliers.
- Improve DGA procurement practices (with a focus on reducing cycle time).
- Streamline logistics.
- Promote assets of DGA suppliers.

A Top-Down Strategy

The DGA initiative, available on the Web at *www.ixarm.com*, is certainly relevant to challenges faced by industry today. In the beginning of 2000, every industry executive was trying to address the same tough issues:

- Do I need to establish an e-marketplace in my business area?
- Do I need to develop a joint-order front office in collaboration with some of my competitors, and if yes, which ones?
- Is my back office able to work effectively with the emerging marketplaces?

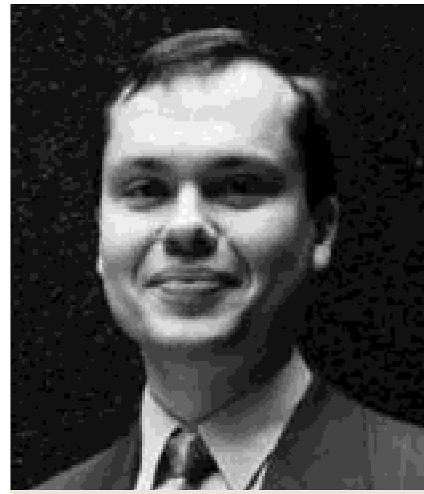
And naturally, all these issues had to be addressed and solved at Internet speed.

Of course, DGA is a governmental agency and, as such, must comply with government contracting regulations (Code des Marchés Publics); at the same time, DGA is also striving to capture the

Jourlin *is Chief of the Armaments e-Portal Project in DGA. Coursault is currently working at the French Embassy, Washington D.C., as Assistant Defense Cooperation Attaché.*

best practices of the commercial environment. Thanks to a French Reform Initiative, launched in 1997, DGA is now managed as a kind of private company. As such, all the issues just discussed are still relevant for us, even if the challenges are sometimes faced from a different perspective.

We realize the tremendous ramifications of such a project – impacting partners far beyond our own environment. Changing business processes between DGA and its suppliers may even result in a requirement for these companies to revamp their own internal working practices. On the other hand, an unchanged DGA would represent an impediment to the modernization and restructuring of its contractors. DGA's Defense industrial partners will therefore benefit from the modernization of DGA, we believe,



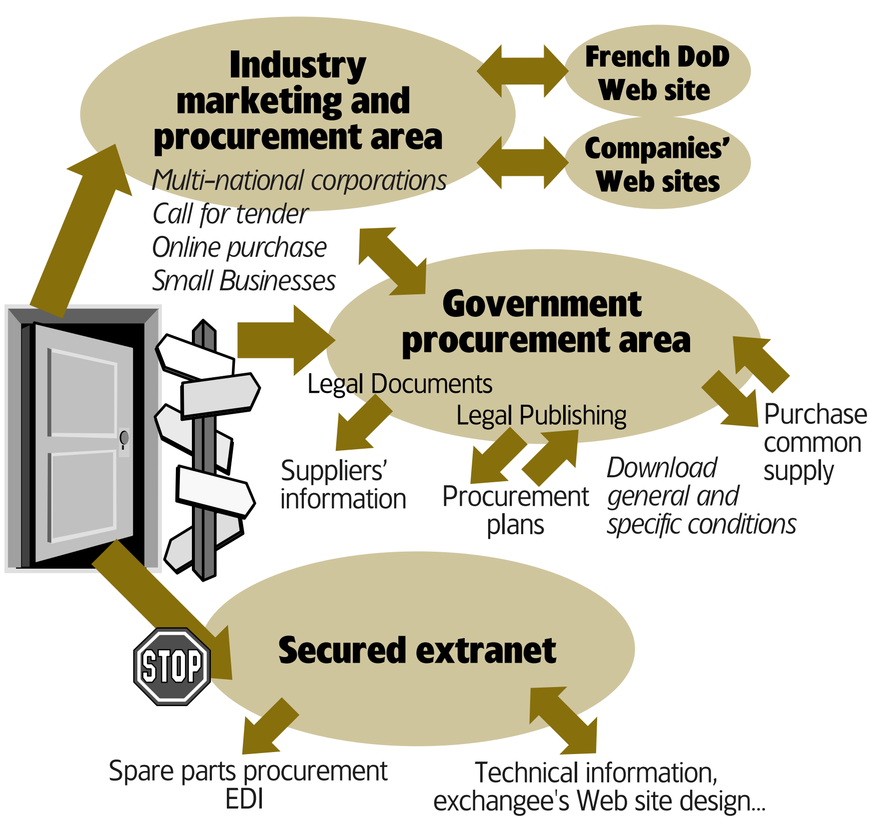
BERTRAND JOURLIN
CHIEF, ARMAMENTS E-PORTAL PROJECT
LA DÉLÉGATION GÉNÉRALE POUR L'ARMEMENT (DGA)

The *ixarm* Armaments e-Portal encompasses a wide range of initiatives impacting virtually every aspect of the DGA's business operations. This comprehensive and innovative gateway is the first business Web site in France dedicated to the relations between a government agency and its suppliers.

Purchase Marketing on the Internet

The DGA's purchasing workforce faces an ongoing challenge to stay abreast of current services and products offered by industry, especially in the area of cutting-edge technologies. Used as a purchase marketing tool, the Internet is a tremendous asset that can help the purchasing workforce immeasurably. Certainly, every piece of information a purchasing agent might ever need about a particular company is available on the Web – organization, products, services provided, bio of executives, financial data, and other information. Even where some databases may better capture all the information available, the main challenge is still to be able to find the appropriate data, where users can place a high level of confidence in its authenticity. In this regard, the armaments marketing area offers a new gateway to the Defense Industry – ranging from Prime industry to the Small Business community.

FIGURE 1. **Portal Architecture**



by using cutting-edge technology, thereby becoming more competitive on the world market. Additionally, by adopting commercial best practices, the traditional Defense suppliers reduce their operating costs, which are costs driven by their main customer – DGA.

The Defense community as a whole is evolving with DGA, and we must consider all the members of this community – such as suppliers, providers, and customers – as partners in this major shift in our business practices.

Web standardization is an enabler of the partnership between DGA and its suppliers. Of course, some concerns remain for security and high-speed data exchanges; however, fielded with standard Web technologies such as http, html, and Xml, DGA's Web portal – *www.ixarm.com* – offers easy and user-friendly access to every member of the community. We do not pretend that all the relevant issues are now solved. In fact, we are still wrestling with some of them, and working to achieve complete interface with our partners. Admittedly, we face a tough task, but by relying on commercial standards, we at least facilitate the handling of services provided.

Ixarm — the Armaments Portal

To reach the goals and objectives assigned to the portal project, *ixarm* has been structured around three main areas (Figure 1), two of which are already accessible at *www.ixarm.com.*

Marketing Area

This area provides an overview of products and describes the technical expertise of DGA suppliers, including Prime contractors, Sub-contractors, and Small Business companies. Soon, everyone will be able to view the operational capabilities of various weapon or procurement systems presented via this virtual show.

Of course, many Prime contractors and Small Business companies already manage their own Web sites, promoting their own products. DGA's portal aims to be a complement to these burgeoning sites by offering a complete and coherent overview of the entire French Defense community and its capabilities. Thus, the DGA portal is a single point of access to all Ministry of Defense industrial partners.

Procurement Area

As many other departments across the French Government are embracing online operations to move toward a more customer-centric service delivery, the Procurement Area of the *ixarm* portal is also aiming to improve the relationship between DGA and its suppliers. The French Government needs to rely on a wide and reliable contractor base from which to solicit quotations and bids. We also need to avoid the emergence of companies specialized in doing business solely with the French Government. Likewise, we must also be wary of imposing complex and burdensome regulations, which result in the undesirable side effect of companies which do not wish to do business with DGA.

The Internet is cheap, user-friendly, and used worldwide; DGA embraces online operations as a tool to improve Civil Military Integration (CMI) and to alleviate the difficulties described in this article.

Ixarm gives more transparency and equity to the procurement process for all DGA suppliers.

The Procurement Area link to the *ixarm* Web site includes all legislative and regulatory guidelines for doing business with DGA and also provides access to electronic forms and documents. As a portal, DGA's *ixarm* Web site offers a gateway to specialized sites covering all Procurement-related documentation, without duplicating the content of these sites. Providing easily accessible references for all Standards and Military Specifications, the Procurement link also connects to all archived contractor documents, which can be downloaded through Web sites of proprietary organizations. As a result, DGA no longer scrambles to update these documents.

Eventually, the DGA portal will provide a single point of access for all DGA solicitations, Requests for Information, Requests for Proposals, and Contract Awards in the same manner as *DoD BusOpps.com* is used today on the U.S. side of the Atlantic. Online access to DGA contracts, of course, is limited to those contracts subject to an official release, which represent the lion's share of the total procurement budget managed by DGA.

Some contend that this information is already available at several other sites such as the *Journal Officiel des Communautes Europeenes* (*JOCE*), a European Union Daily Publication Journal; or the *Bulletin Officiel des Annonces des Marchés Publics* (BOAM), a French Public Procurement Bulletin. Nevertheless, the fact remains that providing a single point of access to all Procurement-related information will facilitate access to DGA contracts for many small businesses and foreign competitors.

Of course, we have not yet reached a paperless contracting environment; the *ixarm.com* Armaments e-Portal is the first step that offers users, for instance, the ability to download requirements of a solicitation. The next step will offer the capability to send secure online electronic quotes and bids for DGA-posted solicitations. Electronic documents management such as storage and instant competitive comparison between offers will ultimately transform the everyday lives of DGA purchasers.

Just as the United States adopted appropriate legislation, including the Government Paperwork Initiative Act, e-Sign, and a number of other Office of Management and Budget (OMB) policies to fuel "paperless-contracting," the growth of *ixarm* will hinge on the adoption of new French and European legislation, and, more importantly, the occurrence of a significant cultural change in French traditional public business practices.

The DGA e-Portal is moving toward becoming a true marketplace beyond its own boundaries; indeed, industry can also use *ixarm* for their own solicitations. This would be the case, for example, when a Prime contractor is selected without a competitive process. DGA would then negotiate a so-called "acquisition plan" with the Prime, ensuring that sufficient competition is managed at the Sub-contractor level. The marketing area would be used by Prime purchasers to identify and track some candidates for their own solicitations on the sub-contractor level. Altogether, these new capabilities will ensure a broader and more efficient competition for DGA Procurement.

Easy access through the Web to a site like *ixarm.com* also makes it a valuable tool for Small Business companies. To gain access to technologies developed by Small Business companies, DGA has launched several initiatives such as a call for papers on science and technology, unsolicited proposals, and a call for innovative projects. With *ixarm.com* acting as a significant catalyst, these initiatives will deliver their full potential by more easily reaching the overall Small Business community, including companies that were heretofore unknown, that are now doing business within the DGA Procurement Area.

Today, the DGA Armaments e-Portal is a true marketplace, enabling this now

Message From Yves Gleizes
la Délégué Général pour l'Armement (DGA) (Head of the French Procurement Agency)

Recently appointed as the head of the DGA, I wish to foster collaboration between all the partners of the defence community. The *ixarm* portal is intended to spur our relationships and increase the efficiency of our common actions. For us, it is a way to shorten our delays and widen the range of our suppliers. For you, it is the opportunity to be informed faster, earlier, and more easily of our needs in the field of research and technology, our procurement projects, and our calls for tender.

That is why I am wholeheartedly keen on making this project succeed together.

private company to experiment with some of the latest e-procurement strategies such as reverse auctions, as well as electronic catalogs. (A first experiment of reverse auctions was carried out in June 2000. The purchasing authority was DGA/ECS and products were ink cartridges. The result was a reduction of costs by 24 percent compared to traditional methods.) We must evaluate these new methods, assess what benefits we can leverage, and how we can use such benefits for French Government purchases. Only then can we move to expand them.

Partnership Area

The benefits of the Armaments e-Portal project are not limited to the Marketing and Procurement Areas; *ixarm* premises are far more ambitious. A third area dedicated to DGA partners will be used to build an online paperless contracting environment. The contracts will, in the beginning, be dedicated to spare parts; the online operations will provide a contracting continuum ranging from solicitations through awards, up to contract payment by ACSIA (a French equivalent of the U.S. Defense Finance and Accounting Service), including shipping bulletins. This Partnership Area, or Electronic Data Interchange (EDI), will include not only industry, but also the Services and the Ministry of Economics, Finance, and Industry. (EDI is undergoing a major evolution, from heavy EDI-EDIFACT standardized through light EDI, toward Web EDI XML-driven.)

Undoubtedly, we will have to rationalize our current procurement methods before implementing EDI; indeed, without simplification, traditional practices will preclude reaping the benefits derived from using electronic data and the latest communications technologies. And without simplification, savings and cycle time reduction would not reach expected figures.

Ambitious EC goals and metrics have been assigned. Chief among them is a one-third reduction in the duration of time between order and payment. By achieving this goal, DGA and French Armed Forces will be able to reduce their logistics stocks by the same order of magnitude.

The Partnership Area of *ixarm* includes a second project far more ambitious and innovative than the EDI: building an integrated data environment (IDE), enabling a full electronic flow of technical data within the French Defense community (DGA, Armed Forces, Industry, Primes, and Small Business companies). The Partnership Area will host technical communities gathered around a dedicated weapon system, equipment, or technology. As envisioned, the various members of one community will be able to exchange electronic contractual documents, work together on an e-design, and discuss technical issues online.

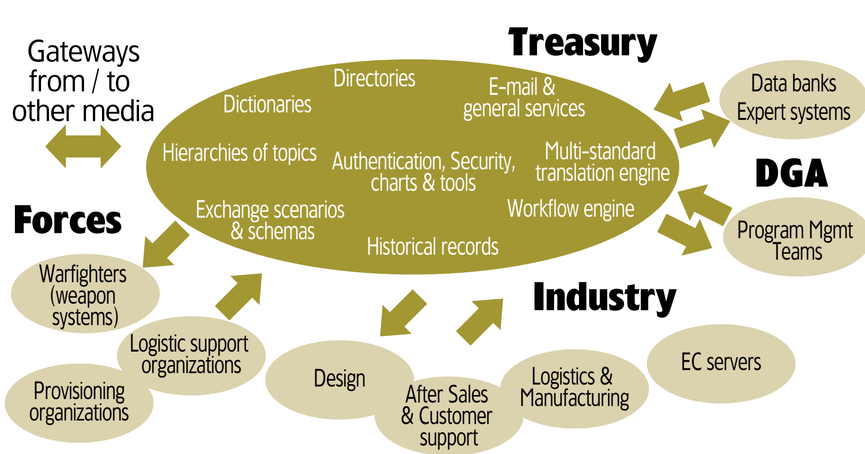
In the Partnership Area, security is much more of an issue for exchanges of data than it was for the Marketing or Procurement Areas previously covered earlier. Even in today's context of technology maturity and supposedly secure Web sites, exchanges of defense confidential data are not envisioned due to the industrial sensitivity of technical data. EDI exchanges will first need to demonstrate a sufficient level of security and reliability. The commercial world, and more particularly banks and industry, have already paved the way on the security issue: technological solutions must come from their pioneer work.

The level of classification for documents exchanged will be adjusted according to the level of security protection available. Several technical solutions can be adopted such as a truly secure network linking DGA with major Prime contractors or an Internet-based network for small companies doing business with DGA on an occasional basis, for instance, during reverse auctioning.

Within the Partnership Area, some brand new concepts will be implemented such as Public Key Infrastructure (PKI)-enabled applications like digital signature, registration (from a judicial point of view), exchanges, sender/recipient authentications, and reliable partners who trust certificates. (Note that registration will constitute and be used as proof up to the level of a European court.) From a technical point of view, we can say that solutions adopted will be far more innovative than technologies driving the Marketing and Procurement Areas. As a matter of fact, no other hub exists today (Figure 2) where all partners are on equal footing, without any master or centralized mainframe. We are talking here of a true shared working environment – providing opportunities and capabilities for remote software use that are far more ambitious and attractive than those offered by a classical shared data environment.

To register in the Partnership Area, DGA's suppliers will not have to overhaul their legacy of information technology sys-

FIGURE 2. **Generic Hub Concept**



tems and organization processes. Just the opposite – the area is designed to be instantaneously accessible. Moving toward the adoption of optimized and more standardized exchange processes will, of course, be a key enabler in improving the use of the Partnership Area. Nonetheless, this evolution will be achieved only under the direction of all partners involved. Even though the Partnership Area is a risky technical initiative, the main potential impediment lies in the ability of the French Administration to implement successful changes in its policies and business practices. Indeed, the digitization of processes implies a thorough reform of our procurement process and will greatly impact day-to-day business across the French acquisition workforce, not to mention the regulatory issues since this Partnership Area implementation will be successfully achieved only by adopting innovative and new legislation.

Final Thoughts

The *ixarm* Armaments e-Portal encompasses a wide range of initiatives impacting virtually every aspect of the DGA's business operations. This comprehensive and innovative gateway is the first business Web site in France dedicated to the relations between a government agency and its suppliers; its objectives differ drastically from those of institutional Web sites already existing. *Ixarm.com* aims at bringing together the entire French Armaments community into the e-business arena.

Stakes are high for this very challenging initiative. And the success of *ixarm* relies not solely on DGA but also on an early involvement of all key players, including DGA's international partners, teaming together and building on the global expansion capabilities made possible only through the wonders of the Internet.

Editor's Note: The authors welcome questions and comments on this article. Contact Coursault at *f.coursault@ambafrance-us.org.*

Federal Acquisition Regulation (FAR) 2001 Edition

The GSA FAR Secretariat, (202) 501-4755, has reissued the Federal Acquisition Regulation (FAR). The reissued FAR is available via the Internet at *http://www.arnet.gov/far*. The reissue incorporates Federal Acquisition Circulars (FAC) 97-1 through 97-27. If you maintain a paper copy of the FAR, future FACs must be incorporated into the 2001 edition of the FAR. The POC is Rick Layser, DoD FAR Editor, OUSD(AT&L) DP(DAR), (703) 602-0293, e-mail *richard.layser@osd.mil.*

AT&L WORKFORCE RESOURCES

The following guides, handbooks, and "How To" manuals will help you step-by-step through several acquisition processes. Access them at *http://www.acq.osd.mil/ar/resources.htm.*

- *Guide to Performance Based Payments,* Jan. 22, 2001. The policy, "Use of Performance-Based Payments (PBP)," signed by Dr. Jacques Gansler on Nov. 13, 2000, explains this new, simplified financing technique.
- *Performance-Based Services Acquisition (PBSA) Guidebook,* Jan. 2, 2001.
- *Commercial Off The Shelf (COTS) and Commercial Item Guide*, "Commercial Item Acquisition: Considerations and Lessons Learned," July 2000.
- *Guide to Incentive Strategies for Defense Acquisitions,* January 2001.
- *Guide to Collection and Use of Past Performance Information,* Version 2, May 2001.
- Intellectual Property: *Navigating Through Commercial Waters*, "Issues & Solutions When Negotiating Intellectual Property With Commercial Companies," April 2001.
- *Other Transactions" (OT) Guide For Prototype Projects,* January 2001.
- *Contracting for the Rest of Us: Some Basic Guidelines,* October 2000, was released by the Office of the Assistant Secretary of the Navy for Research, Development and Acquisition, Acquisition and Business Management.
- *Procedure for Bid Protests at GAO* (a descriptive process).

2001 DAVID PACKARD EXCELLENCE IN ACQUISITION AWARDS

Aldridge Recognizes Four Teams

Army Small Computer Program

The Army's Small Computer Program team negotiated a series of Enterprise Software Agreements. The U.S. Army and the Department of Defense received heavily discounted pricing by leveraging their combined buying power. More than $700 million in commercial software cost avoidance was realized through the Army Small Computer Program's efforts.

DLA Strategic Sourcing Program Team

The Defense Logistics Agency (DLA) Strategic Sourcing Program (SSP) team is responsible for shifting acquisition of spares and repair parts, from spot buys to long-term contract arrangements utilizing best commercial practices. Since October 1998, DLA has increased the percentage of "shift to commercial practice" usage from 18.5 percent to over 43 percent in January 2001. The team implemented DLA's first Strategic Supplier Alliance with Honeywell, moving from an arms-length relationship to a strategic relationship. The alliance has the potential to save more than $40 million over the life of the contract. The team also implemented an Internet electronic commerce system, streamlining the acquisition process for routine items and reducing administrative lead-time by 21 days per buy.

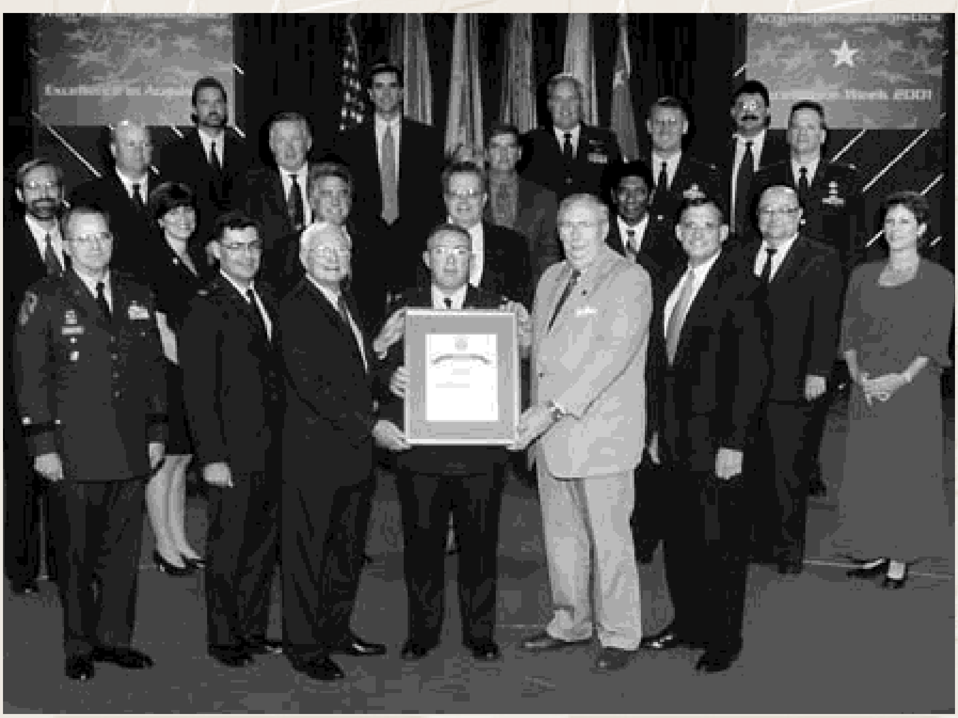
Photos by Richard Mattox

The David Packard Excellence in Acquisition Award went to four outstanding teams this year at a Pentagon ceremony on Sept. 10. Presiding at the Kickoff Ceremony for Acquisition and Logistics Excellence Week 2001, Under Secretary of Defense for Acquisition, Technology and Logistics E.C. "Pete" Aldridge Jr., presented the Packard Award to the Army Small Computer Program Team; the Navy Cartridge Actuated Devices/Propellant Actuated Devices Supply Reengineering Team; the Air Force/Defense Contract Management Agency/Northrop Grumman Joint Surveillance Target Attack Radar System (JSTARS) Future Support Team; and the Defense Logistics Agency Strategic Sourcing Program Team.

The David Packard Excellence in Acquisition Award is established to recognize DoD civilian and/or military organizations, groups, or teams who have made highly significant contributions that demonstrated exemplary innovation and best acquisition practices. Nominations are for organizations, groups, or teams that have exhibited superior accomplishments significantly contributing to defense acquisition excellence initiatives and acquisition programs.

Navy CAD/PAD Program Team

The Navy's CAD/PAD (Cartridge Actuated Devices/Propellant Actuated Devices) Supply Reengineering Team reinvented the process for ordering and receiving aircraft emergency system explosives (Hazard Class 1.3 and 1.4) at U.S. Navy and Marine Corps activities worldwide. Using the Business Process Reengineering and Systems Thinking methodologies, the team created a process that uses existing aircraft maintenance and technical data to automate requisitioning, enabling telephone, e-mail or fax orders, while eliminating burdensome paper transactions. The team also instituted bundling, transitioned to small package carriers, streamlined redundant receipt inspections, and incorporated other support processes (e.g., deficiency report tracking) to reduce Fleet workload. The reengineered process averages less than eight days' cycle time within the continental United States (reduced from up to four months), while avoiding over 45 unnecessary work years annually required under the historic process.



Air Force/Defense Contract Management Agency/Northrop Grumman Joint Surveillance Target Attack Radar System (JSTARS) Future Support Team

The Future Support Team developed through joint Air Force, Defense Contract Management Agency, and Northrop Grumman efforts, established an innovative approach to systems acquisition resulting in the Total Systems Support Responsibility (TSSR) contract. This contract structure reduced the amount of JSTARS sustainment contracts from 11 individual contracts to one contract that focused on aircraft availability to the warfighter, trained aircrews, and cost performance. Where the government normally shoulders these responsibilities, the contractor, Northrop Grumman, is now in charge of the total systems support responsibility. It has the single role of integrating all (contractor and Air Force) activities. When a new aircraft is delivered, the software and hardware are there simultaneously, in the right configuration, with appropriately trained crews, all at the same time. This synergy maximizes the availability of the asset to the wing.

The Naval Surface Warfare Center

World-Class Scientists, Engineers, and Facilities for the Current Navy, the Next Navy, and the Navy After Next

REAR ADM. MIKE MATHIS, USN

What is the Naval Surface Warfare Center? Why does the Department of the Navy (DoN) have a Surface Warfare Center, or other Warfare Centers for that matter? What do they do, why do they do it, and how do they do it?

REAR ADM. MICHAEL G. MATHIS, USN
COMMANDER, NAVAL SURFACE WARFARE CENTER

Rear Adm. Michael G. Mathis is the Assistant Deputy Commander for Surface Ship Technology, Naval Sea Systems Command, with additional duty as Commander, Naval Surface Warfare Center with its six major Divisions (Carderock, Md.; Corona, Calif.; Crane, Ind.; Dahlgren, Va.; Indian Head, Md.; and Port Hueneme, Calif.). He is also the Systems Engineer for the Single Integrated Air Picture (SIAP) Joint Task Force. More recently, he was designated the Chief Engineer for the Office of the Assistant Secretary of the Navy (Research, Development and Acquisition). Mathis was promoted to his present rank on Feb. 1, 1999.

The DoN technical community, drawn mainly from the ranks of the former laboratories and Systems Commands' field activities – now merged into Warfare Centers – is not well understood by many in the DoN. In fact, if you should ask many program managers to whom Warfare Centers provide assistance in acquisition matters; or Fleet units whose ships, aircraft, submarines, and command and control systems the Warfare Centers support, they will tell you they cannot exist without the technical capabilities Warfare Centers provide.

Unlike most operational and headquarters components in the Department of the Navy, Warfare Centers are technically focused and are funded through a Working Capital Fund. Partially for these reasons, they remain an enigma to many parts of the Department.

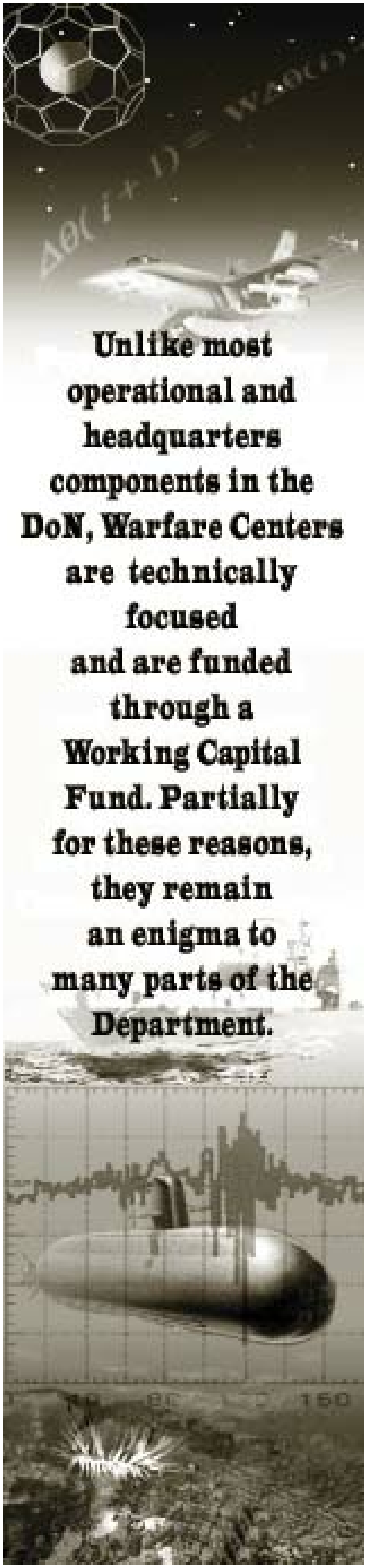
This article will attempt to reduce some of the mystery surrounding the DoN Warfare Centers by introducing you to the Naval Surface Warfare Center (NSWC). It will explain why NSWC exists and how it does business and discuss the Center leadership's innovative business thinking – an approach to managing the Center that has helped NSWC remain viable and available to the Fleet through a decade of dramatic cutbacks in defense spending.

Why Does NSWC Exist?

The policy of our country is to rely on the private sector to supply the Navy and Marine Corps and all armed forces with the systems they need to carry out their missions. The DoN, however, must be able to state what it needs in technical terms that the private sector can develop and build. The DoN must also be able to determine where to seek such capabilities from the private sector: in other words, it must know the technical turf of private industry. In today's era of Commercial Off-The-Shelf (COTS) technology, this is especially true. Moreover, given the competitive nature of the private sector, the DoN must be technically competent to know when a proper solution has been proposed or built by the private sector. That is not to say that the private sector does not have the best interests of the DoN at heart, but the private sector's principal customers and the DoN's principal customers are different: the former are stockholders, and the latter are the men and women of our fighting forces and the taxpayers of the United States.

The DoN needs interoperability in its systems, not only *within* the same fighting units (ships or aircraft, for example), but also *among* these units. Interoperability extends beyond the DoN to the Joint arena, and ultimately to allied and coalition forces. All this requires a strong technical community within the DoN, possessing not only knowledge of the systems themselves, but also the *interactions* among these systems. For this reason, we see a principal focus on *systems* within NSWC.

Hence, the DoN has Warfare Centers that exist to:



- Understand the technical dimensions of Naval problems.

- Be a technical peer of the private sector to enable the DoN to: 1) know where to go for solutions to these problems; and 2) know when a competent solution has been provided, including the ability to certify systems safe and effective.

- Be prepared to do what industry: 1) *will not do* because the work is not profitable (the primary objective of the private sector); 2) *cannot do* because the work requires extremely expensive or unique facilities; and 3) *should not do* because they are not prepared to accept the subsequent liability (for example, certifying systems safe and effective).

NSWC does all the preceding in support of five mission-related Product Areas: Ships and Ship Systems, Surface Ship Combat Systems, Navy Strategic Weapon Systems, Littoral Warfare Systems, and Ordnance. The Center's broad focus spans the cradle-to-grave life cycle of programs, systems, equipment, and materials. In short, NSWC supports the current Navy, the next Navy, and the Navy after next.

The aggregate of the work performed across NSWC: provides the intellectual basis and facilities to enable NSWC to carry out its reason for being; provides an economic base to achieve the economies of scale to perform such work at competitive rates; and provides a technical foundation and stewardship of an "intellectual insurance policy" while various acquisition reform initiatives are being tested out, such as Full Service Contracting, Performance Specifications, and COTS. This is especially important given the potential implications of some of these policies to interoperability.

Sustaining an In-House Capability

How does NSWC develop and sustain the breadth and depth of capabilities to meet the expectations of the Department of the Navy? Over the years, the Center has found that the most effective way to do this is to *perform hands-on technical work*. Reading about developing and sustaining capabilities, learning about it in the classroom, or watching (overseeing) others is insufficient to develop and sustain such capabilities while simultaneously anticipating those needed by the DoN in the future. Hence, NSWC performs technical work for the acquisition community – the Fleet.

In addition, sustaining an in-house capability requires sufficient workload to permit products and services to be provided at *affordable rates.* This relates to the way in which Warfare Centers do business within the Navy Working Capital Fund (NWCF). Every direct labor hour worked is charged at a rate calculated to cover all operating expenses. The objective in each operating year is to balance revenue taken in through direct work with total costs such that the Center's Net Operating Result (akin to net profit) is zero. Operating gains and losses are made up in future rates charged to customers. In this way, Warfare Centers are incentivized to keep operating expenses low and thereby maintain competitive rates.

Thus, the very nature of the NWCF causes the Center to behave much like a business. For example, a program manager needing specific work done, negotiates a task Statement of Work to be performed during a specified period for a specific amount. The Warfare Center arrives at that amount by calculating the amount of labor, materials, and other costs necessary to perform the work. When the task is accepted by the Warfare Center, it becomes a "contract" between the program manager and the Warfare Center. Progress bills and reports are made by the Warfare Center to the program manager until the work is completed.

As in any business, Center leadership needs to adopt *innovative business solutions* aimed at lowering costs while ensuring that intellectual capital and facilities for the future are sustained. The remainder of this article will share some of NSWC's innovative business thinking.

A Systems Approach to Business Thinking

Maintaining the technical relevance and economic viability of a complex Naval enterprise requires leaders that possess a high degree of business savvy to complement their technical know-how; and it requires effective tools be developed, made available, and used to guide decision making.

Core Equities

NSWC has devoted significant management attention to business planning. The primary focus of such planning is to ensure the Center is fiscally sound and investments are made in the proper areas to ensure development and sustainment of Core Equities – the highly skilled technical workforce and specialized world-class facilities that comprise the Center's technical capabilities. As warfare systems obsolesce, related technical capabilities are phased out.

Business Ethic

The guiding precepts of the NSWC Business Plan are expressed as a *Business Ethic*. NSWC institutionalized the Business Ethic to raise the level of importance of fiscal discipline. For example, the Business Ethic set a policy to absorb cost increases within NSWC through increased efficiencies rather than pass them on to the Fleet via increased rates. The principles invoked by the Business Ethic guide not only NSWC's day-to-day activities, but also its future investment decisions. For example, investments made by one of NSWC's six operating Divisions are evaluated in terms of their impact on the entire Center to ensure corporate decisions are made concerning investments in people, facilities, and tools.

Audits, Performance Targets

Annual overhead audits are conducted to better understand spending requirements before overhead dollars are spent. NSWC assigns its operating Divisions (Carderock, Dahlgren, Port Hueneme, Crane, Indian Head, and Corona) specific *performance targets* controlling rate growth and net operating results (NOR), while at the same time ensuring appropriate investments in maintenance, training, and compensation are being made.

NSWC is studying the economic viability of *privatizing utilities*. The Center has assessed the marketplace and established market interest, and is now focused on determining market value and conducting an economic analysis, assisted by private sector experts in this area.

Product Area Coordinator

NSWC established a *Product Area Coordinator* for each of its five Product Areas. The Product Area Coordinators act as if they were senior vice presidents of a corporation, charged with ensuring the stewardship of each of the Core Equities that fall within the Product Area. Their charter is to develop a set of investment recommendations that optimize at the corporate level, and to serve as advocates for the Product Area. This provides the mechanism to: reshape the Center; provide a focus for technical competencies to support the Fleet and other customers; and resolve corporate technical issues dealing with NSWC's capabilities.

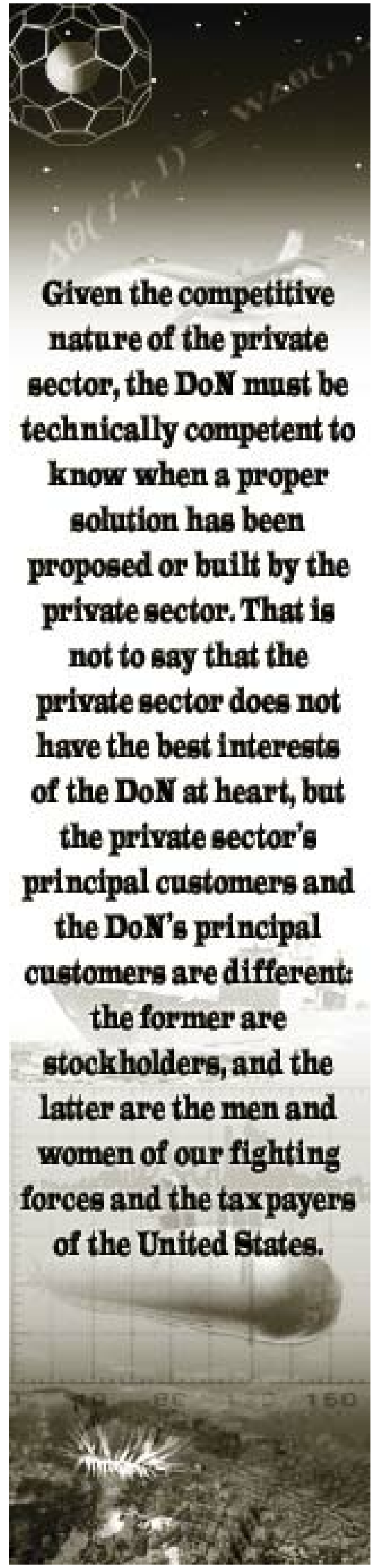
Technical Assessment, Grand Challenges

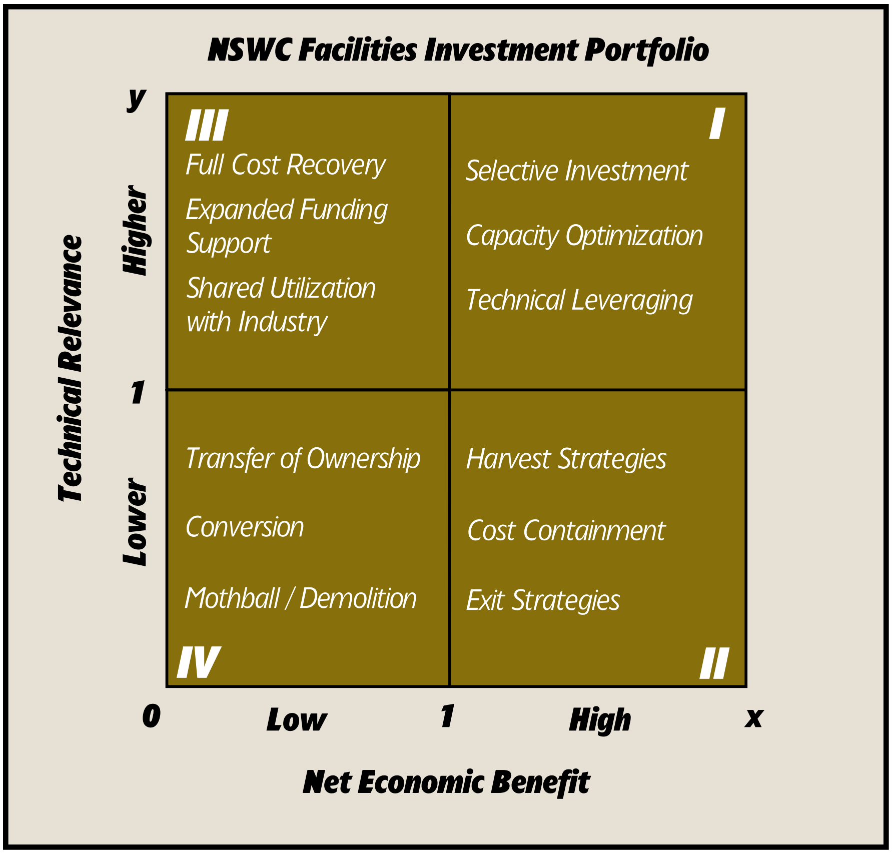
The NSWC Product Area Coordinators conduct a comprehensive *Technical Assessment* of NSWC Core Equities every two years to determine the overall health of the Center's capabilities and better understand which capabilities will be needed to meet DoN's *Grand Challenges* – the tough technical problems where the Navy and Marine Corps will need NSWC's help to develop viable solutions.

Future investments will be based on need and rooted in the Core Equities that best support Grand Challenges. Investment strategies will address the two basic building blocks of NSWC's Core Equities: workforce and facilities.

Workforce

The *Workforce Reconstitution Strategy* is a product of the Technical Assessment and focuses on how to rebalance and reshape the workforce to meet current





and future needs. A comprehensive strategy, it addresses the nurturing of critical skills to support both legacy systems and emerging systems in the Fleet. It also includes new skills that must be developed to support Grand Challenges and future capabilities envisioned in the Science and Technology Investment Portfolio.

Significant aspects of the strategy include such areas as recruitment, training and development, attrition, and rewards. As a catalyst, the Workforce Reconstitution Strategy acts to ensure that the Center develops future leaders who will take NSWC into the future and ensure its continued technical relevance and viability.

Facilities

The final element of the NSWC investment approach addresses a *Facilities Reconstitution Strategy*. As in the workforce, the objective here is to make investment decisions that optimize at the corporate level and meet future needs. Transitioning infrastructure management to an enterprise focus will provide greater management insight, and create synergy among the individual Division facility planning initiatives. It will enable the Center to save money, shrink footprint, and preserve critical facilities needed by the Fleet.

An Innovative Facilities Investment Portfolio

The approach NSWC has taken in establishing an integrated Facilities Reconstitution Strategy involves the application of commercial portfolio management techniques. The chart shown above represents a facility-specific derivative of the Boston Consulting Group Strategic Planning Matrix that is often applied in corporate decision making. As shown, the *Facilities Investment Portfolio* framework enables the Center to understand the revenue-generating power of its facilities and their technical relevance to the Navy.

Net Economic Benefit (NEB)

The horizontal axis of the two-by-two matrix is defined by the *Net Economic Benefit (NEB)* metric that represents the ratio of revenue received for work performed in a technical facility vs. the annual operating cost to support that facility. NSWC procured the services of an established accounting firm, KPMG, to assist in determining NEB for its technical facilities.

Technical Relevance

The vertical axis is defined by a similar metric of *Technical Relevance (TR)* that measures the relative importance/priority of the facilities' technical contribution to the DoN's Grand Challenges discussed previously. Here, NSWC adapted a model developed by the RAND Corporation to determine the technical relevance of its facilities. Combined, the intersection of these two axes creates four quadrants for classifying NSWC technical facilities. As the chart depicts, the investment strategy is guided by the quadrant in which the facility is plotted.

DoN – NSWC's Primary Customer

The Naval Surface Warfare Center, like its sister activities in other warfare areas, exists to serve the interests of the Department of the Navy as its primary customer. Its focus is on the technical dimensions of warfare systems and the associated technical knowledge that enables DoN's leadership to: 1) know where to go for solutions to the Navy's operational needs; and 2) know when a competent solution has been provided. As such, the Center must be vigilant in its stewardship of the Core Capabilities to perform this necessary governmental function.

Innovative business practices are a part of this vigilance, including those dealing with facilities. Such an approach will ensure NSWC Core Equities continue to be comprised of the world-class scientists, engineers, and facilities needed to support the current Navy, the next Navy, and the Navy after next.

Editor's Note: The author welcomes questions or comments on this article. Contact *LashFC@navsea.navy.mil*.

DAU Joins Fort Belvoir in Supporting Security Efforts

In Wake of Attacks, Campus Security Intensified

SYLWIA GASIOREK

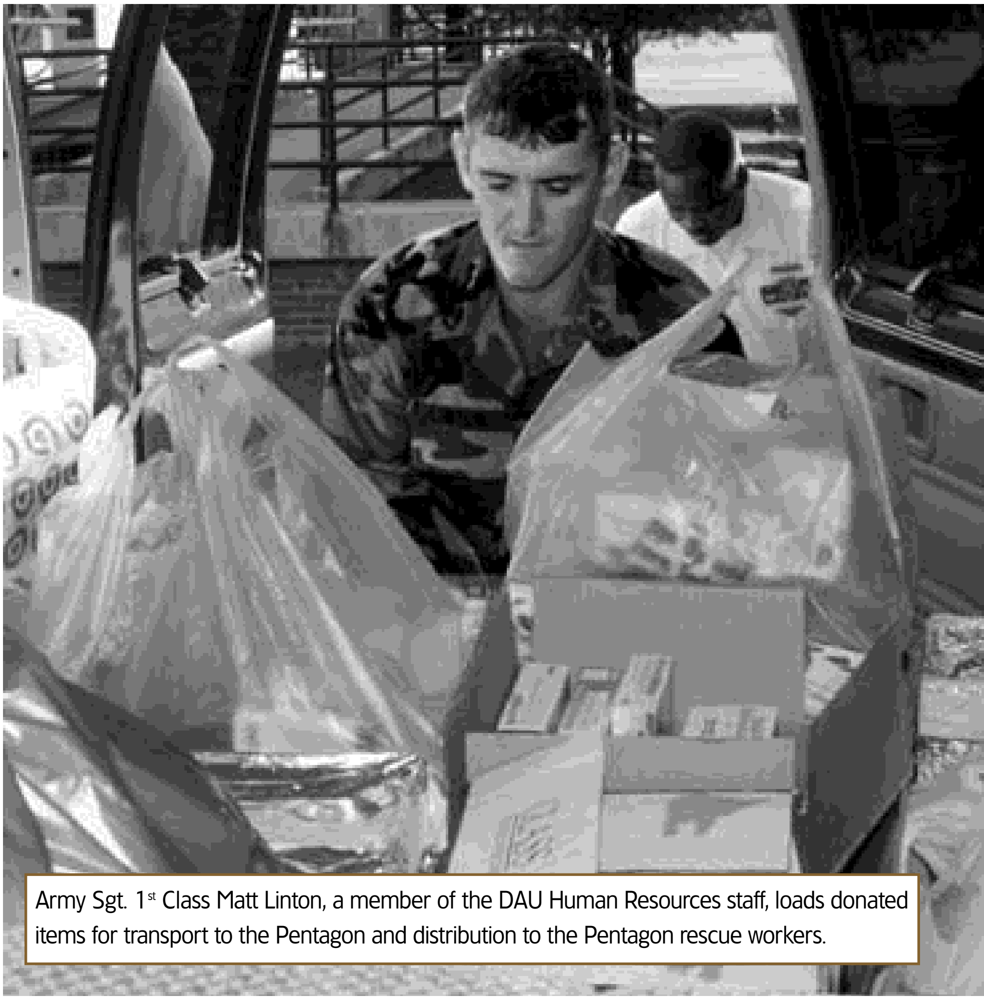
The September 11th horrific attacks on American soil stand as the greatest loss of life from a terrorist activity in our nation's history. Innocent people – our friends, neighbors, and family members – paid a terrible price for the murderous acts. The events of that Tuesday morning left deep wounds in the hearts of Americans and involved the entire nation. At DAU, academic life came to an abrupt halt as Fort Belvoir and the University reacted to the attacks by closing, followed by a mass exodus of staff and students heading home on that unforgettable Tuesday morning.

Fort Belvoir, which was already conducting a limited access-control exercise, responded to the attacks by immediately implementing DoD directives to increase the installation's threat posture to Force Protection Condition "Delta" – the highest level of threat protection.

Belvoir's soldiers immediately went into action, conducting 100 percent identification checks of personnel entering the installation and performing inspections of vehicles attempting to enter the post.

"We've implemented procedures to safeguard our residents and facilities," said Fort Belvoir Garrison Commander Col. Kurt A. Weaver. "Our emergency operations center will remain open and operational for as long as necessary to coordinate activities and respond to evolving requirements."

Gasiorek *is a full-time contract editor for* Program Manager *magazine.*



Army Sgt. 1st Class Matt Linton, a member of the DAU Human Resources staff, loads donated items for transport to the Pentagon and distribution to the Pentagon rescue workers.

Aftermath

Since Wednesday, Sept. 12, Fort Belvoir and all U.S. Army installations have changed their security posture to Force Protection Condition "Charlie" – requiring all those attempting to enter Fort Belvoir, and other military installations, to show photo identification and to conduct random inspection of vehicles.

Wednesday morning, the day after the attack, security checks at the post gates snarled traffic; in fact, some members of the Belvoir workforce spent up to four hours waiting in traffic to get on post.

"We want to let employees at Fort Belvoir and the local community know that we understand the frustration and irritation that may have occurred Wednesday morning as a result of the tremendous delays experienced at our gates," Weaver said. "But they were unavoidable, given the recent terrorist ac-

Photos by Army Sgt. Kevin Moses

tivity and our heightened security requirements ... We encourage everyone to allow extra time for commutes."

As a result of the commuters' gridlock and heightened state of security, a number of facilities on the post closed, and a number of events scheduled that week were cancelled.

Also cancelled was the Fourth Annual International Acquisition/Procurement Seminar – Pacific, which was to be hosted at the main campus Sept. 17-20.

Moving Forward

But despite the cruelty of the hour, the smoke, the fire, and the shock, people did not give in to full-scale panic.

While employees were struggling with the traffic, soldiers were mobilized to the Pentagon to assist the rescue and recovery efforts. At the same time, personnel from the Belvoir DAU-DSMC community were involved with some support efforts of their own – graciously donating baked goods, bottled water, hand wipes, Gatorade, and other items for the Pentagon rescue workers.

Many showed support by posting ribbons and American flags throughout the campus. Many donated blood. Many participated in the National Day of Prayer and Remembrance, on Friday, Sept. 14, in Howell Auditorium. Many lighted candles that same Friday night at a candlelight vigil to show that America is united. And many kept an intense vigil by their TVs, as the full extent of the tragedy emerged.

The generosity of the American people in times of disaster has always been exceptional, and during this worst-of–all-times, the outpouring of help only reaffirmed what much of the world has witnessed first-hand: Americans are the most generous, giving people on the face of the earth.

New Sense of "Normal"

What will it be like to live and work in the post-September 11th era – operating inside security lines, with gate checks and doors closed? It's not clear what the future will bring. It will be days or weeks before we know the particulars of the death and destruction – before we fully absorb the magnitude of our losses. Fort Belvoir and DAU, however, will continue to take measures aimed at safeguarding staff and students.

What we know already is shocking and overwhelming. But we also know that Americans have come together and united as a nation to rescue, to support, to act, and to move forward according to American principles and values.

Army Sgt. Sandra Morse (left) , a member of the DAU Video Services staff, distributes bottled water to Louisiana rescue workers preparing a batch of gumbo.

DoD's Fiscal 2002 Amended Budget Request

Under Secretary Aldridge Speaks Out on Acquisition Budget Implications

On June 27, 2001, Secretary of Defense Donald Rumsfeld presented a special DoD News Briefing on the amended fiscal 2002 budget request for the Department of Defense. Under Secretary of Defense for Acquisition, Technology and Logistics Edward C. "Pete" Aldridge spoke with a small group of reporters after the briefing.


Crusader
Image courtesy General Dynamics

Q
What is going into the BMDO [Ballistic Missile Defense Organization] in terms of changing the lending programs into categories?

A
The philosophy of the ballistic missile defense program is that we are trying to put together a technology program that will allow ballistic missile defense to move from various stages of intercept — we'll be looking through the entire spectrum of ballistic missiles from short-range to long-range, and designing a program that allows us to address the terminal phase, the mid-course phase, and the boost phase.

And as we go from terminal to boost, it obviously gets harder and harder. We're not sure we know what the answer is to move through these layers of defense, so we've laid out a program that really gets started in FY02 to begin to identify those technologies for those various phases of flight. And as we proceed in time and technologies are proven or disproved, we will narrow down [the choice of technologies], heading toward a solution.

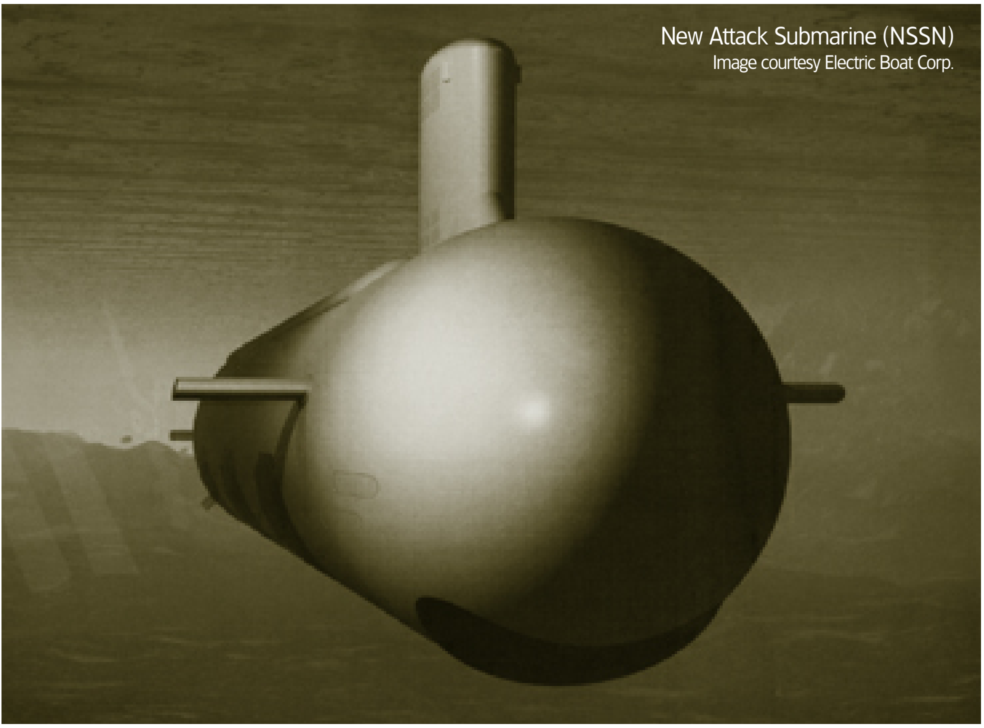
As we get to a solution, if there is a decision to deploy, we will. The first step of that you're seeing [already] in the budget, where the PAC-3 [Patriot Advanced Capability 3] and possibly wide area defense are actually moved from BMDO to the Services for them to [monitor and] deploy. That's missile defense, and they've made the decision to move out and proceed.

As we lay out a research and development program, and as we find those answers with time and we know what the cost is and we know what the time to deploy would be, then we would move it [missile defense] back to the Services for implementation.

In the past we've been spending money, but we've been restricted to the assumption that we will do everything within the ABM [Anti-Ballistic Missile] Treaty. I think you've heard the President has said that until we find a solution — if that's the solution we want — we will not be constrained by the ABM Treaty. We hope to negotiate that away, but he thinks the decision on how we're going to pursue ballistic missile defense will be based on what's in the best interest of the nation in *this* world rather than the world of 1970.

As a matter of fact, I was a member of the arms control negotiating team that wrote the provisions of testing in the ABM mode. I was part of the SALT I [Strategic Arms Limitation Treaty I] negotiating team, and I remember writing those provisions down. Those provisions are no longer appropriate for this world. That was 30 years ago. So that's kind of what the plan is and that's what [BMDO Director] General Ronald Kadish has laid out.

The program this year adds roughly $2 billion to begin to lay out these parallel technology paths, and that's where we're heading.



New Attack Submarine (NSSN)
Image courtesy Electric Boat Corp.

Joint Strike Fighter
Photo courtesy Boeing

Q

Knowing that you are heading up this panel that is now doing a comprehensive review of the Navy's shipbuilding program, [and based on] what you see from the Navy regarding their solutions for what to do with the SBN [Ship Building Navy] account money that's provided in this budget, is that satisfactory to you? Are they placing themselves on the right track given what you started to see out of your review?

A

What we saw in the review as far as what's going on in the Navy ship building program, puts the Navy on a decline [as far as] total number of ships. If we did nothing more than what the Navy's plan was, we would be going down over the next 20 years to a 200- or 230-ship Navy. So we said we need to understand the role of the Navy in this new environment. What is the role of the Navy? What is the structure of the Navy we need to pursue to begin to meet our needs for the future as part of this strategy?

"On the morale of the military — in spite of the fact that they're overworked and they endure deployments and unreasonable things, you will never find any finer people in the world than the U.S. military. As I think about it, I'd put that on the top of the list. It's magnificent – and we ought to be proud of them."

I asked the Secretary of Defense about doing an overall Navy force structure review with the programs that we need, the rate of ships we need to buy, and the type of mix of ships we need for the future. So the study was undertaken under those ground rules. It was something that I thought was very important.

I happened to have run a Navy shipbuilding study for former Secretary of Defense Rumsfeld in 1976, and he understands how we do those kinds of things. We look at the world and determine what the world looks like and the threats, challenges, and technologies of the world. We need to determine what the role of the Navy is in this future world. If we can determine what the role of the Navy is going to be, then we can determine the size and the shape and the technology that it ought to have. We need to do that before we lay out a shipbuilding program. We have to do it for the purpose for which the Navy's being constructed.

Q

Based on the reaction yesterday to the play on reducing the B-1s and consolidating them, and the general reaction in Congress every time there's a suggestion to cut something almost anywhere, how realistic is it to make those cuts? And how do you go about doing it?

"Anybody who has heard me testify to the House and Senate and during my confirmation knows I have a goal in my life of establishing the credibIlity of our acquisition process. I am determined to make that happen, and properly pricing a program is one way."

A

Of course you'll have to ask the Air Force for the details of this, but I did work with Secretary of the Air Force [James G.] Roche when he was going through the decision process.

We've got 93 B-1s, which are not very effective. We said if we're going to keep the B-1 force we need to make it effective. Clearly we don't have all the money in the world. The plan was, from the Air Force point of view, to consolidate the B-1s onto essentially two bases with a smaller force, and use the money to modernize the current force to make it operationally effective. There are some problems with the defensive avionics — they [Air Force] need to upgrade the bomber to carry more of the newer class of weapons. So it was a decision that I believe was based on logic and reason. If we're going to keep the B-1s, we need to make them as effective as we possibly can. And here's a plan to do so.

Yes, I understand the politics and that half of the Air Force [personnel] that would be reduced are Air National Guard, but we tried not to put politics in our decision. The Air Force tried to be as logical as they could about the right thing to do for the B-1 force, that would contribute to the bomber force — the bomber force being the B-2s, the B-52s — and make the force as effective as it possibly can be. In my view, it is the right answer.

Q

How do you take the next step? How do you sell it?

A

Just the way I did. You're going to hear the Secretary of Defense say this. We have too much infrastructure for our current force structure. The numbers run between 20 and 25 percent. We cannot keep all the things that we have distributed across the country and still run this Department in an effective way. It's just not efficient.

We have to determine what makes sense, present the case to the Secretary of Defense and then the President and then the Congress, and let the chips fall where they may. Some may say that, politically this is too hard. All we can say is, this is what makes sense from the standpoint of running the Department correctly, and logically, and truthfully.

And you'll hear a lot about another aspect of the budget. We have properly priced the programs that are currently in the budget. We're tired of going over to the Hill and telling what a program costs and knowing it's not truthful. So we have fully funded by several hundred million dollars, programs that are currently in the budget — shipbuilding being one of those. We have properly priced the programs, and we will continue to do so.

Anybody who has heard me testify to the House and Senate and during my confirmation knows I have a goal in my life of establishing the credibility of our acquisition process. I am determined to make that happen, and properly pricing a program is one way. We know there were too many programs underpriced. When fish comes to bait — when we get to the point of having to really determine the price of a program and we're going to have to rob one program to pay for another — I call it getting all the programs sick as a result.

Q

That's the genesis for your PBD [Program Budget Decision] on relative cost?

A

Yes, correct.

Q

$100 million for ships?

A

Right.

Q

Pete, I want to make sure I'm not mixing apples and oranges, and maybe this was sort of an inference that I leaped to incorrectly, but am I hearing or understanding right when you talk about incentives for the Services to create efficiencies and save money — does that also lead over into weapons programs? In other words, if the Army or the Navy or anyone can figure out a way to truly dispose of systems that really aren't efficient and economical and move ahead, then they're not necessarily going to suffer?

A

Yes. In fact, the Army actually gave up 25 percent of their artillery pieces to get Crusader — one of their biggest programs — because of its ability to fire more often. So they actually paid for Crusader with their force structure reduction.

We have set up a council called the Business Initiative Council that consists of the three Service Secretaries and me. We have a working group formed with the three-star level underneath to identify efficiencies within the Services. The role that I play is to look across all the Services and see what they're doing. We can comment on their best practices and we can suggest ideas or identify areas where they're not doing things very efficiently.

But the four of us have a goal that we want to achieve: to take $15 to $30 billion a year out of the infrastructure and overhead of the Department of Defense. Now it's going to take us awhile to get there, but we believe we have an important incentive to the Army, Navy, and the Air Force in that if they can find things they're doing that are not very cost effective and get rid of them, they can keep the money to pay for things they really want. That precludes us having to increase the budget to pay for those categories such as people. We can put money for people in the budget now. If we can find these savings, we won't have to increase the budget. The Services can put their own money into people. That's our goal, and that's the purpose of that Council.

Q

Can you do this infrastructure reduction without a BRAC [Base Realignment and Closure]?

A

I think we have to do a BRAC to get the infrastructure down, yes. But there are other things we can do without a BRAC. For example, there is some discussion within the Army on why DoD is involved with prisons. In fact, they just built a brand new prison at Fort Leavenworth. A question mark? Just maybe the Army can outsource that prison, and if it's outsourced and the Army manages to save some money, they can use it for other things — things the Army really does need such as family housing, infrastructure, and facilities.

We believe there's a lot of things like that yet to be identified. DoD has a lot of overhead for things in the United States, and people are used for jobs we probably could outsource. But we have to be fair and objective as to how we approach that.

The incentives before were simply not there. Any time the Services saved some money, the Comptroller took it. Here, with the commitment of the Secretary of Defense, if they [the Services] can find efficiencies, they get to keep the money to pay for things we want them to do; therefore, we will not have to add money to their budget to achieve it. So if we can get savings in the $15-billion-a-year range, we can start the process of doing the transformation that we really need to do.

We may fail. But we are optimistic at this point that we will not, because the incentives are there for the Services to pursue.

Q

You talked about the B-1 decision in terms of infrastructure, but [DoD Comptroller Dov Zakheim] was saying that these bases have other airplanes, and that they would not be closed.

A

That's true. I was speaking more from the logic of consolidating the B-1s onto two bases, putting an optimum number of aircraft on each base, and then using the savings for other areas. But yes, the C-130s, C-135s, and so forth would still be left on those bases.

Q

If you take everything that was said in the briefing, about 10 years from now DoD forces are going to be 85 percent of what they are today. [Considering] the amount of money we need to spend on O&M [Operations and Maintenance] and other readiness things, it's going to take a long time to get out of the problems that have accumulated over the years. That suggests that even the transformation budget — the ´03 budget — is not going to be hugely different from ´02. Is that a fair assumption?

A

That's probably premature. Because if we can do some things in ´02 — for example, if we do get some kind of decision on a base closure package — we can start the process in ´03, even though it takes up-front dollars. And if we can get some of these initiatives from the Services as we go through the next fiscal year, I'm going to be optimistic that we can start showing some savings that will offset the beginnings of these transformations.

But you're right. We've got to be able to show some savings to get some of this transformation as quickly as we can. Of course we're trying to do that as fast as we can. But there are lots of bills to pay. The Secretary's talked about medical care. That's a huge bill for the Department of Defense. We have to do more in family housing. We've got something like 160,000 substandard family housing units. We're trying to get on a trajectory to get those removed in the next decade. We're trying to get on a trajectory to get the infrastructure recapitalization rates back to something that's reasonable. We've got a lot of readiness problems, both in our facilities as well as the military.

We've made a major strike toward getting most of this done in FY02. We're going to have to continue it. It's a bill that doesn't go away. You don't buy infrastructure, fixing it one year and forgetting about it the next, because the problems continue on. We hope that the way we're going to increase the transformation budget is to increase it through savings — infrastructure savings or efficiencies that we can find — and hopefully we will be able to do that.

Q

I was just at the Air Force briefing on their budget, and they were saying it's [all about] people and readiness. That's really all they can afford right now. And most of the new money is because of [cost growth]. To stave off cost growth, sometimes you need to invest now to get in the pipeline. And if transformation is going to be as "transformational" as some people expect, one would think we'd need to start investing now. And there isn't a whole lot, at least in the Air Force budget, for [investment] right now. How are you going to contain those costs, *and aren't you taking somewhat of a gamble in waiting until '03?*

A

In the '02 budget, what you see is what you get. There are no major force structure reductions other than what we saw [in Secretary Rumsfeld's briefing] — the restructuring of the B-1 and phasing down of the Peacekeeper. Those are really the only force structure things decided.

"Areas where I think the United States has a tremendous advantage are space and information surveillance and reconnaissance. We've got enormous leverage of our abilities in information operations, information warfare, and information dominance... No adversary can match us. I think that's an advantage we have for all of the Military Services."

A lot of things are still on the plate as we go through the QDR [Quadrennial Defense Review] process and get ready for FY03. If we see things that result from the QDR such as no longer needing the force structure, we can make those adjustments both for '02 as well as getting ready and offsetting anything for '03. This is a continuum. It doesn't stop at any one place.

I'm hoping, again, somewhat optimistically, that our BIC — the Business Initiatives Council — will be able to identify some things, and the QDR will begin to identify some things maybe we don't need. Everything is on the plate at this point in time.

We were not prepared to make any of those decisions for '02 because we don't have all of our [defense strategies] formalized; the QDR is really going to give us the direction for the next step.

Q

Do you share the view of a "train wreck" in TACAIR [tactical aircraft] that's been talked about now for so long? That basically we can't afford the three programs [F-16, F-22, JSF], or the three plus V-22?

A

I think I'd take the V-22 out of the TACAIR equation at this point in time. That program is being looked at, restructured, and is getting back into a test program that can get the reliability and maintainability up. So let's put that in one sense.

The problem with TACAIR is that it's aging too quickly. And in spite of the F-22 and the JSF [Joint Strike Fighter], it's still aging. The F-22 helps bring the average age of the air superiority fighter down, but we've got TACAIR aging overall. We're not buying enough aircraft to keep the average age where we'd like to keep it, which is somewhere around a half-life, like 10 to 15 years.

So I wouldn't call it a train wreck. We've got an aging problem. And if we look at the aging problem, the only way to fix it is to get rid of the old stuff or to buy new stuff, and in some cases we've got to do both.

So we are looking at the whole TACAIR issue as part of the QDR. What is the force size we need to have? Once we get the force size we need to have, we can make some kind of determination on whether or not we want to get rid of some of the older aircraft, thereby allowing the newer aircraft to come in. Here's what we have to do: determine the role of the tactical air force, what missions we want it to perform, and the mix of aircraft we need. I don't call it a train wreck — it's an aging problem.

Q

Can I follow up on the same topic?

A

Sure.

Q

Joint Strike Fighter specifically — the budget was pretty much seen as coming in where it was supposed to come in. Your thoughts — does that budget allow you to do anything but a "winner take all," and would you be willing to change strategies? Willing to find money to do that?

A

Our plan right now is that we're going to down-select around the first of October. We have to think about the industrial base implications of that. We've not made any changes to our plan right now. Both airplanes as you know, are performing exceptionally well. Over the weekend, in fact the last couple of days, they [Boeing and Lockheed Martin] have done hover tests on both aircraft, which is a major technological breakthrough — both takeoff and landings — in the vertical takeoff mode.

So the cost of the program still looks okay. The schedule of the program still looks okay. The performance is right on track. So right now we're heading toward the plan that we've laid out for ourselves, and that's down-select to the "winner take all" on the first of October.

As you know there's a tremendous international implication in this program as well, the U.K. [United Kingdom] actually being part of the team, with other countries considering joining the team. Of course they're a little worried about the future and they're a little hesitant until they get a different direction. And hopefully by this summer, we will have that direction. With our QDR process done, we'll have a handle on where we're going in TACAIR, and we can then lay out a plan to get there.

Q

Joint Strike Fighter — there's been this cottage industry in Washington saying essentially, kill the Joint Strike Fighter. If I hear *you, the decision's been made to somewhat go forward with it?*

A

I didn't say that. I said we will continue with the program until we have a decision. The decision is really based on how the QDR comes out. But in the meantime, the program is proceeding. There's no reason to turn it off at this point in time because there's no rationale to turn it off.

Q

What must change between now and the end of the year to possibly change that conclusion?

A

If the QDR, for example, decided that the force structure is significantly smaller. If the QDR decided that the threat to the tactical air force was significantly different. Those are the kind of things that might turn it off.

Q

Is the QDR where you expect to come up with the numbers on the F-22?

A

Yes. When this Administration came on board, the QDR is the first time that we have had to go fix some problems immediately such as the FY01 supplemental. We had to revise and amend the FY02 budget submission that had been sent to the Congress to reflect the new thoughts and ideas of this Administration in terms of both the readiness account as well as any new things we wanted to pursue. Ballistic missile defense is obviously one of those.

So we've been focused on that. FY03 is the first time we've taken the strategy and integrated it completely with the budget. So QDR is the result of all these strategy reviews, transformation studies, and the budget process, which is the normal bottom-up process that goes on in the Military Services.

The QDR has been given out to OSD and the Military Departments. They're coming back in with their analysis. Once that analysis is done, the defense planning guidance will be formulated. It goes back to the Services, where the budgets now get built from the bottom up.

So now we will have a strategy, QDR defense guidance, and a budget that is fully integrated. And ´02 is the first time that's going to come together.

Q

Secretary Rumsfeld and other political appointees have said that they were surprised by some of the problems. Were there any pleasant surprises, for example, that what had been going on for the last eight years wasn't totally irrational, and some of the programs — some of the force changes — actually made sense; that they were just underfunded?

A

Yes. I would think there are a lot of things in information technology and space, for example. We found the space program, while needing a lot of things, is generally in fairly good shape. Some of the technology advances we've had in directed energy, in nanotechnology, and UAVs [unmanned aerial vehicles], for example — there's some very good work underway.

On the morale of the military — in spite of the fact that they're overworked and they endure deployments and unreasonable things, you will never find any finer people in the world than the U.S. military. As I think about it, I'd put that on the top of the list. They're magnificent — and we ought to be proud of them.

Q

There's a lot of talk about the "silver bullet" approach, [one-shot problem solving]. Philosophically, what do you think about that? Generally, do you think that's an approach one can live with, or do you think that's a pretty dumb way to do business?

A

I don't think you can point to any *one* thing as a silver bullet. Areas where I think the United States has a tremendous advantage, however, are space and information surveillance and reconnaissance. We've got enormous leverage of our abilities in information operations, information warfare, and information dominance. There's no country in the world that can match us. No adversary can match us. I think that's an advantage we have for all of the Military Services. If you look at undersea warfare, no Navy in the world can match our Navy. There are very few nations that can match our air-to-air capability. UAVs and unmanned combat air vehicles — the new technology is going to give us tremendous leverage.

Our industrial base is also a tremendous capability. There's no nation in the world that can match us in any of our industrial capacity. Our training — the ability to train and exercise our troops — no other country can match. We have an existing global command and control structure. No nation in the world has that. Unified CINCs [Commanders in Chief] — basically we have that, in regions all over the world.

We have the capability to go long range and strike anywhere in the world in a few hours. We can deliver any equipment, anywhere in the world in a few hours with our airlift capability. No other nation has that.

Just look at our space program. Surveillance — our space surveillance system is basically a global space surveillance capability. No other nation in the world has anything like that.

You put all that together, we've got a tremendous advantage, so it's not in any one thing. If you look at these things one by one, they're all silver bullets — and they're all unmatched. I'm glad it's that way.

Q

What's the status of your review of long-range strike?

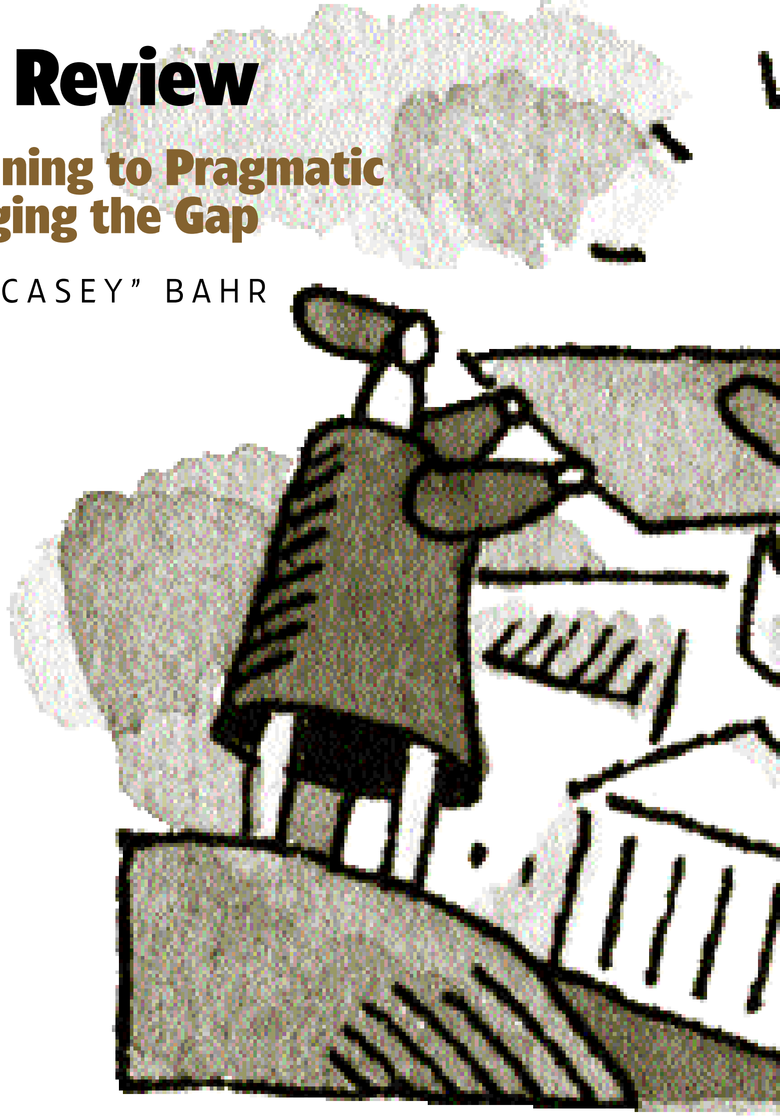
A

As part of the QDR there is a long-range strike study underway to fix the current B-2 and B-52 force. There are about six or seven options that are being looked at for long-range strike and that's in the defense equation.

Integrated Baseline Review

From Optimistic Planning to Pragmatic Management — Bridging the Gap

WALTER E. "CASEY" BAHR



The Milestone Decision Authority (MDA) for a typical DoD developmental program uses a document called an Acquisition Baseline Agreement (ABA) to establish a contract with a program manager for cost, schedule, and performance thresholds. The ABA may *bound* a program; more often, however, a cost-plus contract with industry *defines* the program.

Frequently, the contractor-government team's productivity fails to meet the performance goals of the contract, ultimately breaching the program baseline. The breach can be the inevitable outcome of overly optimistic goals, unforeseen external influences, requirements creep, or mismanagement. Typically, it results from a combination of the four.

Until some future acquisition initiative successfully alters the acquisition process for developmental programs, I suggest we find a way to transition from optimistic planning to pragmatic management. I believe that the MDA can bridge the gap between the optimism of the ABA and the reality of the contract through the ownership and judicious use of the information resident in the Integrated Baseline Review (IBR).

Where Does Program Optimism Come From?

Any system that unites unlimited wants (user requirements) with competition for limited resources (DoD budget) yields optimism. Almost everyone in the acquisition system puts pressure on programs to deliver their product better, faster, and cheap spective, users w possible, resour want the most sy they can get for money they allo cate, and budgeters want to allocate only what is necessary to execute the contract.

Contractors have t own pressure for o Even when DoD a competitive contra on best value, co know cost will b the selection crit derstandably, co pare their cost sub consistent with t petitive environme often than not, a tor's profit potenti duction phase tha phase. It can mak contractor to bid at or near cost during the development phase to secure the more lucrative production contract.

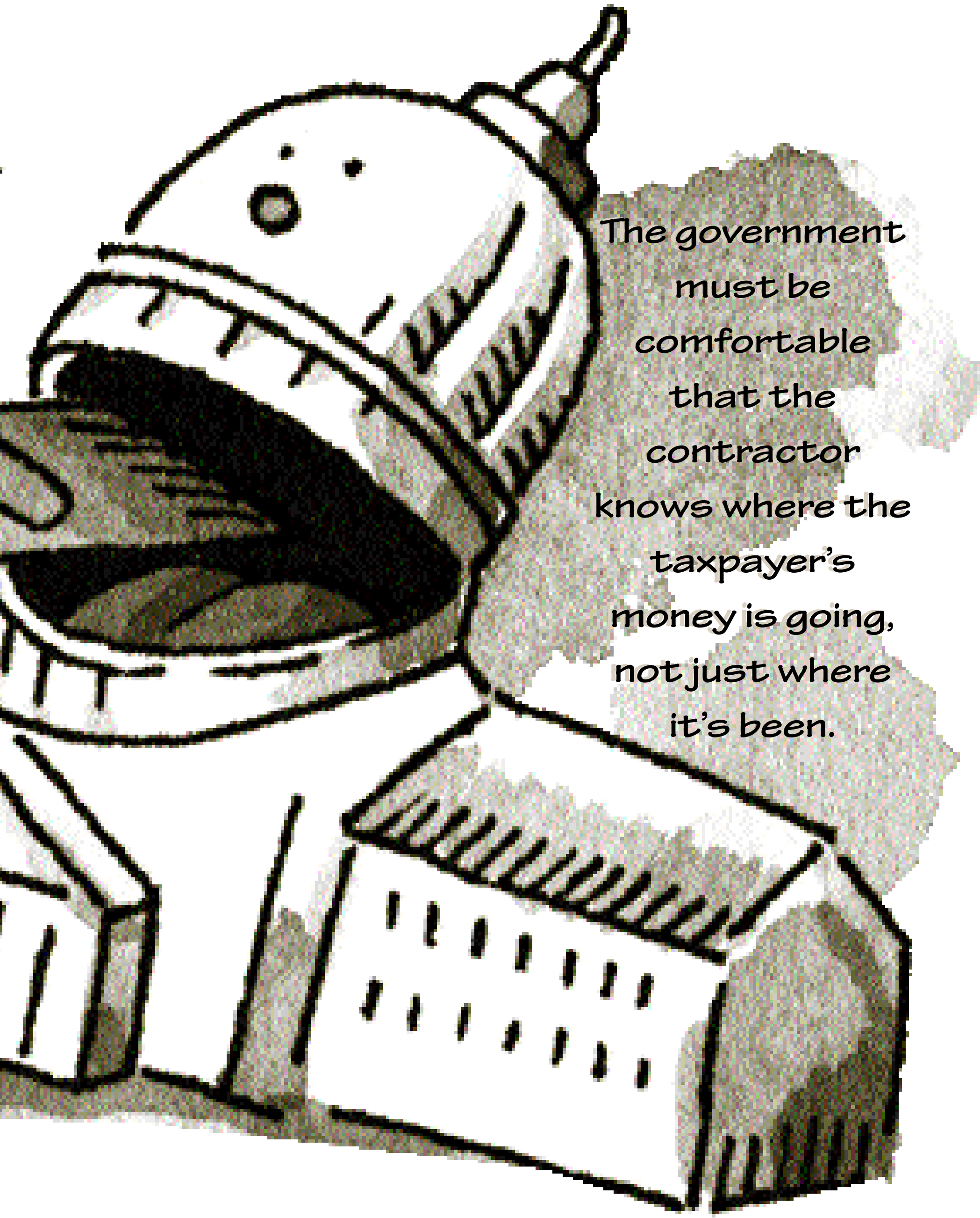
Even after the government selects a winning contractor, the system often encourages program managers and contracting officers to find areas of additional savings during contract negotiations rather than highlight potential funding shortfalls. As a result, our programs begin with requirements that challenge the existing state of the possible and execute at a funding level below the contractor's original estimate.

challenge the forces of optimism. It's at the IBR, after the contract has been signed and the budget obligation identified, that we could and should admit to ourselves what we bought. We might not like what we find, but without a realistic baseline, history suggests the contract specification and statement of work, not cost and schedule, will dominate program execution.

What We Bought is Effort

We have signed a contract in which a contractor has committed a pre-ordained set of resources in pursuit of contract

***Bahr** is the Low Observable/Counter Low Observable (LO/CLO) program manager, Office of Naval Research, Arlington, Va. His career includes 25 years' experience as an engineer, engineering manager, and E-2/C-2 program manager at Naval Air Command.*



The government must be comfortable that the contractor knows where the taxpayer's money is going, not just where it's been.

management approach, and manning level. At the IBR, the contractor lays out the schedule, anticipated resources, and management reserve. Resource allocation should give rise to expected levels of productivity across all elements of the project. The contractor should be able to cite the manhours per drawing, software lines of code per day, material costs, Quality Analysis allocation, anticipated scrap or rework rate, or any other factor that contributed to the estimate. The IBR should reveal how the contractor intends to measure technical performance as the system matures.

From a management perspective, the quality of the initial assumptions matters less than an understanding of the factors behind those assumptions. The contractor should articulate a process to monitor and adjust those factors over time. The true nature of any buy-in should become apparent as well as any unrealistic schedules or levels of productivity. The IBR should baseline expectations as well as disclose how the contractor intends to manage costs. It should identify the level of Work Breakdown Structure that the contractor will be collecting, cost data, the tie to the contractor's detailed schedule, and areas of responsibility for the cost account managers. The government must be comfortable that the contractor knows

re the taxpayer's money is going, ust where it's been.

IBR is Too Important e Left to the PM

use the IBR validates the detailed for contract execution, I believe it ld belong to the designated MDA r the program. The MDA should lead the program office IBR team, providing independent experts experienced not only in the IBR process but also in the subject matter of the contract. If all involved are get a true sense of program risk, the needs to do everything possible sure a quality IBR. From the results quality IBR, the team should be able sess the likelihood that a given set sources and time can produce the ired product. In that way, an IBR assess the level of optimism, and aluate the reason for the optimism.

he program office needs to participate in the process, as they must man- and report from the knowledge d at an IBR, but the program of- should not filter the reality of the mation. They, after all, were the re- nts of all the pressure that con- ted to the current state of optimism cted in the contract. Further, a typ- rogram office lacks the experience sure a quality IBR.

CAT I program manager might be d to manage a handful of cost-plus acts over the entire life of the system. Many program managers complete their entire tours without ever conducting a single IBR, while others may lead one or two. By providing subject matter experts, the MDA can develop consistency in the IBR process, improve the quality, and provide focused training to the PM team.

Together, the program manager, the MDA, and the resource sponsor can develop meaningful metrics for monitoring contract performance. The program office can monitor progress in targeted risk areas, develop alternatives, anticipate early the need for more time and money, or even restructure the expectations. By owning and documenting the IBR, the MDA would facilitate the transition between program managers, between versions of DoD 5000, and even between MDAs.

I'll admit that a realistic IBR runs the risk of exposing wildly optimistic programs. In this case, the IBR could call into question the propriety or even the legality of awarding a given contract at an inadequate funding level. Today our acquisition system permits us to "just get it on contract and we'll fix it in the out-years." An independent IBR would let more people in on the secret. But, if we do not seek the truth, we should not be alarmed at the consequences (baseline breaches).

Yes, It's a Requirement, But at What Price?

Once we sign a contract, neither the contractor nor the government program office can afford to think only in terms of meeting the specs. The government must begin to see every performance criteria in terms of the cost and schedule. The contractor should manage the contract within the bounds of the allocated resources. The government should be responsible for allocating additional resources. Too often we allow the contractor to pursue contract performance goals far beyond their original estimate under the guise of meeting specs. Asking a contractor to resist the temptation to satisfy the government's technical requirements is like asking a casino owner to restrict their patrons' desire to place a bet before they've reached the limits of their credit cards. We enter into contracts to satisfy user requirements, but not at any price. The government, not contractor execution, should decide how much additional funding to apply in the pursuit of any particular spec.

To an accurate baseline we need to add a rock-solid Earned Value Management (EVM) system. Now the program manager has the tools to manage the contract, not just monitor it. I did not say the program would stay within cost and schedule with proper management. Unrealistically optimistic programs are unreasonably optimistic; shortcuts have a way of becoming longcuts; and, inventions don't always happen on schedule. Contractors have some control of overhead — general and administrative — and corporate processes, but at the project level productivity tends to be what it is. What we *can* do with proper insight is decide when and if to add funding, reduce scope, or adjust priorities rather than just document them.

EVM is the Tool

With a good EVM system and a well-understood baseline, anything that occurs that alters the contractor's projected expenditure of resources can be analyzed in terms of its impact on cost and schedule. EVM becomes a living reality check. Even at the IBR, neither party knows precisely what they have agreed to do. Once a contract has been signed, the participants spend the next several months defining the detail of the contract. Hardware goes from initial design, through a Preliminary Design Review (PDR), and then a Critical Design Review (CDR). It's not until CDR that the program office and the contractor know the scope of the contract.

Software has a parallel process. On some complicated programs, CDR can be 18 months to two years after contract award. How is it possible to know if the program described at CDR can be executed within the constraints of a contract signed over a year earlier unless both parties know how resources were originally allocated? How can they adjust expectations unless they understand how many resources were expended getting to this point? How can they properly budget for the remaining work unless they know how productive they have been to date? Actions at a PDR, CDR, or design review that change the contractor's estimate of work should be articulated in terms of cost and schedule.

DoD acquisition training warns us to avoid making substantive changes to any contract without proper contract modification. Some of our more spectacular baseline breaches can be attributed to unmanaged requirements creep. I don't want to minimize this danger, but simply point out that defining the contract can have the same effect as requirements creep if the refined definition alters the baseline assumptions

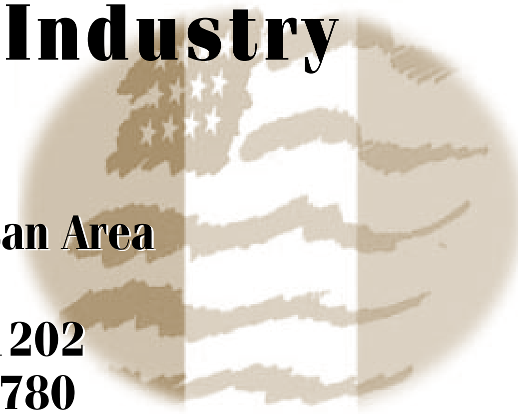
So What's the Bottom Line?

DoD's MDAs need to understand the true nature of their contracts if they expect program mangers to control costs. Once the contract has been signed, cost, schedule, and performance thresholds should become goals to be monitored, adjusted, and traded, if necessary, throughout the life cycle of the contract. With a validated IBR, MDAs can tailor their baseline agreement for the program to set not only thresholds, but also meaningful metrics. Rather than simply covering the bills, with these tools DoD can decide how much it is willing to invest in any of its weapons systems.

Editor's Note: Bahr welcomes questions or comments on this article. Contact him at *Walter_Bahr@onr.navy.mil.*

Asking a contractor to resist the temptation to satisfy the government's technical requirements is like asking a casino owner to restrict their patrons' desire to place a bet before they've reached the limits of their credit cards. We enter into contracts to satisfy user requirements, but not at any price.

France-U.S. Defense Industry Business Forum II



Dec. 10-12, 2001

Greater Washington-Baltimore Metropolitan Area
Renaissance Harborplace Hotel
202 East Pratt Street • Baltimore, Md. 21202
Phone (410) 547-1200 • Fax (410) 539-5780

Registration
View/print the registration form at *http://register.ndia.org/interview/register.ndia?~Brochure~2990*

Business to Business Meetings
To be conducted Dec. 10-11, 2001

Table Top Display Hall
To be accessible December 10-11, 2001

Objective
The globalization of national economies and the need to improve interoperability among allied forces are strong incentives for nations to seek forms of cooperation that are robust, mutually beneficial, and pragmatic. That cooperation must take place among national governments, among their defense industries, and among the suppliers to those industries. The United States and France each are home to leading armaments and commercial industries. Thus, it is natural that both actively seek ways to expand existing business links and create new ones.

The second French/U.S. Defense Industries Business Forum will continue the work started two years earlier when senior officials from the two governments and senior executives from large, medium, and small companies in both countries came together in Toulouse, France, for three days of discussions. Building upon the accomplishments of the first, the second Forum will seek to further promote transatlantic alliances and partnerships between French and U.S. defense firms, including prime contractors, medium and small suppliers. The Forum will:

- Provide an understanding of business operating environments in the two countries and of specific defense business opportunities of possible interest to their firms.
- Describe the various initiatives being undertaken by the French and U.S. Governments to reform their respective defense procurement procedures and export control systems. Many of the reforms could foster increased transatlantic cooperation and increased transatlantic business.
- Provide numerous opportunities for face-to-face meetings between French and U.S. executives, thereby laying the groundwork for future, focused discussions.

Co-Organizers
Aerospace Industries Association (AIA)
Association of the United States Army (AUSA)
Comite Richelieu
Groupement des Industries Francaises Aeronatiques et Spatiales (GIFAS)
Groupement Industriel des Constructions et Armements Navals (GICAN)
Groupement des Industries Concernees par les Materiels de Defense Terrestre (GICAT)
Groupement des Industries de Telecommunications et d'Electronique Professionnelle (GITEP)
Ministry of National Defense
Navy League
Office of the Under Secretary of Defense (Acquisition, Technology and Logistics) (OUSD-AT&L)
Office of Defense Cooperation (U.S. Embassy-Paris)

For more information on the International Committee, contact the Director, Jennifer Burnside, at: *jburnside@ndia.org.*

Germany Hosts Thirteenth Annual International Acquisition/Procurement Seminar — Atlantic

Restructuring, Consolidation, Cooperation Spark Lively Exchanges at 2001 IAPS-A

DON HOOD

The week of June 25 through 29 marked the successful presentation and conclusion of the 13th Annual International Acquisition/Procurement Seminar – Atlantic (IAPS-A).

Sponsored by the International Defense Educational Arrangement (IDEA), this year's IAPS-A was hosted by the Bundesakamie für Wehrverwaltung und Wehrtechnik (BAkWVT), translated as the Federal Academy of Defence Administration and Military Technology in Mannheim, Germany. Gathering together over 100 acquisition professionals, participants learned about and discussed current issues and impending changes in national acquisition and procurement policies as well as the latest trends in acquisition education.

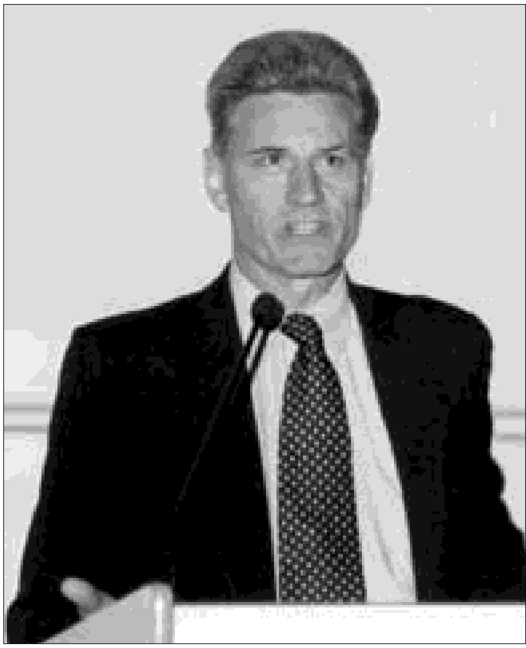
Peter George, President of the BAkWVT, provided the official welcome and opening remarks. Participating nations were the four IDEA member nations – Germany, France, United Kingdom, and the United States, plus Australia, Canada, Italy, and Singapore. The representatives of the other IDEA member nations – Dr. Gertrud Humily, Executive Director, International Education,French Procurement Agenc; Frank Anderson, President, Defense Acquisition University, United States (DAU); and Brig. Will Cook, Director of Studies, Royal Military College of Science, United Kingdom (UK) – welcomed all the participants of this year's event.

> **"Successful [seminar]. Met two new contacts – now we can do business."**
>
> —AIR FORCE MAJ. GEN. CLAUDE BOLTON

This year's Seminar focused on the acquisition and procurement relationship between the United States and OCCAR, or Organisation Conjointe de Coopération en matière d'Armement, which is the European Nation Central Procurement Agency; Industrial Mergers and Cooperation; Defense Capability Initiatives (DCI); and Barriers to International Cooperation.

The National presentations were well received, with the United States focusing on the views and expected priorities of the new Bush Administration.

Hood is a Professor, Defense Acquisition University, Fort Belvoir, Va.



Dr. Jörg Kaempf, National Armaments Director, Germany.

The German, French, and UK speakers discussed the fundamental restructuring of their respective procurement systems, their continuing industrial consolidation, and corporate cooperation.

Speakers, Presentations, Discussions

Dr. Jörg Kaempf, National Armaments Director, Germany, delivered the Keynote address. He began his remarks with an outline of five major efforts underway that will focus on Bundeswehr operations reform, within the framework of the DCI.

Photos courtesy IAPS–A

Participants at the 2001 International Acquisition/Procurement Seminar — Atlantic.

From left: Don Hood, Professor, Defense Systems Management College, United States; and Brig. Will Cook, Director of Studies, Royal Military College of Science, United Kingdom.

Dr. Klaus Von Sperber, OCCAR, Germany, presented "The Role and Progress of OCCAR." His presentation, as well as the ensuing panel discussions, sparked lively interchange between OCCAR, European Union, and U.S. spokespersons on Workshare, Competition, and "Fortress Europe-Fortress America" impressions or realities.

IDEA member representatives' discussion on Industry Cooperation Patterns also generated considerable interest. Jean-Paul Bernard, Vice President, Europe Military Engineer, Snecma Moteurs, France, addressed five potential arrangements between companies and corporations:

- Mergers – Single (All Programs) Entity (Use of Programs)
- Joint Company
- Joint Program Management (Single Program)
- Leader-Follower (Management and Technology Shared Contribution)
- Leader-Preferred Subcontractor Relationship (Revenue Sharing)

Karl D. Horn, Vice President and Country Manager, Raytheon International, Inc., Europe, emphasized that alliances between companies are a fact of life, dictated by economic realities that override political considerations. He also highlighted the different views on technology transfer between the United States and its European allies.

Trevor Taylor, Head of Department of Defense Management and Security Analysis, UK, compared collaboration by project, usually the U.S.-preferred arrangement, to the more lasting multinational business arrangements and joint ventures preferred by European industry. He further stressed the need for Import/Export Processes' harmonization between the industrial nations.

Overall, and in light of European mergers and acquisitions, a number of companies are emerging that will rival and challenge the big three U.S. defense industry leaders. The Ministries and Departments of Defense will need to develop policies and processes for contracting with, and procuring from, trans-national industries.

Other sessions, obviously enjoyed by presenters as well as delegates, touched on subjects ranging from Centralized Software development/procurement and DCI, to Lessons Learned and Cost Benefit Effectiveness Methods (which were discussed in depth).

Lt. Col. Mike Phelps, Royal Military College of Science, UK, concluding his National Presentation, discussed the results of a major review and some fundamental changes being made to the Australian Acquisition process.

The Asian-Pacific update, given by Dr. Stefan Markowski, Australian Defence

Force Academy, provided a detailed analysis of the regional/country defense expenditures as a percentage of Gross Domestic Product (GDP). While the amounts are small when compared to the GDP of the United States, they are stable, and in some cases are increasing with the regional recovery from this year's "meltdown" in technological stocks being stronger than anticipated.

Comparative Acquisition Handbook

Also at this year's Seminar, the IDEA-sponsored *Comparative Acquisition Handbook* development and publication efforts led by U.S. representative, Tony Kausal, DAU Air Force Chair, were reviewed briefly at the start of the program. Later in the week, Kausal also discussed and outlined future update and publication timetables for the handbook. (Within hours of the opening session, over 100 copies of the Handbook – now in its 4th printing – were made available to the participants at the Seminar.)

Authored by Kausal; Peter Roller of the German Federal Academy of Defence Administration and Military Technology; Taylor; and Humily, the Consensus was that the book should continue to be published in hard copy form, updated and reissued every two to three years, and be available on the DAU Web site for review and intermittent update. The authors also solicited volunteers to help review, revise, and edit future editions.

During the final panel session, representatives of four nations discussed changes in their programs. Participating in the final panel were: Roller; Michael Austwick, Defence Procurement Agency, UK; U.S. Professor Don Hood, Defense Systems Management College; and Humily.

Austwick spoke on reviewing, consolidating, and reassessing the UK's educational needs, while Roller talked about totally revamping Germany's program (Note: Germany's first new offering started July 2, 2001).

Humily said that since France opened its system to, and encouraged more international students, many graduates of the top schools are opting for careers in industry rather than government. Hood stressed the increasing need and increasing numbers of students (replacements) needed to fill the void that will be created when large numbers of experienced personnel retire during the next five years. Distance and online learning programs were discussed along with social, ethical, and employment is-

From left: Frank Anderson Jr., President, Defense Acquisition University, United States, presenting Peter Roller, Federal Academy of Defense Administration and Military Technology, Germany, a memento.

Signing of the Atlantic Charter. Seated from left: Anderson; Cook; Peter George; President of the Bundesakamie für Wehrverwaltung und Wehrtechnik, Germany; and Dr. Gertrud Humily, Executive Director, International Education, French Procurement Agency. Standing: Hood.

sues. The panel consensus was that these programs have their place, but they may not be the answer if the goal is to improve students' decision-making skills.

Recurring themes in all the national defense acquisition education systems were the need to go from program inception to equipment fielding faster and cheaper, with fewer government employees; and the continued privatization of formerly government functions.

IDEA Board of Directors Convened

On Wednesday, June 27, the IDEA Board of Directors convened. Their agenda items included formal signature of the reformatted Charter, a review of the functional content of the Seminar, and recommendations for future seminars. The Board, sensing the need for a theme-structured approach, recommended that the Seminars, in conjunction with the National Presentations, also include a theme selected by the IDEA member nations such as Contracting, Logistics, Export Licensing, or Offsets.

Delegates would be encouraged to submit comments and recommendations, and with the aid of case study materials in a workshop format, would review the issues raised in the case study materials and record their conclusions. The recorded conclusions would then become a "lessons learned" part of the *Comparative Acquisition Handbook*.

Although extremely busy, the Seminar was not all work. After hours, the delegates were formally welcomed to Mannheim, at a reception hosted by the Deputy Lord Mayor, in the City's Art Museum. An evening walking tour of the ancient city of Speyer was organized, and participants enjoyed an informal dinner at the BAkWVT facilities.

Next Year – France

The 14th Annual International Acquisition/Procurement Seminar – Atlantic will be hosted by CHEAr, the Centre des Hautes Études d e l'Armement, in Paris, France, during the last week of June 2002. The host will determine the Seminar theme with IDEA member concurrence. Watch for details of the Seminar in future issues of *Program Manager.*

Editor's Note: The author welcomes questions or comments on this article. Contact him at *don.hood@dau.mil.*

U.S. Office of Personnel Management Individual Learning Account (ILA) Pilot Program

The Federal Training Technology Task Force was established Jan. 12, 1999 by Executive Order 13111, "Using Technology to Improve Training Opportunities for Federal Government Employees." The Task Force was charged with developing a policy to "make effective use of technology to improve training opportunities for Federal Government employees." The U.S. Office of Personnel Management (OPM) invited agencies, including field and regional offices, to participate in an Individual Learning Account, or ILA Pilot Initiative. The OPM invitation and ILA guidance asked agencies to develop ILA plans, participate in piloting ILAs, and assist the Task Force in evaluating the effectiveness of ILAs for federal workers. Agencies, within the parameters provided in the guidance, were encouraged to structure their pilots using innovative models that best met their organizational needs.

Agencies are enthusiastic about this new development tool. Anecdotal feedback from employees and management indicate that ILAs provide a different and advantageous approach to training and development. The agencies overwhelmingly recommended the implementation of ILAs and continued OPM guidance and leadership in this effort. The pilot demonstrated that ILAs are indeed a feasible and practical approach to the 21st Century workforce needs of the Federal Government.

A report on the Individual Learning Account Pilot Program is now online at *http://www.opm.gov/hrd/lead/ILA/ilarpt.htm#Exec.*

ANGELA STYLES

New Administrator for Federal Procurement Policy

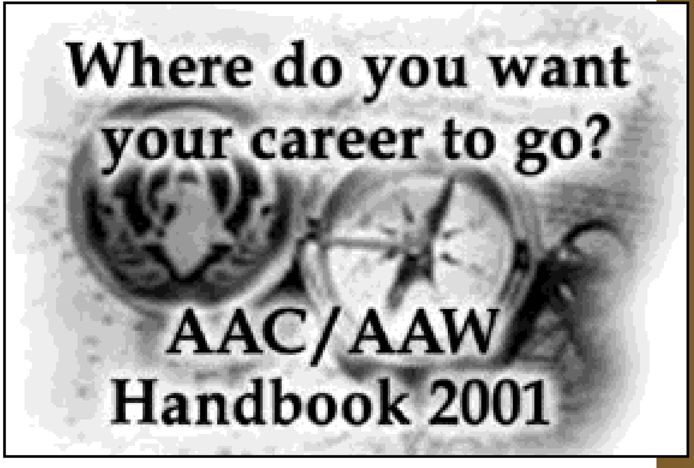
On April 23, 2001, President George W. Bush nominated Angela B. Styles to be the Administrator for Federal Procurement Policy in the Office of Management and Budget (OMB). The United States Senate confirmed her nomination by unanimous vote on Thursday, May 24, 2001. Prior to confirmation, Styles was Counselor to the Director of OMB. Styles is an active member of the American Bar Association's Section of Public Contract Law where she recently served as Chair for the Legislative Coordinating Committee, and is a former Vice Chair of the Accounting, Cost and Pricing Committee.

She received a Bachelor of Arts degree, with distinction, from the University of Virginia, and graduated, with honors from the University of Texas School of Law, where she was an Articles Editor for *The American Journal of Criminal Law*, and was awarded the Order of the Coif distinction.

Before entering the practice of law, Styles worked in Washington, D.C. as a legislative aide for Congressman Joe Barton and former Governor Will P. Clements in the Texas Office of State-Federal Relations.

Army Acquisition Corps/Army Acquisition Workforce (AAC/AAW) Handbook 2001

Career development as a mission is now an integral part of the Army Acquisition Corps philosophy. Army acquisition leaders and professionals must take charge of their careers by understanding the various requirements for members of the acquisition workforce. The *AAC/AAW 2001 Handbook* provides Army acquisition leaders and professionals the basic information needed to plan their careers and take advantage of the unique opportunities available to them as acquisition professionals.



The Handbook may be downloaded from the Army Acquisition Corps Home Page at *http://dacm.rdaisa.army.mil/handbook/index.html.*

Thomas P. Christie
Sworn in as Director of Operational Test and Evaluation

Thomas P. Christie was sworn in July 17 as the director of Operational Test and Evaluation. In this capacity, he serves as the principal staff assistant and primary advisor to the Secretary of Defense on testing of DoD weapon systems. He will prescribe policies and procedures for the conduct of operational test and evaluation, live-fire test and evaluation, the composition and operations of the major range and test facility base, and the configuration of the test and evaluation infrastructure within the Defense Department. As he performs these duties, Christie will issue guidance to and consult with Pentagon leadership.

Prior to this position, Christie served for nine years as Director of the Operational Evaluation Division at the Institute for Defense Analyses, a federally funded research and development center. Christie was responsible for independent analyses of more than 200 major DoD test and evaluation programs.

Christie has previously served at the Department. He was Director, Program Integration, Office of the Under Secretary of Defense (Acquisition); and served in two separate positions in the Office of the Assistant Secretary of Defense (Program Analysis and Evaluation), first as Deputy Assistant Secretary of Defense/Deputy Director (General Purpose Programs), and then Director, Tactical Air Division.

Prior to his DoD service, Christie served at the Air Force Armament Laboratory, Eglin Air Force Base, Fla., as chief of the analysis branch and later as the director of the Weapon System Analysis Division. Prior to these assignments, Christie began his professional career as an analyst in the Ballistics Division at the Air Proving Ground Center and at Eglin Air Force Base.

Christie graduated from Spring Hill College with a bachelor's degree in Mathematics and from New York University with a master's degree in Applied Mathematics. Over the years, Christie has received numerous awards and citations for his outstanding performance, including the Presidential Rank Distinguished Executive Award (1983); the Presidential Rank Meritorious Executive Award (two awards — 1980 and 1987); the Department of Defense Distinguished Civilian Service Award (four awards — 1979, 1981, 1983, and 1989); and the Air Force Scientific Achievement Award (two awards — 1965 and 1970).

Editor's Note: This information is in the public domain at *www.defenselink.com.*

Under Secretary Aldridge Briefs Media on Base Closure Process

Announces Efficient Facilities Initiative (EFI)

Under Secretary of Defense (Acquisition, Technology and Logistics) Edward C. "Pete" Aldridge Jr. spoke at the Pentagon Aug. 2 on the Department's proposed legislation for an additional round of base closures.

I must tell you the last thing I want to do is stand up here before you and tell you that the President, the Department of Defense, and Members of Congress are going to have to take some actions that could affect bases and facilities and thousands of lives around the country. However, the people elect the President, they elect the Members of Congress, and they appoint the Secretary of Defense and people like myself to be good stewards of the taxpayers' dollars.

But this is really more than a cost-savings exercise. We're now operating somewhere between 20 to 25 percent more infrastructure capacity than we need to meet the operational support and training needs of our forces. We've simply got to do something about this.

Legislation to address this problem is being forwarded to the Congress before their recess this week. It is called the Efficient Facilities Initiative [EFI]. It is legislation that will allow the Department to reduce infrastructure by closing, consolidating, or realigning bases and facilities in the United States.

There is a collateral effort, not requiring legislation, that will address the excess infrastructure outside the United States.

The Secretary of Defense signed a memorandum yesterday to the Chairman of the Joint Chiefs of Staff requesting him to direct the geographic combatant commanders to prepare overseas basing plans. Those plans will be due six months after the completion of the QDR [Quadrennial Defense Review].

The EFI effort will address all U.S. military installations. Recommendations for closure or retention will be based upon future force structure needs to meet our strategy, and will emphasize retained military value. There will be savings after the initial start-up costs from this effort. These funds can be used to better support our people, modernize our forces, improve the remaining infrastructure, and start the transition to the future.

EFI will encourage a cooperative effort between the President, the Congress, the Military Services, and the local communities to achieve the most effective and efficient base structure for America's armed forces for that purpose.

Let me now turn to some specifics.

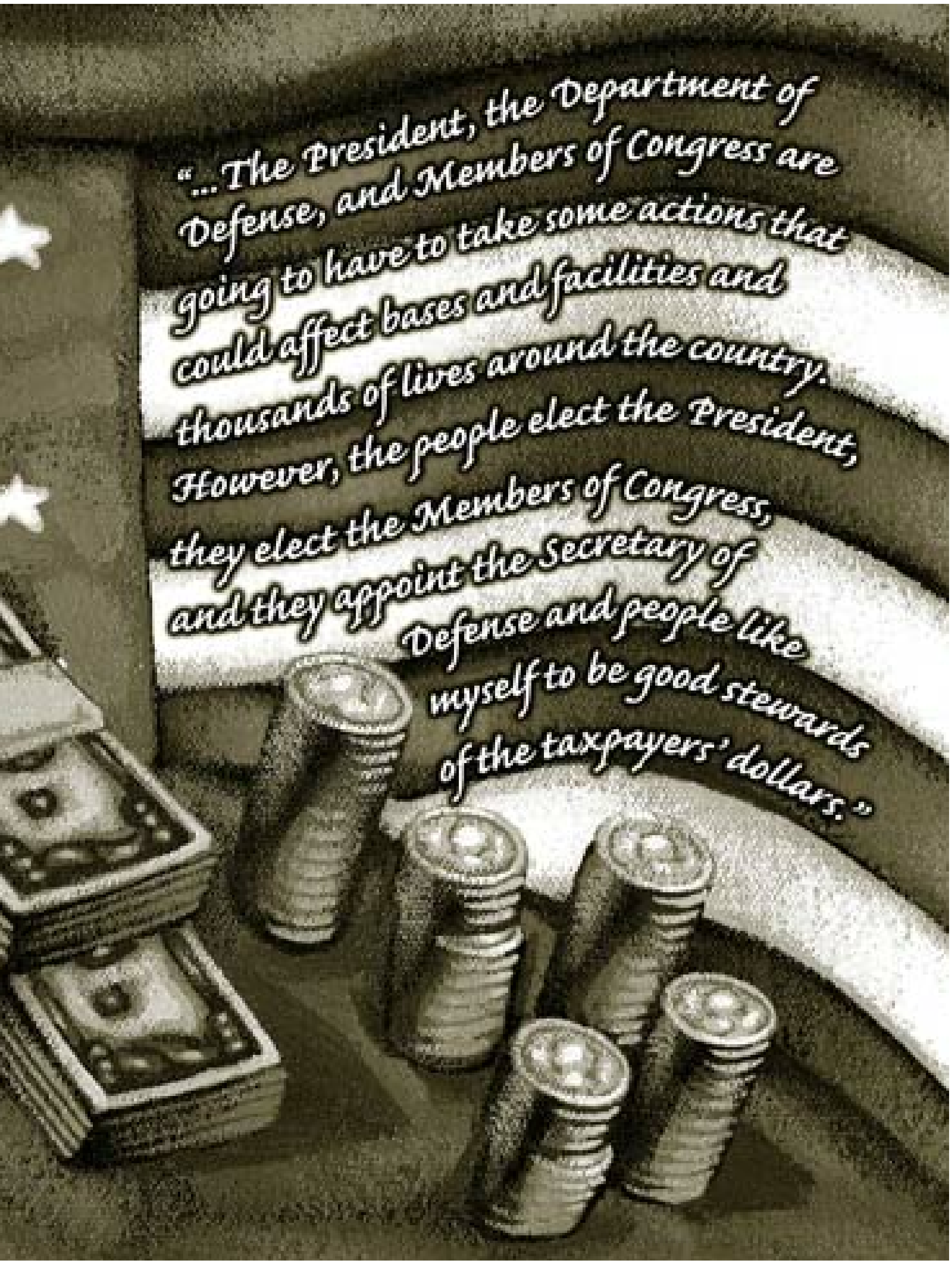
After passage of the legislation for fiscal '02, the Secretary will task the Department to begin a comprehensive review of DoD installations, emphasizing military value. And he will make recommendations for a revised infrastructure plan to an independent EFI Commission by March of 2003. The Commission will review these recommendations and send their own recommendations to the President by July 2003. The President will have two weeks to accept or reject the Commission's recommendations on an all-or-none basis. If rejected, the Commission shall provide revised recommendations back to the President by mid-August of 2003. If the President rejects the revised recommendations the second time, the process ends.

If the President accepts the recommendations, they are forwarded to the Congress in early September 2003. Forty-five days after the President's transmittal, the recommendations become binding unless the Congress enacts a joint resolution rejecting the recommendations on an all-or-none basis. The Secretary of Defense must initiate the binding recommendations within two years and complete them within six years.

I would now like to address the differences between the prior base closure

legislation and the EFI. The new legislation proposes there will be nine commissioners rather than eight, to avoid tie votes. It also proposes that there be a single round rather than multiple rounds. The legislation specifies that *military value* shall be the primary criteria for selecting bases for closure or realignment. Prior legislation did not specify the selection criteria. The new legislation highlights the factors that the Secretary should consider in his evaluation such as combining military operations, privatization, government agency consolidation, remobilization requirements, and elimination of leased spaces. As in the past, this legislation gives localities a significant role in determining the future use of military installations in their communities.

That provides a summary of the legislation. I'd like to address one of the major criticisms that we've heard about base closures and realignments — that these efforts really do not save money. This is really not a cost-savings effort. It is focused on the proper infrastructure for supporting our military forces. But from prior BRAC [Base Realignment and Closure] rounds, we estimate that we are now saving about $6 billion a year. The GAO [General Accounting Office] and Congressional Budget Office have independently validated the magnitude of these savings. We now estimate that after spending up-front costs, we will start to achieve savings in fiscal year ´07 and will eventually reach a steady-state savings rate of over $7 billion a year. These are imprecise estimates at this time, because we have not done the analysis of which installations will, in fact, be affected.



What I'd also like to emphasize is there will be additional savings as a result of not having to recapitalize or increase the base maintenance and repair of those facilities as they would have aged over time.

I'll now respond to any questions you may have.

Q

Secretary Aldridge, you say that 20 to 25 percent of infrastructure that you now have is unneeded. Isn't it true that most of those closings would be domestic? Haven't you had massive foreign base closings so far? Do you estimate that most of these closings would be domestic?

A

Yes, that number is for domestic closures. As I mentioned, there's an independent effort that was signed out by the Secretary yesterday to ask the combatant commanders in geographical areas to come up with their plans for base forces — base structure overseas.

Q

Do you have any idea how many bases might be closed here?

A

Overseas?

Q

Overseas and in this country.

A

The analysis hasn't been done. We know that our infrastructure's about 20 to 25 percent more than we need. The preciseness of which ones would be closed to meet the capacity we need based upon the strategy we want to do has not yet been determined.

Q

Some of the problem with the last base closure process or the main one that localities complained about was that they had to hire high-priced lobbying firms to represent them *to the Commission. How will you avoid that problem — if at all — in the process? Also, the Clinton administration tried several times to get base closures approved from Congress; do you think you'll have a better chance at it, and why?*

A

Regarding the first question, I can't decide how the local communities want to react. We are here to look at our infrastructure to support our force structure and our strategy. I'll tell you that we've got too much. We need to go address it. Our jobs are to protect the taxpayers' interests and make sure we have the ability to carry out our strategy. We have to do it in the very best way possible. And we need to do that analysis. How the individual communities respond, I can't determine. We have no way of reacting to that.

The other question on whether or not [the legislation] can be passed is that we have to do something. Again, the force structure is not consistent with the base structure that we have. We have too much capacity; we have to do something about it. We are proposing to the Congress a process by which we can do it fairly and objectively, taking it out of the political environment in which these type things tend to get immersed. We have to do something of this nature to avoid the political implications. We have to do it right, we have to do it objectively, and we propose legislation to make that happen.

Q

You mentioned the factors that the Secretary would take into consideration in determining/recommending which bases are closed or realigned. Is geography or geographic balance one of those factors in any sense?

A

No. We have to look at the strategy and what our force structure has to do. We have to have those facilities, the locations, and the capacity in the areas that we need them. Whether it has military value is the fundamental criteria.

> *"We're now operating somewhere between 20 to 25 percent more infrastructure capacity than we need to meet the operational support and training needs of our forces. We've simply got to do something about this."*

Q

But isn't geography in some cases a military value?

A

In some cases it would be, based on where we need to go and how fast we need to get there.

Q

Do you have any examples of such facilities?

A

No, because we have not done the analysis. We are just beginning the process of putting down what criteria we want, the military value we want to establish for these facilities, and are preparing to do that analysis. We have not started the analysis, in spite of what some people believe, and so we're just getting underway.

Q

What specifically does the legislation propose to do to prevent the kind of politicization of the process that you mentioned, which marred the last base closing round? And specifically, is there anything contained in the legislation to prevent the sort of privatization in space initiative that the Clinton Administration undertook?

A

The legislation does not propose to eliminate any possibility. But the process to get it away from the political environment is to have the Secretary of Defense, who is ultimately responsible for establishing the military capabilities, in conjunction with the Military Departments and the Joint Chiefs of Staff, to determine what facilities, installations, and capacity he needs to conduct military operations, to make that list available, and then give that list to an independent Commission that would be appointed by the Congress. With the Congress and the President, a commission of nine members would review that list and could make changes or accept the Secretary's position or whatever. That is independent. And then they, as independent, submit that to the President, and it's an all-or-nothing approach.

Q

Isn't that how the other rounds worked?

A

Yes, it's the way the other rounds were, but the process is a little more comprehensive in the fact that the criteria for selection is military value. That was uncertain in the prior rounds.

Q

Can you tell us how this will overlap with the QDR? I mean, couldn't you conceivably have, under the QDR, some sort of restructuring that would essentially dictate base closings and possibly give you some kind of political cover as well?

A

The QDR would, in fact, be very much a part of this, because this is fiscal year ´02 legislation, and when the Congress passes it — which will be sometime toward the end of the year — the QDR has to be finished, by law, by September the 30th of this year. So the QDR is, in fact, an input into the process. Now the process starts with the new legislation, and that will run for a period of a year. So the QDR is definitely an input into this process.

Q

Two questions. When the Secretary presents his list of recommendations to the Com-

mission, will the Commission be able to consider bases which are not on the Secretary's list of recommendations, or will the Secretary, in effect, "redline" a group of bases and say, "These I need"? The second question; you mentioned that one of the criteria is remobilization requirements. That sounds like how long is a piece of string; I mean, depending on the size of the war, you can need anything for remobilization.

A

Well, that's one of the factors. If for some reason you may need a facility close to a shoreline for naval purposes, you may be, or may not be, required to look at that. You may want to take that into consideration. It's one of the factors. It may not be an important factor, but it should be one of them, if we ever have to do something of that nature again.

Q

Couldn't anybody claim, "This base is going to come in handy with a war?"

A

Could be. Now, let me address the other part of your question, which is yes, the Commission can do anything it wants. It is an independent commission. It has the list. It can make any decisions that it desires. Now, we're still working out some details. Suppose there is a significant difference between what the Commission wants and the Secretary wants — that has to be worked out. We haven't gotten to that point yet.

Q

There's clearly very little support in Congress for this. John McCain has a bill that I don't think has much support. And the members of the House and Senate Armed Services Committee, who you would think would be supportive of this, are clearly cool to the idea. I'm just wondering, do you have a "Plan B" if this doesn't happen? Is there any way you can make savings within the Department curtailing operations, consolidating it all? Or do you just come back next year and try again?

A

This is hard, and we all know it. This is one way that we need to address what we need to support our forces in the most efficient manner possible. So we believe we have to do this. Congress may deny us the ability. We have other activities underway which are things we can do internally to improve the efficiency of the operation. We have weapon systems we have to address. If we can't afford the budget that we have, we have to address what things we need, what things we don't. And we have some activities — looking at our overhead structure, how we can cut back on the overhead, the tooth-to-tail ratio. Those are initiatives that may or may not panout over time, but all of us are always looking for efficiencies in our operations. Clearly, trying to find $6 billion or $7 billion a year is very, very difficult by just cutting out overhead and infrastructure.

Q

Are you suggesting that if you don't get your base closures, weapons programs and [other] purchases may be less ambitious?

A

Yes, they could be. We haven't gotten to the point of making that trade-off yet. We have lots of different options regarding our infrastructure in terms of people, weapon systems, and things of that nature. But a lot of that depends on what our budget will look like over the next few years.

Q

Are you going to look at the organizational structures of the Services? For example, a lot of National Guard units have 15 planes instead of 24; active-duty Air Force squadrons have 18-20 planes. Are you going to look at consolidating there?

A

I would say that is one of many factors that has to be looked at. Consolidation is certainly one of those. Restructuring, realignments are all part of the game plan that we have to look at to make efficient use of facilities that we have.

Q

There's been some informal discussion on the Hill about a process that would, as the earlier question suggested, "redline" certain bases as absolutely essential for national security and take them off the table. Can you tell us why you opted not to go with that?

A

That would really politicize the process because everyone would be clamoring to get their bases on that list. We have opened it up to all bases. We are not trying to restrict the levels. Although I think during the analysis we will find some of those [where] it will be very clear that we cannot make any modifications. But the process in the beginning is open, it's objective, it's fair across the board; it's looking at all facilities without any restrictions.

Q

Does the estimate of 20 to 25 percent excess capacity apply to the overseas bases as well?

A

No, that's just for U.S. (CONUS) bases.

Q

And do you have any estimate of their excess?

A

No, I do not — we just asked for their plan. We are letting the combatant commanders come back with the plan of what they think they need to support their overseas commitments, and we'll see what they say. I have no idea what that would look like.

Q

How can you come up to that 20 to 25 percent estimate without actually knowing where that overcapacity lies?

A

That's why the range is 20 to 25. It is an uncertain number based upon our estimate, just a gross estimate of capacity to support the force structure we need according to where we think the QDR may come out. And it's just an estimate — we don't know. When we get down to the analysis, we'll get further into it and we'll get more precise on what the number is.

Q

Mr. Secretary, given the furor over the '95 round, why wouldn't you want to rule out *privatization now to remove that obstacle, because that was how it got politicized. Why wouldn't you want to assure Congress now that's not going to happen?*

A

Well, it may make some sense that it would be the proper thing to do, and we have to make that case. And there may be some partnerships one could undertake. I know we've had partnerships in many of the depots that have worked very, very well between the government and privatization. So I don't want to rule that out as being something we're just going to not address, when it may make some sense when we get into the analysis.

Q

Two questions: Is there a cost associated with this base closing process? And secondly, among the options that you're considering, would one of them be to simply shut down bases, not close them through the formal process, in order to save money?

A

The answer is yes, there is obviously a cost up front, as you have to move people, you have to close things down, you have to pay money to do these kinds of things. There is an up-front cost, and it will be the first few years of this process before we start saving money, just like we did on the previous rounds, which addressed about 21 percent of the facilities we had. The number is in the tens of billions — $10 billion, something of that order. I don't know because, again, the analysis requires the specifics of [each] base. And we know what we did last time. We can kind of extrapolate what it cost us before, given the rough size and order of magnitude, and so we can make an estimate. And all it is, right now, is an *estimate*.

Q

The second question was, amongst the options you're considering to save money in the event that this does run into opposition, is one of those options shutting down?

A

Yes. Clearly, you could shut down and essentially mothball, and that's certainly one of the considerations that should be brought into the factors. And we have to take all of those into account.

Q

Can you explain the rationale for doing one round instead of multiple rounds?

A

Yes, and this may get back to the issue of the local communities. We don't want to put the local communities through this torture twice. If any community passed the first round and didn't make it, now they're going to have to go back through a second round. It's unpleasant enough to have to go through this once. We shouldn't make people go through it twice. Let's do it once, do it right, encompass all of it, get it behind us and move on.

Q

Since the overriding criterion here is military value, will the Secretary or will the independent Commission have public hearings?

A

I don't know the process — I don't know what they plan to do.

Q

Have you talked to the Services about consolidating test facilities such as Army, Air Force, and Navy?

A

That will be a consideration in the analysis that is underway, yes. When it gets underway, everything is on the table, and test facilities are certainly one of those.

Q

How does the Navy, currently pulling out of its training range in Vieques, factor all of this with the timing since the Commission is looking at a March 2003 deadline for making recommendations? And add on to that the Navy having to find another place to train to replace Vieques?

A

We haven't started the analysis at all, because we haven't gotten the legislation to do it, so we can't start it until we get the legislation. That is probably going to be a factor in the process, but depending on where they go, if it's an overseas facility, it would have an impact.

Q

Does Vieques count as a domestic or an overseas facility in this?

A

Domestic.

Q

Does the legislation create a mechanism by which the Secretary of Defense could intervene or intercede in the proceedings of the Commission if the Commission wishes to close or act on bases that are not on his list?

A

Not in the process as the Commission is doing its analysis. We are discussing now the details of what happens — and we haven't gotten this specifically laid out — what happens if there is a disagreement that, for example, the Commission wants to put an additional base on the list above what the Secretary did? What role does the Secretary, who has the ultimate decision on military capability — how does he address that? That is something that's being discussed now — how we would handle that — and we don't have a definite answer as we go through this process.

Q

Is that going to be submitted by tomorrow?

A

It will be submitted tomorrow, and that's part of the discussion that's ongoing right now.

Q

I've got two questions. Was 2003 chosen so that Congress would not have to decide this next year, ahead of the 2002 Congressional elections?

A

No, it was decided based upon passage of the legislation in fiscal '02 in giving the Department about a year to do the analysis necessary to rationalize what the structure ought to be.

Q

Congress was furious over the fact that President Clinton stepped in after the '95 BRAC and kept bases open in California and Texas for political purposes. What's being done to prevent this in the future?

A

It's the process, as we say. When the President gets the recommendations from the Commission, it's an all-or-nothing decision.

Q

He [the President] cannot step in afterwards?

A

No, sir. The way the legislation is written, he cannot.

Q

Given the reaction to the B-1 decision, how would you characterize the Congressional receptivity to this proposal?

A

It's going to be tough. You have heard, and we have heard, that some people are very much against this process. Some other people are very much for it, recognizing that we need to do something, and we have tried to make our best case that we have to go do something. This is a process that we believe will result in an answer which is acceptable to everyone, hopefully, and that we'll get on with our business.

Q

You said that the President could accept or reject these as a package. But he would be free, wouldn't he, to write a letter to the Commission explaining why he rejected the package and making suggestions as to how to change it?

A

That's part of it, that when the Commission makes their recommendations, the President can reject them — obviously he tells them why he's done so. They have an opportunity to go back and re-look. And they can take into account what the President saw, and can make modifications as appropriate.

> "The Efficient Facilities Initiative (EFI) will encourage a cooperative effort between the President, the Congress, the Military Services, and the local communities to achieve the most effective and efficient base structure for America's armed forces for that purpose."

Q

So he would be, in effect, be able to tell them, "You change it this way or the whole process is rejected?"

A

No, change more like, "I don't like it because you didn't address this factor or this factor; go back and re-look." When it comes back again, it should have addressed [the President's] concerns. And if it does not, he rejects it and the thing stops. So it can all be done.

Q

Who appoints the Commissioners?

A

In the prior BRAC rounds, the Speaker of the House had two seats, the President had two seats, and everybody had their choice: they could put people in. This time the plan is that it would go forth with a package of nine [Commissioners] that would be [appointed] in consultation with both the President and the Congress. But exactly how they're [appointed] is still being negotiated.

Q

A previous question was about inter-Service consolidation of tech facilities. One of the areas in which a previous BRAC staff and commissioners failed utterly was to get inter-Service consolidation of everything on bases. What mechanism are you setting up at all to goad them into doing it this time?

A

We have a much more cooperative spirit at the Department of Defense. The relationship between the Service Secretaries, the Secretary of Defense, the Deputy Secretary, and me is very, very good. The process that we have in place that monitors the ongoing analysis will be a cross-Service view, a Joint-like view, because the Service Secretaries, the Secretary, the Deputy Secretary, and myself will sit on an overview committee to make sure that there's consistency among the Services for how they're addressing their issues, and there's a cross-flowing of information. So I think it's going to be much, much better.

Q

Will this begin by asking the Service Chiefs what they want to close? Is that how you start?

A

Yes. The process has to start with the Services coming up with their candidates. They look at what they need for their force structure to meet their needs, and they have proposals. We cross-fertilize those, because there could be some areas that, if you're going to close one base, maybe the Navy could join them and they could close one of theirs. It's a whole process that has to go on, and it has to be not only stovepipes — which it was before within the Services — it has to be integrated across. And that's what we're going to do.

Q

Will there be some sort of an appeals process for communities?

A

Appeals process?

Q

Appeals process. And if so, where would that fit in?

A

You're asking me for some details that I just don't have at this point in time. We want to let the communities have an input into this process, and it may be at some point it would be appropriate to do so. We have not spelled that out in the legislation.

Q

Will there be any openness in the overseas closings? The last rounds, in the early ´90s, were done quite secretively.

A

I haven't seen the results yet, and I don't know how they plan to present it. There's not a need that I see to have a highly secretive process. Commanders ought to be able to identify which facilities they need and which ones they don't, and that ought to be an open process that the Secretary of Defense has to address.

Q

One of the major criticisms of the previous BRAC rounds was that without a uniform accounting system, you couldn't tell how much savings were going to be achieved. So how do you intend to address that within this initiative? And second, are you going to ask Congress to alter the 60-40 rule for depot maintenance?

A

That's not part of this legislation. But yes, we want to have a much more comprehensive analysis of the savings. We're getting a very good database put together of what our facilities are, how much they cost, what capacity they have. So we have some good information, better information to start this process than we did in the past. So we hope to do that.

Q

Have you given any thought to incentivizing the process by letting each Service keep the savings from the bases it closes?

A

Basically, the end result is that's what will happen. If we do in fact save money as a result — and we hope we will — those funds will be redistributed and offset things we would normally have to pay for in people and modernization and so forth. So while the number of bases doesn't get directly back to the Services, it does in an indirect way because it increases the money available to other than base operations for the Department of Defense.

Thank you very much.

Editor's Note: This information is in the public domain at *http://www.defenselink.mil/news*.

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The Department of Defense (DoD) prides itself on providing "world class" training and continuing education to its military employees and would like to expand that reputation to its civilian employees. But just what does "world class" mean in the civilian context and how can the DoD best measure the quality of its efforts? A recently released RAND study, *Ensuring the Quality and Productivity of Education and Professional Development Activities: A Review of Approaches and Lessons for DoD,* points out that the DoD's education and training efforts are highly decentralized and suggests that defense policymakers can gauge the caliber of those efforts by choosing one of four assessment approaches. To read about the approaches or to obtain a complete copy of the report, visit the DoD Chancellor of Education Web site at *http://www.chancellor.osd.mil/.*

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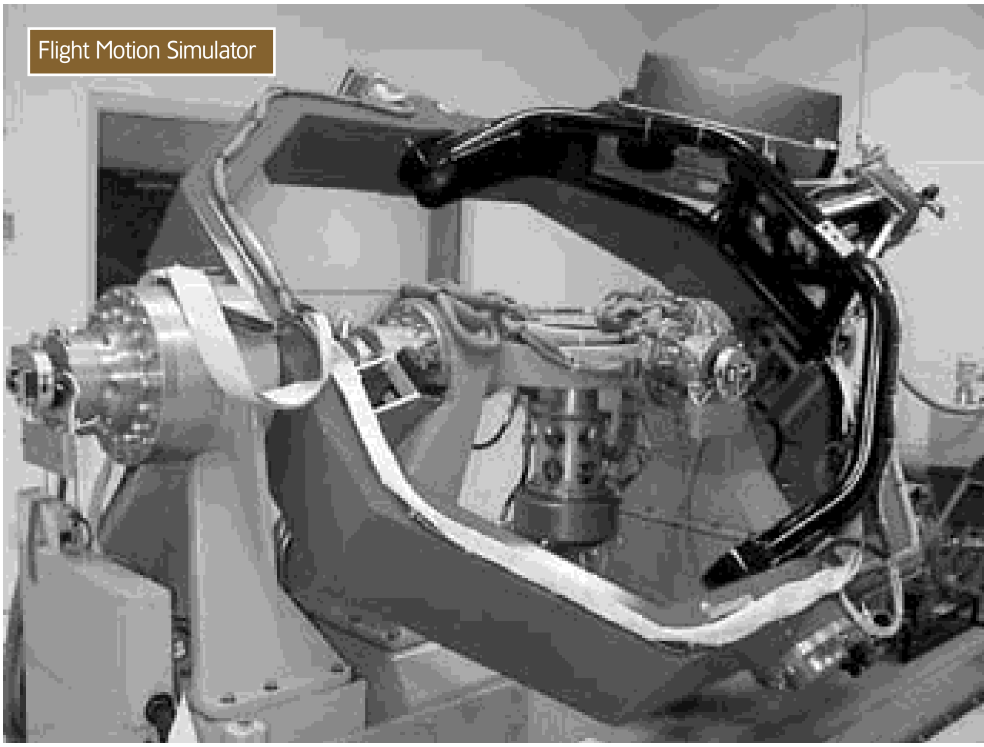
Distributed Testing at Redstone

Sharing Data in "Real Time" to Support Development of Javelin and Other Weapons

MIKE CAST


Flight Motion Simulator

As the Army transforms itself and develops lighter and more mobile forces that are also lethal and versatile, it is acquiring more sophisticated, lightweight weapons. Developers are providing the Army with a variety of new systems such as the Javelin, a fire-and-forget anti-armor weapon that allows a soldier to lock onto a target, fire, and then seek cover or move to another position while the missile is in flight.

Redstone Technical Test Center

The Army's Redstone Technical Test Center (RTTC) at Redstone Arsenal, Ala., is an important player in acquiring such weapons, putting them through a variety of rigorous tests. Though a system such as the Javelin still must be fired on a test range to prove its accuracy and lethality, the Army is also investing in new technologies at RTTC and other test sites, to conduct a full spectrum of realistic tests through computer modeling, simulation, and other nondestructive means.

The RTTC is also improving its ability to "distribute" tests, said Lloyd Brooks of the center's Test Management Division, explaining that RTTC uses fiber-optic communications links on Redstone Arsenal and high-speed network connections to other locations to link them into tests at the same time and share data in "real time." Distributed testing saves time and resources, he said, and enables defense contractors and acquisition program managers to make critical decisions and design changes earlier in the process of producing and fielding their systems.

Javelin Test Program

For weapons such as the Javelin, that means using state-of-the-art simulation technologies to test these systems in a "hardware-in-the-loop" mode. A specially designed laboratory at RTTC, the Electro-Optical Sensor Flight Evaluation Laboratory (EOSFEL), provides the means to test missile guidance and control systems in a nondestructive and simulated environment. The proximity of this laboratory to the Electro-Optical Target Acquisition System Evaluation Laboratory, linked to EOSFEL by high-speed fiber-optic cable, allows closed-loop, nondestructive testing of target-acquisition sensors and fire-control subsystems with the missile's subsystems. The Defense Research and Engineering Network (DREN), a high-speed wide-area network connection, links RTTC to other test sites and enables them to participate in distributed tests.

Javelin Command Launch Unit

One hardware-in-the loop trial, for example, involved having a soldier at White Sands Missile Range, N.M., use a Javelin Command Launch Unit (CLU) linked to RTTC, some 1,200 miles from White Sands. When the soldier powered up the CLU, he was actually seeing a simulated battlefield scene generated by the laboratory at Redstone. When he locked onto the target and pressed the trigger, he saw a live mis-

Cast *is a public affairs specialist with the U.S. Army Developmental Test Command Public Affairs Office, Aberdeen Proving Ground, Md.*

Photos courtesy RTTC

sile-seeker video and the round going down range to strike the target. He didn't notice a delay in response due to the high speed of communication between RTTC's lab and White Sands.

"We took the functionality of the Javelin CLU, just in software, and gave it to White Sands," explained Kenneth LeSueur, a senior electronics engineer at RTTC who oversees the work at the EOSFEL facility. "The gunner did the 'switchology' where he was actually looking on the range, and we inject that into the tactical hardware here. The Javelin seeker video was piped from this lab over the DREN back to the gunner at White Sands. We were getting round-trip latencies on the order of 80 milliseconds, so the DREN is very successful for us."

Early Involvement

LeSueur said the trial at White Sands was preceded by a test that linked a gunner on one of RTTC's test ranges to the EOSFEL, some three-and-a-half miles away.

"Our goal was for the gunner to not know there wasn't a real round on his shoulder until he pulled the trigger," LeSueur said. "The band width and the latency of the fiber-optic connection to the test area from the lab was such that a human could not perceive a delay. Actually, the weapon system in this case could not perceive any difference."

A Javelin missile is fired at the Army's White Sands Missile Range, N.M.

"We are trying our best to take the Virtual Proving Ground effort and bring it to where the customer is leading us," Brooks said. "The test community is driving us toward this way of doing business – getting the soldier involved more quickly while involving developers so they can determine more quickly if they are meeting the user requirements placed on them. We're able to help them make material changes and refocus the design strategy before they get into producing large numbers of hardware."

Virtual Environment

"We can merge a weapon system into a virtual environment and perform nondestructive testing that we can repeat in any given scenario," LeSueur explained. "We can simulate differing weather patterns and conditions, differing types of ranges, countermeasures, [and] temperature extremes. With missile systems in particular, any time you do a live test you are going to destroy hardware. So when you come into a laboratory and do repeatable, nondestructive tests on very expensive assets, there is a financial payoff as well as an engineering advantage. We can also push the edge of the envelope in here and not be limited by the safety and environmental constraints of live fire."

LeSueur said additional improvements to support distributed testing are planned.

Central Hub Planned for Developmental Testing

"In the coming two or three years, we will be bringing a Test Command and Control Center online," he said. "It will be kind of a central hub for all distributed testing. You can compare it to a NASA command center, because it will have all types of communications – voice, computers communicating over the DREN, big-screen TVs, and a big tie-in to the fiber-optics infrastructure here at RTTC. We will be able to bring in a representative of every player in a distributed test, and they will be able to communicate with their personnel and coordinate the test from a central location."

He said RTTC is also planning to link through the DREN to the Raytheon plant in Tucson, Ariz., to support future tests.

William Wilkinson, RTTC's lead engineer for the Javelin test program, said this program spurred RTTC in developing some of its laboratory facilities and test tools. These high-tech facilities do not just test the operation of missile sensor guidance and control systems under normal operating conditions, he explained. They also simulate various functional problems so testers can see how the systems respond.

"You can input certain faults to look at how a missile would react in flight," Wilkinson said. "This is done using tactical hardware, not just bread-board components in a lab. We have a system that can introduce a control-actuator problem such as a fin that sticks, and we can simulate the missile going bad in flight. We can then determine what the flight characteristics would be in that case. You can load different types of tracker software into a guidance system and play it against different scenarios without having to do captive-carry flights."

A "captive-carry" flight uses aircraft to carry missiles down range to the target and test their guidance systems, he explained.

Wilkinson first became involved with the Javelin test program during production-verification testing for the initial low-rate production design in 1995, and he has seen the system undergo some improvements and changes that lower production costs. As Raytheon and Lockheed Martin introduced new materials or made alterations to Javelin subsystems, a variety of tests at RTTC helped the program manager determine if these changes affected system performance. RTTC testers also subject systems to a variety of dynamic and climatic environments.

Testing to Extremes

"The Javelin is a fairly robust system because we do some rigorous dynamics tests," Wilkinson explained. "During a qualification test, we drop the bare round from three feet, at various angles, onto reinforced concrete. We also drop it housed in its container, from several different angles. That is all done at different temperatures – extremes you would see in the field."

Dynamics testing for the missile system includes subjecting it to the type of vibration it would experience when transported in a tactical wheeled vehicle, a two-wheel trailer, and a Bradley Fighting Vehicle. RTTC has used data from the field to create simulations on a shaker table. Soon a vibration test that replicates transport in a HMMWV will be introduced, Wilkinson added.

RTTC has upgraded some of its other facilities to improve testing.

Bottom Line – Improved Firing Capability

"Over the past several years, we have improved our firing capability at Test Area 6 with facilities upgrades," Wilkinson said. "The Javelin Environmental Test Set that we built for the program office has become one of our primary instrumentation keys. We are able to do functional tests on rounds in chambers at varying temperatures, varying humidity, etc. We can power up the round and go through some functional tests, while actually looking at a target. We can fire a round with a derivative of this family of test sets.

"We've bought some new dynamic equipment. The [Javelin] program office provided funds for us to complete a dual captive-flight system, providing the capability to compare the performance of two identical guidance systems running two different versions of tracker software during a single captive flight."

Editor's Note: The author welcomes questions or comments on this article. Contact him at *castm@dtc.army.mil.*

Important Notice on Registering for DAU Courses

The DAU Virtual Campus, also known as the Online Schedule System (OSS), no longer serves as a registration system for any DAU course. The Acquisition Training Application System (ACQTAS) will be the sole registration system for all DAU courses. Civilians from DoD agencies other than the Army, Navy, and Air Force can access ACQTAS at the following Web site *https://www.atrrs.army.mil/channels/acqtas*. The OSS will continue, however, to serve as the delivery platform for all Web-based training courses (ACQ 101, BCF 102, CON 237, IRM 101, LOG 101, LOG 203, PQM 101, SAM 101, TST 101) and "A" sections for DAU hybrid courses (ACQ 201, BCF 211, PQM 201).

When a student registers for an online class in ACQTAS, the data entered into ACQTAS for each student (SSN, name, address, organization, etc.) will be the data of record; this data will then be forwarded to OSS. If the student already has an account in OSS, the user name/password for that student will remain the same. If the student does not have an account in OSS, OSS will provide the student with a user name/password he or she can use to enter OSS for the purpose of completing Web-based training courses.

Military and civilian personnel from the Department of the Army and Department of the Navy must continue to register for DAU courses using the prescribed procedures:

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https://www.atrrs.army.mil/channels/aitas/

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https://www.register-now.cms.navy.mil

Air Force
For registration procedures, contact the Office of Acquisition Career Management, Acquisition and Career Management Resources Division, Office of the Deputy Assistant Secretary of the Air Force for Management Policy and Program Integration (SAF/AQXDA), at DSN 487-6580.

Anthony J. Tether Named New DARPA Director

Secretary of Defense Donald H. Rumsfeld today announced the appointment of Anthony J. Tether as the Director of the Defense Advanced Research Projects Agency (DARPA). DARPA is the Principal Agency within the Department of Defense for research, development, and demonstration of concepts, devices, and systems that provide highly advanced military capabilities. As Director, Tether is responsible for management of the Agency's projects for high-payoff, innovative research, and development.

Until his appointment as Director of DARPA, Tether held the position of Chief Executive Officer and President of The Sequoia Group, which he founded in 1996. The Sequoia Group provided program management and strategy development services to government and industry. From 1994 to 1996, Tether served as Chief Executive Officer for Dynamics Technology Inc. From 1992 to 1999, he was Vice President of Science Applications International Corporation's (SAIC) Advanced Technology Sector, and then Vice President and General Manager for Range Systems at SAIC. Prior to this, he spent six years as Vice President for Technology and Advanced Development at Ford Aerospace Corp., which was acquired by Loral Corporation during that period.

He has also held positions in the Department of Defense, serving as Director of DARPA's Strategic Technology Office in 1982 through 1986, and as Director of the National Intelligence Office in the Office of the Secretary of Defense from 1978 to 1982. Prior to entering government service, he served as executive vice president of Systems Control Inc., from 1969 to 1978, where he applied estimation and control theory to military and commercial problems, with particular concentration on development and specification of algorithms to perform real-time resource allocation and control.

Tether has served on Army Science Boards and Defense Science Boards and on the Office of National Drug Control Policy Research and Development Committee. He is a member of the Institute of Electrical and Electronics Engineers (IEEE) and is listed in several Who's Who publications. In 1986, he was honored with both the National Intelligence Medal and the Department of Defense Civilian Meritorious Service Medal.

Tether earned his Bachelor of Electrical Engineering from Rensselaer Polytechnic Institute in 1964, and his Master of Science (1965) and Ph.D. (1969) in Electrical Engineering from Stanford University.

More information on DARPA can be found at *http://www.darpa.mil*, or by contacting Jan Walker at 703-696-2404.

Editor's Note: This information is in the public domain at *http://www.defenselink.mil/news.*

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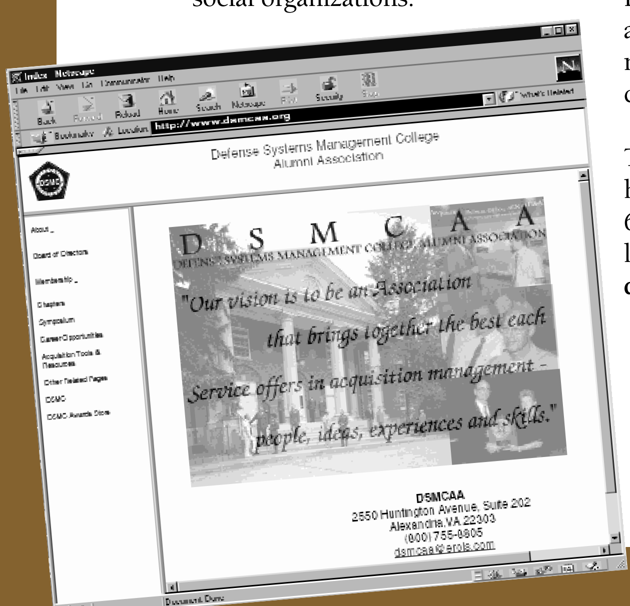

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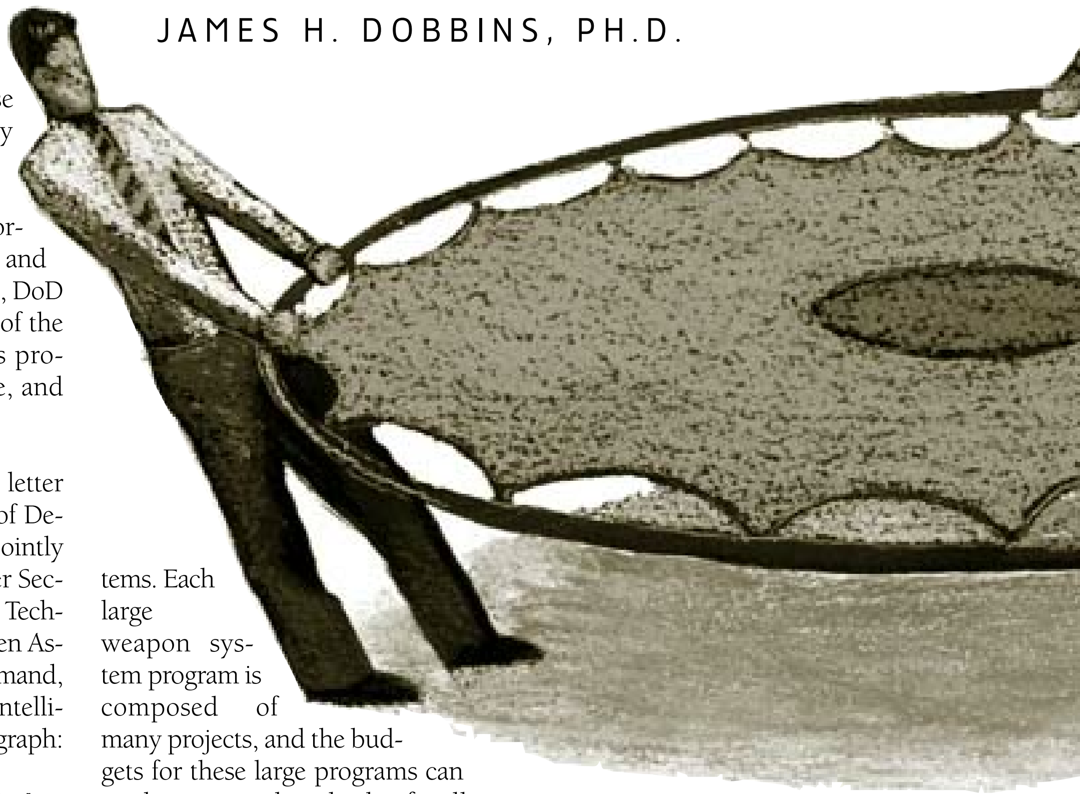
Identifying and Analyzing Critical Success Factors

Let's Not Overlook an Acquisition Strategy That Would Promote Program Management Stability

JAMES H. DOBBINS, PH.D.



The Department of Defense (DoD) has not previously used Critical Success Factors (CSF) for program management. Is it an important enough issue to warrant time and attention? To decide that question, DoD conducted an extensive analysis of the records of success of numerous programs in meeting cost, schedule, and performance.

Referring to this prior analysis, a letter from the Office of the Secretary of Defense, dated Jan. 9, 1997, issued jointly by Dr. Paul Kaminski, then Under Secretary of Defense (Acquisition and Technology), and Emmett Paige Jr., then Assistant Secretary of Defense (Command, Control, Communications and Intelligence), states in the opening paragraph:

> "Nearly one-third of information technology (computer and software) projects were canceled before completion. Over half of the project budgets exceeded 189 percent of the original estimate. The average schedule overrun for projects that were in difficulty was 222 percent. And, on average, the delivered product contained only 61 percent of the originally specified features."

This letter addressed only DoD information systems of various kinds. It did not address issues specifically related to the acquisition of large and costly weapon systems such as aircraft, submarines, tanks, and space-based systems. Each large weapon system program is composed of many projects, and the budgets for these large programs can easily run into hundreds of millions, and even billions of dollars. In fact, the budget for just one of these large programs can exceed the annual gross national product of many countries around the world. The cost, schedule, and performance factors on these large weapon system programs tend to dwarf those found in information systems, not to mention the fact that many of the weapon system acquisitions are unprecedented, thus further complicating the acquisition management function and processes.

The acquisition management strategy must be focused on the correct issues or the system will have a high probability of failure to achieve the program goals for cost, schedule, and performance.

All three of these target goals, which are present for every program, are goals that are achieved, or not, depending on the success of the program manager in addressing the program risks.

CSF and Risk Management Directly Linked

Program Management on Department of Defense programs is inherently a process of risk management in the sense that the time from initial concept to first article production of a major weapon system averages 15 years, the budgets for many of these programs are several hundred million dollars, and the performance requirements may change several times prior to production. Since managers depend on correct and relevant information to acquire and use the

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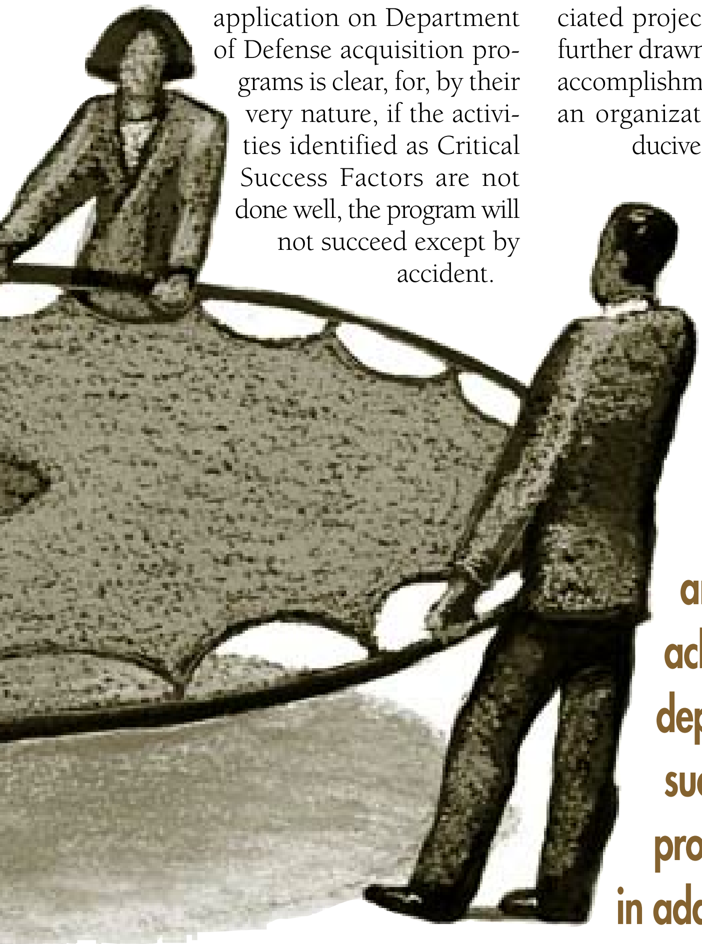
knowledge they need to properly manage program risks, successful program risk management and Critical Success Factor analysis are directly linked.

The need for CSF research and application on Department of Defense acquisition programs is clear, for, by their very nature, if the activities identified as Critical Success Factors are not done well, the program will not succeed except by accident.



CSF — Large-Scale vs. Small-Scale Projects

Critical Success Factors, as defined by John F. Rockart in the chart to the right, are critical management activities, quite distinct from a set of detailed requirements or specifications that define an acceptable deliverable for a project. Though they are activities that must be successful and are *necessary* to achieve an organization's broad goals, CSF are not necessarily *sufficient* to ensure success of any single project effort associated with these broad goals. Though they are activities *critical* to overall success, CSF are not a statement of *everything* that should be done for eventual success. Because they are activities, they can be tracked over time and measured, and are fundamentally performance-based.

In this sense, a set of CSF identified for a given large-scale program effort differs fundamentally from the set of interlinked, detailed tasks that must be completed satisfactorily in the ordinary course of business for any single associated project. The distinction can be further drawn by noting that successful accomplishment of a set of CSF creates an organizational environment conducive to successful management of the associated projects. However, successful management of any one of these individual projects nonetheless requires an appropriate project concept, detailed project plan, and effective execution of the plan to achieve time, budget, specification, and customer satisfaction goals. *Success for any single project is extremely difficult unless the CSF are successfully accomplished.*

All three of the target goals for every program manager — cost, schedule, and performance — are goals that are achieved, or *not*, depending on the success of the program manager in addressing the program risks.

Since Rockart introduced his definition, a large body of research on CSF has been conducted. Most of the prior research focused exclusively on CSF identification and did not investigate the three interrelated areas of 1) CSF identification, 2) underlying constraint analysis, and 3) measure identification. Nor did any of the prior research attempt to test the credibility of identified CSF against any defined analysis criteria, especially in a contextual framework. What the research did produce was lists of CSF for project management. The problem was that the different lists, produced by different research tasks, differed in content. Besides some overlap, differences were apparent from one list to the next. Thus, managers faced a dilemma. If they wanted to use CSF, which list should they pick?

A more serious issue was beneath the surface, undiscussed in the research, but always there. Invariably, the question surfaced: *Why do managers have such a hard time using CSF?* The answer had two parts.

- One, by simply adopting a list, managers never learn how to think in terms of CSF, and therefore CSF utility is minimized.

Critical Success Factors

- The limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization. They are the few key areas where things must go right for the business to flourish. If results in these areas are not adequate, the organization's efforts for the period will be less than desired.

- Areas of activity that should receive constant and careful attention from management..

(As defined by John F. Rockart in "Chief Executives Define Their Own Data Needs," *Harvard Business Review,* March-April 1979.)

- Two, the lists produced from the research tended to be stated as something other than an activity, and the lists deliberately eliminated any reference to CSF having a contextual flavor. Yet, any valid set of CSF for a manager will always be contextually relevant to that manager.

A Way Out of the Box

So, how do we solve the impasse? If I am a manager, how will I recognize a CSF when I run into one on the street? This is an important question because if I ask any 10 managers to list their CSF — managers who have not been trained to think in terms of CSF — they will most likely list the most recent things with which they had the greatest difficulty. Is there a way out of this box?

Yes, there is a way, and it lies in *process*, not lists. Consider what we face in DoD program management. A large and complex program may have a development cycle as long as 15 years. No program manager can state categorically that the CSF identified at any life cycle point in the program will lead to, or guarantee, final program success. Clearly, on many such programs, the goals and objectives may change over time because of availability of new technology, funding availability and constraints, political realities, changing threats, and many other factors, thereby necessitating a change in the CSF.

What we *can* say is that the managers leading the programs at any point in development may identify what they believe to be, at that time, the most significant activities upon which program success depends. The final answer to the question — *Which CSF were necessary for eventual program success?* — has to be examined upon *completion* of the acquisition program. In the interim, as the program advances toward completion and since each program has several intermediate milestones, CSF analysis can be conducted at several points and adjusted as necessary.

Why is *Process* Important?

Lists of CSF given to a manager clearly were not particularly helpful. However, developing a process by which managers could identify their CSF, determine the constraints on which each critical success factor is based, and determine the measures for each, would be very useful. Why? Because the process itself teaches managers how to think in terms of CSF. Because it *is* a process, once the process is learned managers can apply it to any other management job to which they are assigned. The generalization is in the process, not in a list.

If it turns out that several different managers within a given domain area each identify some common subset of CSF, certainly that knowledge is very helpful, but not essential for any individual manager's success. What managers have to know is their *own* CSF and a process to help them identify and manage to those CSF.

Just as is sometimes done by their civilian counterparts, many of the more skillful program managers intuitively determine CSF rather than rely on standard information from their own Management Information System (MIS) to manage programs. However, where the CSF are not explicitly identified and recorded, they do not become a part of the program history and are not explicit elements of the management reporting process. Furthermore, the underlying constraints for the CSF do not command attention, and the CSF are seldom measured.

A successor program manager, given his or her own skill level and background, may be more or less capable of identifying CSF or may focus on a different set of intuitively perceived CSF, if indeed any at all. The result is that a given acquisition program may encounter wide swings in managerial focus and direction due to the particular skills and backgrounds of the different program managers who will attempt to guide the program to completion, each of them attempting to integrate and manage complex information related to as many as 11 different functional disciplines. In the program management office, there may be a different person responsible for each of the different disciplines, with each person responsible for providing critical information on that discipline to the program manager.

In the absence of an active and continuous process of identification of the program CSF, this is all done without any documented continuity of those activities critical to program success — activities that *should* be documented as an important part of the program's history. This is further exacerbated in Department of Defense programs by the almost routine turnover of military program managers. Because of this high turnover rate, it would be highly beneficial to a program:

- if the CSF were explicitly identified at the program manager level;
- if the criticality of the identified CSF were validated; and
- if the identified and validated CSF were used as a foundation for the acquisition management process for the program, used to establish the data reporting requirements for successively lower levels of management, and then measured in each instance (quantitatively or qualitatively).

Once explicitly identified and available to successor program managers, with the underlying constraints clearly and explicitly stated, the information gathered by such a process would go far in promoting program management stability and in alleviating the adverse effects of program manager discontinuity. Once a set of CSF has been explicitly identified and communicated, the likelihood that it will be ignored becomes minuscule. Therefore, establishing clear CSF to support the acquisition management of large defense programs would be a significant element of eventual program success.

Scratching Beneath the Surface

My personal research into developing a process model for CSF identification and analysis, conducted as part of my dissertation at George Washington University in November 1999, surfaced some unexpected results:

One of the managers interviewed, having already been briefed on the process and given relevant background on Critical Success Factors, was asked how many CSF he associated with his program. He answered between 40 and 50 CSF, and indicated he knew that number was too high to manage effectively. As he assisted in the production of the final report, saw how the process worked, and saw that everything could be covered within the scope of six CSF, he said for the first time he was confident he could get the job done. He was also somewhat surprised that this all happened with information he had provided, and that the interviewer had not contributed any new information to cause this realization.

Four of the Program Executive Officers (PEO) responsible for the programs studied were asked to evaluate the information. Responses were received from the San Diego Space and Naval Warfare Systems Command (SPAWAR) PEO, Navy Rear Adm. John A. Gauss, and from Air Force Lt. Gen. Robert Raggio, located at Wright-Patterson Air Force Base. Each of their responses acknowledged that military program managers engage in risk management as a normal part of their activity, and they examined the CSF analysis process from the perspective of whether it would be value-added to the existing risk management processes. Their responses are revealing:

Raggio

"The CSF analysis appears to be a useful way to create a common understanding of what the members of a team need to concentrate on to achieve program success. This is particularly important with a large complex program and a large multilevel, geographically dispersed program team. CSF and the analysis to define them are a good way to focus a cross-functional team on a common agenda and ensure that everyone is applying their best effort where it is most important. In answer to your question, I agree that it would be advantageous to include education in CSF analysis as a part of a wider program management curriculum at DSMC."

Gauss

"The use of CSF seems like one piece of an overall effort to manage risk. However, it is one of the first and most important steps to take in order to build a successful risk management program. It appears that a CSF analysis would have merit for project managers. Any successful project manager does a CSF analysis informally anyway. We identify what is critical to the success of our project and prioritize our efforts to make sure that happens. The CSF methodology that Professor Dobbins is advocating appears to give a formal framework to achieve this. Establishing the right data to measure and the proper monitoring process is critical. This data varies by program and magnitude. The data and CSF must be data that is generated by the production level of the organization and something they buy into."

An examination of these independently provided statements shows that they are not only consistent with each other, but confirm the premises of the research, namely: successful managers do indeed identify CSF informally; it would be advantageous to have a formal process for doing this; and it would be advantageous to make education in this process a part of program management education. The independent evaluation by these experienced managers supports the foundation premises for this research, and is consistent with the following conclusions.

- The program managers who participated in the research were, with the aid of the researcher, able to effectively apply the CSF Process Model to their situations, were able to define their contextually relevant CSF, and were able to formulate those CSF in terms that make them both immediately usable and measurable.
- Each of the managers, with the aid of the interviewer, was able to state each critical success factor in terms of an activity and was able to define measures for each factor. None of the CSF identified are ambiguous or at such a level of abstraction that additional effort is required for CSF to be applied to the program.
- Since each manager interviewed has complete control of the final statement of the CSF and the measures, no interviewer bias is interjected nor is there any interpretation in defining the CSF or the associated measures.
- Each manager understood the process, felt comfortable with the process, and understood the results. Each also understood they had the freedom to change any of the candidate CSF and indicated a willingness to do so if they felt it was necessary.
- The responses from the PEOs are insightful beyond the level of being a polite or merely supportive statement. For example, Raggio indicated the CSF analysis process should be a part of the education process for program managers. Given that the educational process for program managers is intense; complex; and takes time, effort and financial resources to accomplish, this PEO is, in effect, saying he is willing to back his statement with commitment of meaningful resources.

  We see a similar response from Gauss who stated that the CSF analysis process is the first, and most important step in building a successful risk management program. In effect, he is not only willing to support the educational objective, but has concluded that this process is the first and most important step in developing a comprehensive and integrated risk management program.

These statements do not provide absolute certitude, but do give another and independent view by those whose competency and expertise are well known, who have a vested interest in the programs' success, and who served as program managers prior to becoming PEOs. They therefore understand the responsibilities involved as well as the particular programmatic issues, and have given this qualitative evaluation of value.

The question we now must answer is: *Does the user community support inclusion in the DAU executive curriculum of a short course for program managers in CSF identification and analysis*?

Editor's Note: Dobbins welcomes questions or comments on this article. Contact him at *jim.dobbins@dau.mil*.

DoD Selects Foreign Defense Equipment For Testing

The Department of Defense has selected six new start out-of-cycle projects to receive fiscal 2001 funding under the Foreign Comparative Testing (FCT) Program.

The six programs include the Driver's Vision Enhancer, a thermal imaging system from Canada; the Expeditionary Airfield Light-Duty Mat System, a replacement fabric for aircraft from France; environmentally safe Floating Smoke Pot Components from Germany; an enhanced UHF [Ultra-High Frequency] communications device, Multi-Bandwidth Submarine Antenna from the United Kingdom; the Tactical Geographic Information System, MARIA, battlespace software from Norway; and the Muzzle Breaks/Suppressors that will decrease flash and sound for M-4 carbines from Switzerland.

Authorized by Congress since 1980, the FCT Program is administered by the director, Strategic and Tactical Systems, Office of the Under Secretary of Defense (Acquisition, Technology and Logistics).

The FCT Program responds to a growing awareness of the value of using non-developmental items to accelerate the acquisition process and cut rising development costs. The principal objective of the FCT Program is to support the U.S. warfighter by leveraging non-developmental items of allied and other friendly nations to satisfy U.S. defense requirements more quickly and economically. Given a world-class foreign item, U.S. user interest in the item, a valid operational requirement, and good procurement potential, the FCT Program reduces the acquisition cycle for fielding needed systems and equipment not otherwise available. At the same time, by promoting competition and eliminating unnecessary research, development, test, and evaluation expenses, the FCT Program reduces total ownership costs of military systems while enhancing standardization and interoperability, and promoting international cooperation.

Each year the Military Services and U.S. Special Operations Command nominate candidate projects for FCT funding consideration. Each proposed project is screened to ensure the non-developmental item addresses valid requirements, a thorough market survey was conducted to identify all potential contenders, and the sponsor has developed a viable acquisition strategy to procure the foreign item if it tests successfully and offers best value.

Of the six new out-of-cycle projects for fiscal 2001, one is sponsored by the Army, four by the Navy and Marine Corps, and one by the U.S. Special Operations Command. More details on the six projects are available on the Web at *http://www.defenselink.mil/news/Jul2001/d20010719fct.pdf.* Additional FCT Program information is available on the FCT Home Page on the World Wide Web at *http://www.acq.osd.mil/sts/fct/*.

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EC Day 2001

From Paper-based Processes, DoD Now Deeply Immersed in eBusiness

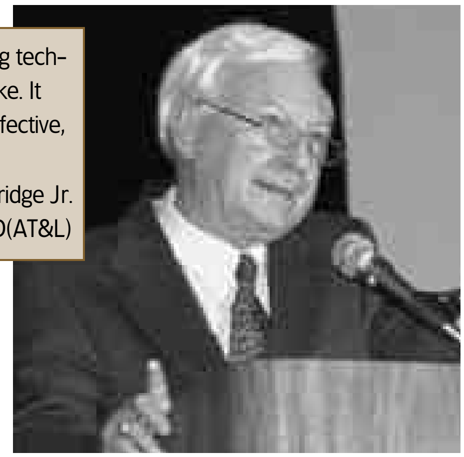
LYNN FREUDENTHAL

Electronic Commerce, or EC has changed DoD's culture and business practices in ways never imagined, according to Claudia "Scottie" Knott, Director of the Defense Electronic Business Program Office (DEBPO). Speaking at the opening of EC Day 2001, Knott's comment easily resonated with a crowd who remembered the old days of filling out a purchase request and waiting weeks, even months for delivery.

Their theme this year — "Revolution in eBusiness [Electronic Business] Affairs" — was a revealing indicator of just how far DoD has advanced from paper-based processes to a system that is deeply immersed in eBusiness.

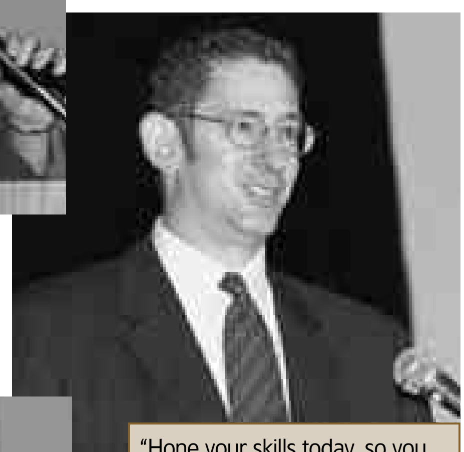
Sponsored by the DEBPO and the Government Electronics and Information Technology Association, the fourth annual EC Day 2001 took place June 7 at the Hilton Alexandria Mark Center, Alexandria, Va. Attendance at the event has been rising yearly — a sign of growing interest in, and use of, EC technologies, Knott said. EC Day 2001 gave government and industry representatives the opportunity to learn the latest on DoD's use of eBusiness.

The day's events included nine pre-event tutorials conducted on June 6, focusing on various technical topics; presentations from DoD components on their eBusiness initiatives; 10 technical sessions; and over 30 EC exhibits from industry and government. Several distinguished speakers and a "Hardball" panel



"eBusiness cannot be using technology for technology's sake. It must be a tool for more effective, streamlined processes."
—Edward C. "Pete" Aldridge Jr.
USD(AT&L)

"This expansion from electronic commerce to electronic business is a natural and necessary progression in support of the Revolution in Business Affairs."
—Claudia "Scottie" Knott
Director, DEBPO



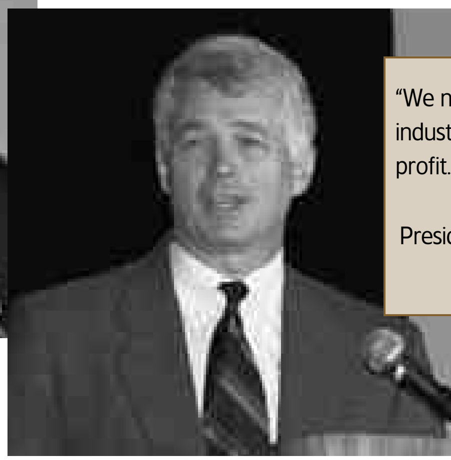
"Hone your skills today, so you can navigate the unknown tomorrow."
—Al Lepeau
Hewlett Packard East Coast Sales Operations Manager

"DoD must have a serious discussion about electronic security because eBusiness is a balance between access and security."
—Dr. Linton Wells II
Acting ASD(C3I)

Freudenthal is a communications specialist with SRA International, Inc., Arlington, Va.

Photos courtesy DLA

"Remember why we're doing this: to remain persuasive in peace and decisive in war."
—Air Force Lt.Gen. Harry Raduege
Director, DISA



"We need a robust defense industry that makes a profit."
—Dave McCurdy
President, Electronic Industries Alliance

contributed their knowledge on industry and government electronic commerce and eBusiness to DoD's "Revolution in eBusiness Affairs."

Birth of the DEBPO EC Day 2001 set the stage for the "virtual birth" of the DEBPO. This virtual event symbolized the office's name change from the Joint Electronic Commerce Program Office (JECPO) to its new name — the Defense Electronic Business Program Office. A change in the office's focus accompanied the name change.

"The use of electronic business technologies within DoD has skyrocketed over the past several years, especially in the traditional areas of Buying and Paying," Knott said. "Now the challenge is for the Department of Defense to harness this potential into the acquisition, logistics, human resources, health care, financial management, and other functional areas, creating a seamless flow of enterprise information. This expansion from electronic commerce to electronic business is a natural and necessary progression in support of the Revolution in Business Affairs."

With a click of the mouse, Army Lt. Gen. Henry T. Glisson and Air Force Lt. Gen. Harry D. Raduege Jr. inaugurate a "Virtual Birth" — symbolizing the birth of the Defense Electronic Business Program Office (DEBPO), previously known as the Joint Electronic Commerce Program Office (JECPO). With the new name also comes an expansion of the Office's focus to include eBusiness.

EC Day Awards

EC Day 2001 featured the presentation of the third annual EC Day Awards for the best electronic commerce initiatives of 2000 (pp. 54-55). DoD experts

DOD EC D

TOP EC TEAMS HONORED

Ronald Dorman, Deputy Director for C4I Programs, DISA (left), and Mae De Vincentis, Director of Information Operations, DLA, present Army Lt. Gen. Henry Glisson, Director, Defense Logistics Agency, an award recognizing his significant achievemnts in accelerating the implementation of electronic commerce and electronic business processes throughout the entire DoD.

Best DoD Electronic Commerce Web Site Business Implementation

Naval Facilities Engineering Command Electronic Solicitation [ESOL] Web Site

This award recognizes an exceptional DoD operational Web site that has resulted in increased efficiency and improved customer service.

From left: Dr. Margaret Myers, Acting Deputy Chief Information Officer, DoD; Paul Miler, Paperless Acquisition Program Manager, Naval Facilities Engineering Command; Margaret Evans, Director of Change Management, Defense Acquisition Reform Office.

Best Electronic Commerce Pioneer

Defense Logistics Standard Support Program Office

This award recognizes a DoD pioneering initiative that epitomizes the Revolution in eBusiness Affairs, demonstrating a high level of government creativity and innovation.

From left: Myers; Army Col. Dan Magee, Defense Medical Logistics Standard Support Program Manager; Evans.

Photos courtesy DLA

AY 2001

IN JUNE 7 CEREMONY

Army Lt. Gen. Henry Glisson presents Claudia "Scottie" Knott, Director, DEBPO, a DLA award for Exceptional Civilian Service.

Best Electronic Commerce Team of Government Agency and Small Business Partner

U.S. Army Communications-Electronics Command (CECOM) teamed with Frictionless Commerce Inc. — Electronic Auctioning Project Team

This award recognizes the best electronic commerce team of a DoD activity and a certified small business.

From left: Myers; Matthew Meinert, Chief EC, CECOM; Geoffrey Farrell, Director of Strategic Alliances, Frictionless Commerce Inc.; Evans.

Best Electronic Commerce Team of Government Agency and Large Business Partner

Defense Supply Center Philadelphia and U.S. Transportation Command teamed with Bindley Western Industries, Emery Worldwide, and Logistics Management Institute (LMI) — DoD Vendor In-Transit Visibility Team

This award recognizes the best electronic commerce team of a government agency and an industry partner for outstanding achievement of EC principles or applications within DoD.

From left: Tony Travia, Defense Supply Center Philadelphia (DSCP); Rose Marie Badame, Deputy Director, Directorate of Operations, DSCP; Air Force Col. Raymond Hebert, Chief, Logistics Program Division, U.S. Transportation Command; John Mark Wiley, Project Manager, Bindley Western Industries; Mike McVeigh, Government Sales and Logistics Manager, Emery Worldwide; Gus Creedon, Program Manager, Logistics Management Institute.

judged 77 nominations in four categories: Best DoD Web Site Business Implementation; Best EC Pioneer; Best EC Team — DoD/Small Business; and Best EC Team — DoD/Large Business. Knott received a Distinguished Civilian Service award from the Defense Logistics Agency (DLA), one of the eBusiness Program Office's sponsoring agencies; while DLA's Director, Army Lt. Gen. Henry Glisson, was presented a special award from the Deputy Director, Command, Control, Communications, Computers and Intelligence (C4I) Programs, for accelerating electronic commerce and eBusiness throughout DoD.

Electronic Industries Alliance

Dave McCurdy, former U.S. Congressman and the current President, Electronic Industries Alliance, began the opening session with an industry perspective on DoD eBusiness.

"We have moved to a networked reality from the industrial, then information age," he said. McCurdy discussed the impact of the current information technology (IT) industry "shakeout," calling it "necessary." But basic [IT] infrastructure companies, he said, are still needed.

"The market has not yet recognized this." Concluding, McCurdy shared his view of the key enabler to fulfilling the vision of eBusiness: "We need a robust defense industry that makes a profit."

DISA

Air Force Lt. Gen. Harry Raduege, Director, Defense Information Systems Agency (DISA), urged the audience to "remember why we're doing this — to remain persuasive in peace and decisive in war." He called eBusiness a significant opportunity to provide seamless support to the warfighter and noted the leadership role DoD has taken with initiatives such as the Central Contractor Registry and Electronic Document Access.

DLA

Glisson said eBusiness is not just about technology. It depends on business cooperation and partnerships. The right policies and standards are essential to conduct eBusiness. "If we are going to meet logistics excellence, we must harness this power," he said. "We need logistics excellence to do our jobs."

C3I

Dr. Linton Wells II, Acting Assistant Secretary of Defense for Command, Control, Communications and Intelligence (C3I), called the potential savings from eBusiness that could be applied to other activities "extraordinary." He also brought what he called the "skunk to the garden party" — security.

DoD, he said, must have a serious discussion about electronic security because eBusiness is a balance between access and security. Wells cautioned that insider threats are greater than potential outsider threats, citing recent espionage cases.

USD(AT&L)

The government keynote speaker, Edward C. "Pete" Aldridge, USD(AT&L) [Under Secretary of Defense for Acquisition, Technology and Logistics] called eBusiness a key enabler to reaching DoD business initiatives and meeting his five goals for Acquisition, Technology and Logistics:

- Establishing credibility of the acquisition process.
- Revitalizing the quality and morale of the acquisition, technology, and logistics workforce.
- Improving health of the industrial base.
- Establishing a strategy for weapons systems and defense infrastructure.
- Initiating high-level technology in weapons systems.

Aldridge said eBusiness cannot be using technology for technology's sake. It must be a tool for more effective, streamlined processes. Fulfilling the promise of eBusiness takes an enterprise view of the entire Defense life cycle, he noted.

"Our tradition has been to gain efficiency through stovepipes; we can gain greater efficiency through enterprise thinking," he said.

He named five key eBusiness excellence enablers:

- Reduce focus on individual systems and establish a total systems perspective.
- Reduce cycle time for implementation.
- Improve processes, creating faster improvements.
- Link human resources to configuration management.
- Monitor progress with metrics.

"If we are successful," Aldridge concluded, "we will increase taxpayer confidence in our resource management."

Industry

The industry keynote speaker was Al Lepeau, Operations Manager, East Coast Business Customer Sales Organization, Hewlett Packard. He spoke about the uncertainty that accompanies eBusiness.

"Some people will jump in first; some people hesitate," he said. Lepeau commented on the role of change in eBusiness and suggested one way to cope with change. "Hone your skills today, so you can navigate the unknown tomorrow."

Hardball Panel

Navy Rear Adm. Raymond Archer, Vice Director, DLA, moderated a no-holds-barred discussion on emerging issues in electronic commerce and eBusiness. Panelists were Barry Lerner, Vice President — Government Sales, Exostar LLC; Max Peterson, Vice President — Sales, eGovernment Solutions, Commerce One; Dr. Douglas Thomas, Assistant Professor — Business Logistics and Operations Management, Penn State University; Al Zapanta, President, U.S.-Mexico Chamber of Commerce; and Dave Mihelcic, Chief Executive Engineer, DISA.

Each panelist emphasized that he was representing his personal opinions, not his organization's stance, on any issues.

Panelists discussed the cultural changes that DoD needs to make to take full advantage of an eBusiness model. "The real issues are cultural," Lerner said, "We're going to a shared service model, where non-core business [business not inherently DoD-related] is going to small and medium-sized enterprises [SMEs]. We need contracts and tools that support that."

Mihelcic agreed with Lerner's assessment. "If it's not DoD-specific, we should not be in that space."

Small business has a large place in DoD eBusiness, according to the panelists. "We wired the border [between the U.S. and Mexico] to create a marketplace for SMEs," said Zapanta, citing his association's work with Fort Huachuca and small businesses.

"SMEs historically did not want to invest in government-specific requirements," added Lerner. "The Web changes that; the cost of admission has gone down."

SMEs have been involved in eBusiness through Web-based exchanges and through "co-opetition," a term the panel used for the concept of businesses teaming with other, often larger competitors in the same marketplace.

Due to the current dot-com shakeout, "Electronic markets will mirror today's non-electronic marketplace," said Peterson. "We can't walk away from small business. We must be inclusive in our business and technology strategies."

Dr. Thomas answered questions regarding training for the future in an eBusiness environment. "We [Penn State University] teach fundamental business principles," he said. "Technology changes — there really is no point in teaching it."

In this world of new technology and rapid change, business processes are the key to future success in DoD acquisition and logistics. Technology will continue to change, but EC Day 2001 had a timeless message:

Tools don't matter as much as people and business relationships.

EC Day continues to succeed because of the relationships formed and ideas exchanged in a forum dedicated to truly revolutionizing electronic business throughout DoD.

Editor's Note: To learn more about DoD's electronic commerce and e-Business initiatives, visit the DEBPO (formerly JECPO) Web site at *ww.defenselink.mil/acq/ebusiness.*

FROM THE DIRECTOR, DEFENSE PROCUREMENT

Effective Dec. 13, 2000, the Defense Federal Acquisition Regulation Supplement (DFARS) 242.72, "Material Management and Accounting Systems (MMAS)," was revised to eliminate MMAS coverage of areas where there is not a material risk to the government. Questions have been raised regarding the application of this rule to contracts that were entered into prior to Dec. 13, 2000 (existing contracts).

FAR 1.108, "Application of FAR Changes to Solicitations and Contracts," permits contracting officers to include FAR changes in existing contracts with appropriate consideration. That same principle applies to DFARS changes as well. Since the revised rule merely eliminates coverage in areas where there is no material risk to the government, it is appropriate for contracting officers to apply the revised rule to existing contracts without receiving consideration.

The revised rule exempts educational institutions and non-profit contractors because such entities do not have significant material costs that would warrant application of the MMAS standards. It also exempts fixed-price contracts where financing payments are not based on cost, such as performance-based payments. To the maximum extent practical, contracting officers should apply the revised rules by modifying existing contracts with educational institutions and non-profit contractors, and by modifying existing fixed-price contracts where financing payments are not based on cost.

The revised rule replaces the demonstration requirement with a requirement for the contractor to accurately describe its MMAS policies, procedures, and practices, and provide sufficient detail for the government to reasonably make an informed judgment regarding the adequacy of the MMAS. Contractors are also required to provide to the government, upon request, the results of internal reviews conducted to ensure compliance with established MMAS policies, procedures, and operating instructions. The government continues to have the same access to contractor records it had prior to the revision, and a contractor is still required to comply with the 10 MMAS standards. For existing contracts, contracting officers shall follow the revised rule by not applying the demonstration requirement to those contracts.

Questions regarding this information should be directed to David J. Capitano at (703) 695-7249.

F-22 Gets Green Light for Low-Rate Production

JIM GARAMONE

WASHINGTON, Aug. 16, 2001 – The Defense Acquisition Board has approved the F-22 air superiority fighter to enter low-rate initial production, officials announced Aug. 15.

The decision means Lockheed-Martin will build 10 F-22s using fiscal 2001 funds and 13 in fiscal 2002. There are currently eight F-22s already flying.

"The program has met all its exit criteria for entering into low-rate production and is performing to its design goals," said Pete Aldridge, Under Secretary of Defense for Acquisition, Technology and Logistics.

The acquisition board unanimously approved low-rate production, Aldridge said. Low-rate production will run through fiscal 2005 and then shift into high-rate production. Aldridge said the program would provide air dominance through the next 20 years.

The board's decision requires DoD and the Air Force to seek a lift in the F-22's current $37.6 billion budget cap. The production budget would rise to $45 billion. Research, development, and testing of the aircraft cost about $18 billion, raising the total cost to about $63 billion.

The acquisition board also cut the total number of F-22s to be produced from 331 to 295. The board reached this decision because of a difference in the cost estimates between the Air Force and the independent Cost Analysis Improvement Group.

The Air Force estimated greater savings than the independent group once the F-22 enters high-rate production, Aldridge said. The board's solution was to accept the Air Force program cost estimates, but the independent group's estimate of the number of aircraft the money will buy.

The decision gives the Air Force incentive to achieve the savings it forecasted. "If the Air Force can, in fact, get the cost estimate at their level, they can buy more airplanes," Aldridge said.

Low-rate production is set to rise to 30 aircraft in fiscal 2005. High-rate production calls for 90 aircraft per year beginning in fiscal 2006.

Aldridge said the plan can change as circumstances dictate. "Anything can happen next year," he said. "It depends on what happens to the budget, what happens to the production, what happens in the operational test and evaluation. We address these programs every year, but we have to lay out a plan. Right now, this is our plan."

Editor's Note: Garamone is a public affairs specialist with the American Forces Press Service. This information is in the public domain at *http://www.defenselink.mil*.

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DAU Learning Resource Center Merges With David D. Acker Library

Listening to the Customer Has Its Own Rewards

MYRNA BASS

From the Editor
One of the most frequently used academic resources at the Defense Acquisition University — the Learning Resource Center — merged its computer lab and collection of videotapes, CDs, and other commercial training packages with the David D. Acker Library effective Aug. 10. Previously located in Building 208 on the DAU main Fort Belvoir campus, the LRC staff is now co-located with the Acker Library staff in Scott Hall, Building 226, Fort Belvoir, Va. First opened in 1989, the LRC was founded by Myrna Bass, who continued through the years as the LRC's director. Bass spoke to *Program Manager* about her 12 years with the Center and expectations for the future.

As anyone can imagine, after starting this Center and nurturing it for so many years, it was initially hard to think of it merging with another Department. At first, I worried that someone would think that we had not done a good job. I now know that isn't true. I realize, as others have, that there will be fewer students on campus because of online training and, if they are in-residence, they will have less time to use the LRC. Our future students are being brought up on the Internet. They are the 16-year-olds who can program our Palm Pilots faster than we can "decide" to read the directions. So, it is again time to change and meet the needs of our students in a new way, where they live — on the Internet.

We opened and closed the LRC doors driven by a simple philosophy: *If we meet the customer's needs they will return.* We adopted the practice of previewing all of our materials. In so doing, we knew which products to suggest to students and could better determine if those products should become part of the LRC's permanent collection. If we didn't have what students needed, we knew they would not return, since there was nothing to tie the LRC to the curriculum in the beginning.

If we were to be successful, we had to plan, benchmark, staff, and execute with pride and know what our customers wanted and needed. Toward that end, we benchmarked against JPMorgan on Wall Street, Sun Company in Pennsylvania, Steelcase Furniture in Michigan, National Security Agency, Central Intelligence Agency, and 11 others.

As our learner's needs changed, *we* needed to change. Over the years, we tried lunchtime videos, set up computer rooms in the Bachelor Officers' Quarters, and extended and shortened our hours, all while monitoring the results and discontinuing what was not working. We also had to adjust to the laws of supply and demand. In the last few years, vendor products changed. Companies started putting their efforts into Internet courses. It became increasingly difficult to find audio or video formats, so we found ourselves owning most of what was offered in lending formats. Meanwhile, the LRC products were getting older. So, it became time to change again.

While many assumed we only circulated training packages, we also tried to help students think through their perceived goals for improvement and get to their real needs, which may or may not have been the same. For example, one student's goal was to improve his management skills. When I asked him which skills — because as a GS-15 he certainly must already possess some management skills — you could almost see the light bulb go on in his head.

Another student commented, "I'm just an ISTJ on the Myers-Briggs Instrument." I reminded him that he was a great engineer because he was an ISTJ, and remarked that if they asked me – an ENFP — to be an engineer, we'd all be in deep trouble. You could see the self-reflection and resultant pride that wasn't in his expression when he first entered the LRC.

Several students came realizing they needed to work on conflict and anger, but had previously never found the right means to deal with these issues. For many, it was the first time they had found not only a resource, but also the time and a safe environment in which to confront these issues — even though a number of these students were successful GS-14s and -15s.

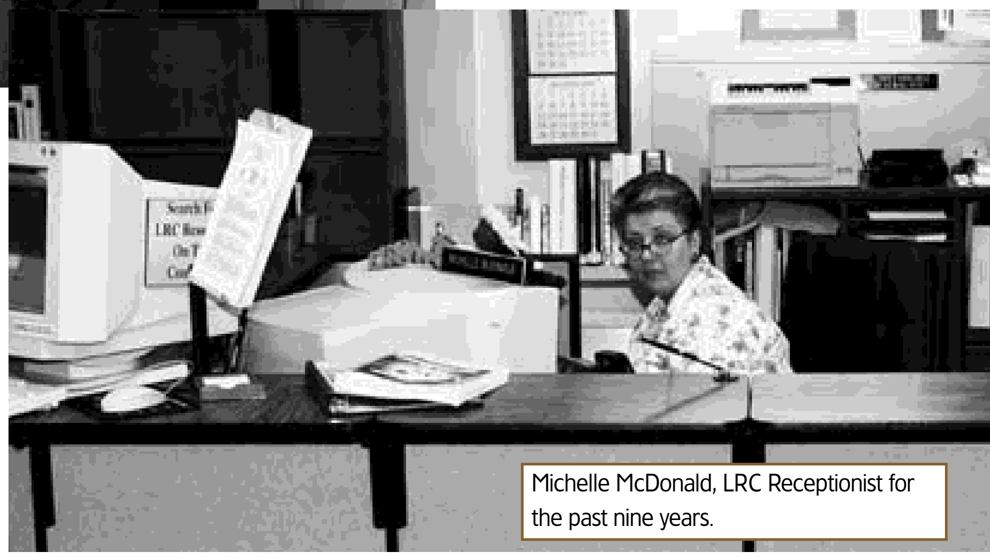
The Personal Touch

We also consulted with students on work-related communications issues that were apparent within their classroom teams. As we go global and our country diversifies, communications problems are inevitable due to our differing cultures. We are working more in integrated product teams, which presents more opportunities for cultural conflicts and misunderstandings. Working remotely at geographically separated locations will only serve to intensify the differences.

Teaching managers how to deal with these issues through remote learning will be a great challenge. These types of issues would seem to require personal interaction. Indeed, one might ask, "How will those who would benefit from

Photos by Army Sgt. Kevin Moses

Myrna Bass (right), LRC Director, helps one of the many customers who visited the LRC each workday prior to its closing.



Michelle McDonald, LRC Receptionist for the past nine years.

such training find the time, especially while at work in the very midst of their communications and conflict challenges?"

I believe these are not the kinds of skills one can easily learn online. The most profound lessons are those you learn about yourself from feedback and reflection, in marked contrast to computer training or flowcharting, which requires hands-on training and experience to effect change. In a future of increased online training, it is my sincere hope that those students who need more personalized communications training will find a venue that places emphasis on feedback, reflection, and personal interaction.

Some believe e-mail will be enough. I believe that eye contact, smiles, gestures, laughs, and so on are what give others the confidence that you believe in their success and the confidence to change their lives for the better. Five people can read the same message and get five different views as to what the communicator of that message is trying to convey. But when you add the tilt of your head and say "sure," then the communicator can see and hear you acknowledge that you're being challenged to reflect on what he or she has just said. That's where the *big* success comes with learners — when you get them to rethink their world from different angles. I don't think the Internet does that well.

How Do You Measure Success?

Was the LRC successful? The data charts tracking usage and feedback have always given us the highest ratings, but numbers can be deceiving. My truest "performance indicator" of the LRC's success was merely sitting on the front desk for 15 minutes and hearing students rave about the wealth of resources available, and how frustrated they were that they didn't have more time to use the Center.

Other performance measures were both tangible and intangible: the end-of-course surveys and the many compliments; the time all Department budgets were cut while the LRC's was raised; the many former students who begged to be able to use the LRC full-time instead of just on weekends as alumni; the faculty who used it on a regular basis; or even the people who called for advice on what to buy for their own start-up LRC. I'm confident we did a good job listening to our customers.

Why was the LRC successful? I believe it was because the students found the latest packages here and got to choose what they thought they needed. The strongest motivation is wanting to learn. As Otto Kroeger says: "I cannot teach you anything you don't want to learn."

It was also because of the magnitude of support from faculty who advised students to use the LRC, reviewed many training packages, and suggested new items; students who advised us on whether they thought a training package was good; and the many DAU support Departments that kept us running smoothly with computers, signs, training, policy advice, staffing, contracts, videos, furniture repairs, cleaning, budgeting, and much more — all too numerous to mention.

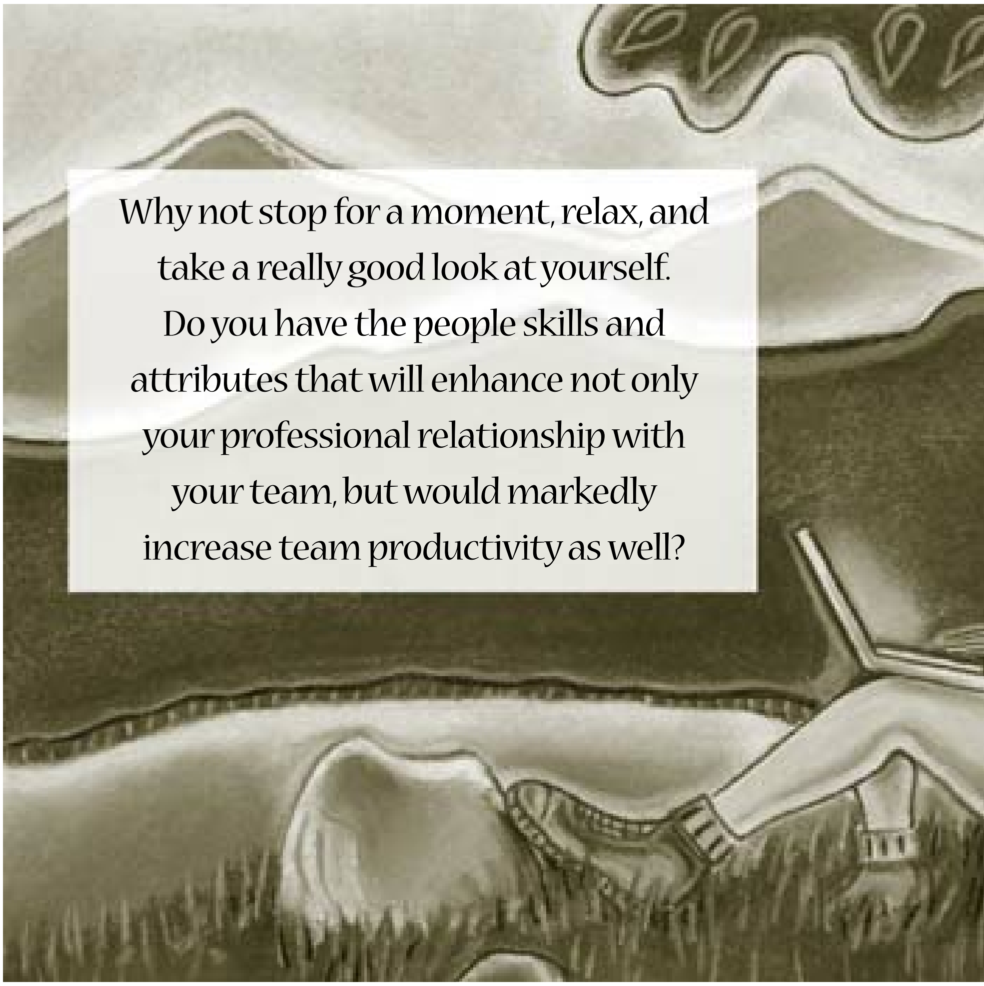
The LRC was also certainly successful because of the staff who worked exceptionally hard to put customer needs first. Not only the present staff, but also others who now work in different Departments and still lent a hand whenever asked because they believed in what we were doing. I'd especially like to recognize and thank Michelle McDonald who put in nine years of running the front desk and was mentioned by *every* class for her great support; Lisa Johnson for her many years of hard work and good judgment; and Owen Gadeken for his wisdom in starting an LRC and giving me the opportunity to be a part of it. It took everyone to make the LRC an institution that successfully served its purpose — *in its time.*

It's Not Enough to be a Xerophilous Program Manager

How Are Your People Skills?

ELIZABETH LUNCH

It's not enough to be a xerophilous Program Manager (PM) these days. Sure, you can calmly sit in a Congressional Hearing and expertly answer rapid-fire questions with cameras rolling and 50 angry, vein-bulging senators slicing and dicing every program decision you've made over the last three years. You can single-handedly turn a mere 24 software lines of code into a fully functional "whizbangit" and simultaneously write the maintenance manual that will leave users gasping with admiration. You can recite the Federal Acquisition Regulation in 10 minutes and competently calculate the next six outyears' budget in five minutes. But, how are your people skills? Do you have any? Do you care? (Hint … you should care!)



Personality Attributes vs. Managing People

The PM's functional and technical abilities are important, as those competencies guide the project. Besides the project, though, what or whom does the PM manage? Obviously, people. Now, people are a quirky commodity. They like to be considered as contributing, valuable, unique specialists — not as merely tolerated, impersonal, expendable resources. Remember the expression "cold pricklies" and "warm fuzzies"? People, for some amazing reason, respond better (translated — they'll work their keester off for you) to kindness, recognition, and fairness ("fuzzies") than to arrogance, disregard, and favoritism ("pricklies").

Therefore, with so much to gain, why not stop for a moment, relax, and take a really good look at yourself. Do you have the people skills and attributes that will enhance not only your professional relationship with your team, but would markedly increase team productivity as well?

***Lunch** is a Senior Project Director at the U.S. Army Simulation, Training and Instrumentation Command (STRICOM), in Orlando, Fla. She holds a B.A. in Education from Ohio State University and is pursuing an M.A. in Management from Capella University. She was also awarded the Master Instructor designation in electronics by the U.S. Air Force.*

Some of those fuzzy-producing skills and attributes PMs would do well to cultivate are listed here from A to Z:

Acknowledge Accomplishment

Fuzzy PMs recognize accomplishments and take the time and energy to acknowledge verbally or with a formal reward both large and small feats. They pass fuzzies to all their team members, and they ensure no one is overlooked.

Believable/Credible

Believable PMs are credible. Their word is their bond. They don't tell a story one way for one group of individuals and change it again for another, while hoping the various groups won't compare notes.

Communicate

Instead of fostering the game of Gossip (where one person hears something and passes it on to another and after awhile the data bear no resemblance to the truth), people-skilled PMs relate information to the entire team at once, not just to select individuals. Whether through e-mails or all-hands meetings, PMs tell their team members the same information simultaneously.

Delegate

PMs who know how to delegate and *do*, earn their team's respect. They then find themselves free to concentrate on the programmatics better suited to their office. Though PMs may be able to handle every task, by delegating to others they demonstrate their trust of others' abilities.

Ethical

Let's face it. It's just too complicated to remember the exact lie you told to whom, and when, and how to cook the books medium well. Ethical PMs "tell it straight" and "walk the talk." Adhering to the highest ethical standards is not always easy, but PMs who practice ethics in all their dealings can look others in the eye with a clear conscience.

> **"XEROPHILOUS"**
>
> Able to survive in a hot, dry environment are the Xerophilous PMs! But no man is an island. Each successful team functions effectively with its PM to produce project success.

Friendly

How hard is it to say "hi" to people or to acknowledge them with a smile, especially if they are members of your team? Since when was courtesy declared evil? Friendly PMs catch more flies … er, teammates, with honey than with vinegar (didn't your Mom ever tell you that?).

Giving

Fuzzy PMs give of their time (they attend meetings when they say they will) and of their project money (they give time-off awards or cash awards).

Honest

When honest PMs chop down the cherry tree, they admit it. If five people have to be let go from the team, honest PMs do so in a straightforward manner. They don't lie, but they aren't brutal with the truth. They balance kindness with honesty.

Inspirational

Fuzzy PMS inspire people to do their best through their own inspirational actions. They set a good example (Mom would be proud).

Just

Just PMs are fair PMs. They listen to both (or more) sides of the story and make a just determination. They refrain from rushing to judgment, and everyone is treated as equals.

Kind

Kind PMs send a personal note (or even an e-mail) to congratulate a birth, offer condolences to the bereaved, or offer thanks for a special act. They take an interest in their team members and talk to (or e-mail) each person as often as possible. They keep up with the temperature of the team — are there problems they can help solve? Does someone need anything that they can provide? Is anyone being "hung in effigy" in the parking lot?

Listen

Are you listening out there? Effective communication is an important asset for any PM, and so also is effective listening. Listening is willfully receiving those radio waves that strike your ears, internalizing and transmitting them further to your "gray matter," thus achieving comprehension. When listening to someone, say the speaker's name and recap what he or she had to say. Be courteous and listen to what is being said.

Motivated

Actor to director: "What is my motivation?" Your enviable work ethic and professional attributes will motivate others to imitate you. As PMs, each of you are your team's director. You provide team and project motivation. Your team sees you take the high road in every circumstance.

Nonjudgmental

You do not judge a book by its cover. You do not judge people by their ethnicity, skin color, age, sex, race, or pimple count. Other than performance and actions directly related to a team member's official personnel appraisal, you do not judge at all lest you be judged.

Open

Open door. Open book. Fuzzy PMs welcome anyone who needs to see them. Some may even set work hours conducive to their own productivity, and they honor their availability.

Positive Attitude

"Laugh, and the whole world laughs with you; cry and you cry alone." PMs can't laugh all of the time (flashback to Congressional Hearing), but they can be upbeat and positive. See the glass as half full, not half empty. Actions follow attitudes.

Qualified

Qualified PMs inspire trust and confidence. They keep up with professional courses. They read the Trades. They attend seminars when possible. And, just as important, they keep their people qualified as well.

Responsive

Is this you? "If I wanted that done tomorrow, I would have asked for it tomorrow?" Likewise, when something is asked of you that needs to be accomplished now, *do* it now.

Spirited

Animated PMs are easier to work with than Johnny Monotone. If your team hasn't fallen asleep after 77 seemingly sibilant syllables … zzzzzzz … huh? Look around — does your audience simultaneously check for light leaks after each of your brilliant monologues?

Trustworthy

You can keep a secret, and you do not break your word. Period.

Understanding

Fuzzy PMs can "walk a mile in another's shoes." You understand that people experience good and bad days and have highs and lows (just like you). You are able to work with them to achieve the best for them — and for the project.

Valorous

Having good old-fashioned courage to stand up for what's right when everyone else is running for the hills is an admirable trait. As vanguard of your team, are you brave in the face of all project perils? (Think bulging veins, award fee evaluations, and personal evaluations...)

Wakeful

In this sense, are you alert and watchful? Do you anticipate what should or could happen next to the project? Do you plan ahead and prepare your team for contingencies?

Xerophilous

Able to survive in a hot, dry environment are the Xerophilous PMs! But no man is an island. Each successful team functions effectively with its PM to produce project success.

Zealous

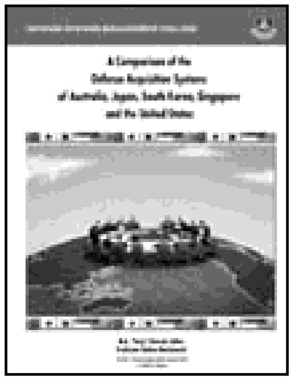
Zealous PMs have a zest for life, and enjoy their work. They treat their team the way they would like to be treated, a la the Golden Rule; and they often succeed where others before them have not.

If, after reading the above examples of people skills and personal traits, you can relate to only two or three, you might want to tweak your professional personality. Respected and rewarded team members feel appreciated and respond in kind to PMs who demonstrate more than xerophility.

Editor's Note: The author welcomes questions/comments. Contact her at *betty_lunch@stricom.army.mil.*

DAU Guidebooks Available At No Cost to Government Employees

Comparison of the Defense Acquisition Systems of Australia, Japan, South Korea, Singapore, and the United States

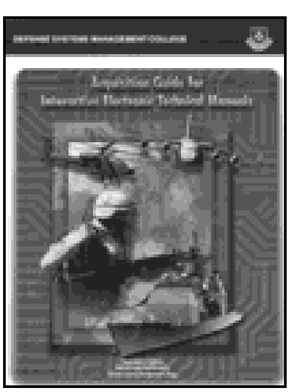


This guidebook describes the national armament systems of Australia, Japan, South Korea, Singapore, and the United States. Beginning with an introduction to the political environment, the acquisition organizations, systems, and processes involved, Kausal and Markowski describe the effects of differences in national culture and traditions, time zones, currencies, fiscal year schedules, and language barriers. Tying these differences to each nation's national armament system, the authors make the case that international armaments cooperation is a difficult but rewarding challenge.

Author: *Stefan Markowski* **Editor:** *Tony Kausal*

Online
http://www.dsmc.dsm.mil/pubs/misc/acq-comp-pac-00.htm
Printed Copy
To request a printed copy of *Comparison of the Defense Acquisition Systems of Australia, Japan, South Korea, Singapore, and the United States*, choose one of three options: 1) Fax a written request to the DAU Publications Distribution Center at (703) 805-3726; 2) mail your request to Defense Acquisition University, Attn: AS-CI, 9820 Belvoir Road, Suite 3, Fort Belvoir VA 22060-5565; or 3) call (703) 805-2743.

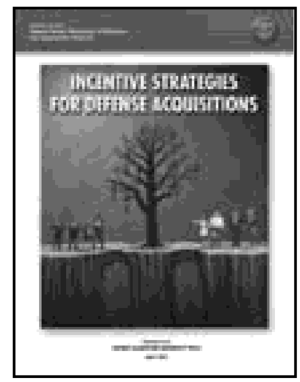
Acquisition Guide for Interactive Electronic Technical Manuals



This guidebook is designed as the primary desk reference for acquisition personnel who must acquire, develop, deliver, and manage Interactive Electronic Technical Manuals (IETM). It incorporates the status of existing/planned DoD and Service-unique policy guidance, discusses current and projected technologies related to the production of IETMs, analyzes the relationships between IETMs and training, and addresses delivery vehicles, including the World Wide Web.

Online
http://www.dsmc.dsm.mil/pubs/misc/ietm.htm
Printed Copy
To request a printed copy of *Acquisition Guide for Interactive Electronic Technical Manuals* (September 1999), choose one of three options: 1) Fax a written request to the DAU Publications Distribution Center at (703) 805-3726; 2) mail your request to Defense Acquisition University, Attn: AS-CI, 9820 Belvoir Road, Suite 3, Fort Belvoir VA 22060-5565; or 3) call (703) 805-2743.

Incentive Strategies for Defense Acquisitions Guide



Printed on behalf of the Office of the Deputy Under Secretary of Defense for Acquisition Initiatives by the Defense Acquisition University Press

Incentives should exist in every business arrangement because they maximize value for all parties. DoD needs to adopt strategies that attract, motivate, and reward contractors to encourage successful performance. Using commercial practices will enhance DoD's ability to attract nontraditional contractors. This guide amplifies existing policy regarding use of incentives in defense acquisitions. It explores cost-based and noncost-based incentive strategies. It clearly defines use of performance objectives or product functionality vs. detailed requirements to seek best value acquisitions. It answers these questions:

- Why are we concerned with contractual incentives?
- What elements contribute to an effective incentive strategy?
- How can we build and maintain an effective environment for a successful business relationship?
- How can we build the acquisition business case?
- How can we build an incentive strategy that maximizes value?

Online
Available soon on the DAU Home Page at *www.dau.mil/pubs*.
Printed Copy
To request a printed copy of *Incentive Strategies for Defense Acquisitions* (April 2001), choose one of three options: 1) Fax a written request to the DAU Publications Distribution Center at (703) 805-3726; 2) mail your request to Defense Acquisition University, Attn: AS-CI, 9820 Belvoir Road, Suite 3, Fort Belvoir VA 22060-5565; or 3) call (703) 805-2743.

Cadet Summer Research Program

Air Force Academy Cadet Exposed to "Real World" of Military Life

ALBERTA LADYMON • MARY-JO HALL

Cadet Isaac T. Bell arrived on May 15 this year at Fort Belvoir, Va., with one primary goal — to experience work as an active duty military member of the Defense Acquisition University (DAU) staff. Bell knew he would be assisting with research and participating in a variety of management and leadership curricula development activities, which is a routine part of the Research Internship Program.

Although he came to DAU to learn and gain on-the-job experience, somewhere along the way he became truly immersed in the military way of life, with all its hardships, loyalties, history, culture, and comradery.

He learned that military life is an *experience* and a close-knit *community,* not just a routine duty or job. Entering the world that supported acquisition professionals was fast-paced, multi-dimensional, and interesting. And in a culture saturated with acronyms and abbreviations, he also acquired a new vocabulary.

Finding a Niche

Since his assignment was assisting faculty member Dr. Mary-jo Hall, he literally "reported" to the classroom. As it turned out, the class that Hall was teaching at 8 a.m. on his first day was a class on Strategic Direction — a topic directly related to his primary research project. Bell decided it made a lot of sense to actually attend the class as a student. From that point on, he became not only Hall's assistant, but also an adjunct member of the Advanced Program Management Course (APMC) 01-2-H.

For his primary research project, Bell served on a research team tasked with developing a measurement system for the Program Manager Community of Practice (PM CoP). Using the Balanced Scorecard approach, the team members designed the performance management system for DAU's new PM CoP. They also used the storyboard technique to capture the design of the PM CoP.

As part of the experience, Bell immersed himself in the activities of Section H as though he were a full-fledged student, accompanying them on their trip to Capitol Hill and playing on their softball team for Sports Day. Adding to the "experience" part of the assignment, he helped his team win by hitting the only home run against the faculty team. Bell attended several other APMC classes and electives and, on a personal note, participated as reader for Air Force Col. Owen Gadeken's retirement ceremony.

A highlight of the Research Internship was the opportunity to shadow senior officers in acquisition positions. Bell met Air Force Maj. Gen. Michael C. Mushala, Program Executive Officer (PEO) for Bombers and Fighters, and accompanied him to his Pentagon staff meeting. He then shadowed Air Force Maj. Ronald Jobo, also with PEO Fighters and Bombers, for the rest of the day. Such experience allowed him to see how DAU's mission supports the acquisition community.

Life From the "Opposite Side of the Podium"

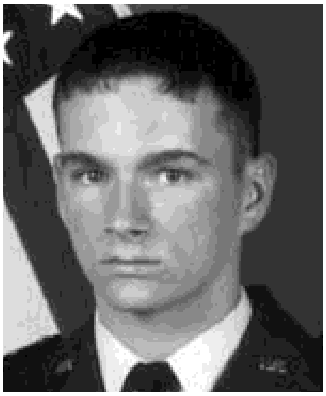
During the six-week assignment, Bell was heavily involved with a variety of activities supporting Hall and her work in the Program Management and Leadership (PML) Department. One of Bell's central areas of focus during the assignment was the *PM SMARTbook* elective course. He participated in all facets of the course from designing classroom materials to developing a CD-ROM. The experience of assisting in the preparation of curriculum allowed him to see the academic environment from the "opposite side of the podium."

Because his assignment was developmental, Bell also completed many of the leadership aspects of the PML curriculum, including a baseline assessment of his own leadership skills, and generating ideas for enhancing his ability to lead Cadets at the U.S. Air Force Academy. To learn more about himself, he completed and internalized the findings of the Myers-Briggs Type Indicator (MBTI) personality assessment. He also attended the MBTI elective with Otto Kroeger, a nationally known organizational consultant and best selling author whose primary area of expertise is use of the MBTI.

Cadet Bell came to DAU with no exposure to the academic side of acquisition,

Ladymon *is a former Research Associate and Fellowship Program Coordinator, Strategic Planning Action Group, Defense Acquisition University, Fort Belvoir, Va.*
Hall *is a Defense Acquisition University professor, Fort Belvoir, Va., working with both the Advanced Program Management Course (APMC) and the Executive Program Management Course (EPMC).*

ISAAC T. BELL
Cadet First Class
U.S. Air Force Academy



Born in Knoxville, Tenn., Cadet Bell attended schools in Sullivan, Miss., and in Charlestown and Borden, Ind. In 1998, former Congressman Lee Hamilton appointed him to the U.S. Air Force Academy.

Bell is on the Superintendent's list for military, academic, and athletic proficiency. He is currently majoring in Management. The Department of Management at the U.S. Air Force Academy offers cadets the opportunity to earn an undergraduate degree in Management, and is accredited by the American Assembly of Collegiate Schools of Business (AACSB). The Cadet Summer Research Program is designed to offer the best and brightest management majors the opportunity to apply what they learn in the classroom in the context of "real-world" organizational environments.

Bell's long-range career plans include completion of graduate school with a master's degree in Business Administration, followed by Euro-NATO Joint Jet Pilot Training and service as an active duty Air Force fighter pilot.

technology, and logistics. Hopefully, he left with a wealth of initial exposure to the skills that breed successful leaders, program managers, and program executive officers. Of the nine cadets DAU has sponsored since 1994, has DAU unknowingly hosted a Senior Acquisition Executive in the making? *One can only wonder.*

ABOUT THE CADET SUMMER RESEARCH PROGRAM (CSRP)

Three decades ago, David Packard, former Deputy Under Secretary of Defense and founder of the Defense Systems Management College (DSMC), envisioned the acquisition community would grow, expand, and mature, in part through acquisition research. To this end, laws that created DSMC, and later DAU, incorporated research as an integral part of the mission.

In keeping with the spirit of the laws establishing DAU-DSMC, the Research program sought ways to enhance the acquisition community of knowledge. One such effort started in 1994 with the initiation of the Cadet Summer Research Program, or CSRP. The program was named the "Cadet" program in honor of the inaugural participant from the U.S. Air Force Academy. The program had aspirations of expanding to the other Services, but this did not come to fruition.

Made possible through a research extension agreement established between DAU-DSMC and the U.S. Air Force Academy, the goal of the CSRP is to provide a unique opportunity where Academy students gain hands-on acquisition research experience during the summer. Program participants reside at DAU during the six-week program and are assigned to assist specific DAU-DSMC faculty members, who act as their mentors during the project.

Under the direction of their faculty mentors, the program participants are exposed to a variety of acquisition-related tasks, contribute to active DAU-DSMC acquisition research projects, and document their findings and experiences.

Cadet J. Jeremy Marsh was the first Cadet to enter the program in 1994. His article, "Liberators, Mustangs, and "Enola Gay" can be found at *http://www.dsmc.dsm.mil/pubs/pdf/pmpdf94/marsh.pdf* in the Sep-Oct 1994 issue of DSMC's *Program Manager* magazine. Since that time, eight other Cadets have participated in the program.

During the summer of 2000, Cadet Laurel Lee became the first Cadet to actively participate in researching and writing a complete chapter for a DAU Guidebook: *Impact of the Media and Mass Communication Technology on the National Security Decision Making Process.* Lee worked closely with Dr. Robert Burnes, Associate Director, School of Program Management Division, and Dr. Robert Delaney, an expert in the field of media relations. Throughout the course of her research, Lee developed questions prior to interviewing leading journalists from the *Washington Post,* NBC, Voice of America, and *The Daily News;* lobbyists; Congressional staffers and members of Congress; and key officials at the Pentagon.

DoD organizations wishing to participate in the U.S. Air Force Academy Management Department's Cadet Summer Research Program can contact Air Force Capt. Mike Haynie at DSN 333-8387; Commercial 719-333-8387; or via email at mike.haynie@usafa.af.mil. Selection for Summer 2002 will begin in the Fall of 2001.

DAU Professor Appointed Examiner for 2001 Malcolm Baldrige National Quality Award

Dr. Mary-jo Hall, a Defense Acquisition University Professor, at Fort Belvoir Va., has been appointed by the Director of the National Institute of Standards and Technology (NIST) to the 2001 Board of Examiners for the Malcolm Baldrige National Quality Award. The Award, created by public law in 1987, is the highest level of national recognition for performance excellence that a U.S. organization can receive.

As an Examiner, Hall is responsible for reviewing and evaluating applications submitted for the Award. The board is composed of about 400 leading experts selected from industry, professional and trade organizations, education and health care organizations, and government.

Those selected meet the highest standards of qualification and peer recognition. All members of the board must take part in a preparation course based on the Baldrige Criteria for Performance Excellence as well as the scoring and evaluation processes for the Baldrige Award.

Awards may be given annually in each of the five categories: Manufacturing, Service, Small Business, Education, and Health Care. To date, 42 organizations were honored for their achievements, including the following Year 2000 Award recipients: Dana Corporation-Spicer Driveshaft Division; KARLEE Company Inc.; Operation Management International Inc.; and Los Alamos National Bank.

The Award Program is managed by NIST in close cooperation with the private sector. The American Society for Quality in Milwaukee, Wis., administers the program.

Information about the Baldrige National Quality Program is available at the following address:

National Quality Program
National Institute of Standards and Technology, Administration Building., Room A600, 100 Bureau Drive, Stop 1020, Gaithersburg, Md. 20899-1020

Commercial: 301-975-2036
Fax: 301-948-3716
Internet: *http://www.quality.nist.gov*

Dr. Herry Hertz, Director, Malcolm Baldrige National Quality Award Program, appoints DAU Professor, Dr. Mary-jo Hall, as a 2001 Malcolm Baldrige National Quality Award Examiner, May 25, 2001. Photo courtesy NIST

Those seeking further information on the Baldrige Award Program can contact Jan Kosko, NIST Public and Business Affairs, 301-975-2767.

Diane K. Morales

Is New Deputy Under Secretary of Defense for Logistics and Materiel Readiness

Diane K. Morales was sworn in July 17, 2001, as Deputy Under Secretary of Defense for Logistics and Materiel Readiness (DUSD [L&MR]). The U.S. Senate confirmed her on July 13.

As the DUSD(L&MR), Morales serves as the Principal Advisor to the Under Secretary of Defense for Acquisition, Technology and Logistics for policy and oversight of the Defense Logistics Agency and Military Departments' logistics activities. She specifically oversees Department of Defense policy in the functional areas of materiel management, maintenance, supply chain integration, transportation/mobility, installations, and environment.

Morales has more than 20 years of experience in business and defense matters. Most recently, she was the president of DMS, a management services firm that focuses on defense and commercial logistics. Her previous government positions included serving as Deputy Assistant Secretary of Defense for Logistics, 1990-93; Board Member, Civil Aeronautics Board, 1983; and Deputy Assistant Secretary for Policy at the Department of Interior, 1981-83.

In the private sector, Morales was the President of Morales Consulting Services; Vice President for Government Affairs at the Earth Technology Corp.; Marketing Services Manager of 3D/International Inc.; and account executive at the advertising and public relations firm of Goodwin, Dannenbaum, and Littman & Wingfield Inc.

Morales is a graduate of the University of Texas and is a native of Houston, Texas.

Editor's Note: This information is in the public domain at *www.defenselink.mil/news.*

Knowledge Management

Next Step to Competitive Advantage

NEAL POLLOCK

Within the last few years, the corporate sector, government agencies, and organizations are demonstrating an increasing interest in the topic of Knowledge Management (KM). KM caters to the critical issues of organizational adaptation, survival, and competence in the face of continuous environmental change.

This article provides answers to the most frequently asked questions about KM, which combines the data and information processing capabilities of information technology (IT) as well as the innovative capacity of human beings.

Q

What is Knowledge Management?

A

The formal Navy definition of Knowledge Management is found in Department of Navy Chief Information Officer (DON CIO) *Glossary of IM/IT & KM Terms*, dated May 2001, which states, "Knowledge management can be viewed as a process for optimizing the effective application of intellectual capital to achieve organizational objectives." More simply, KM is the application of management to knowledge. Management, in this case, refers to the processes involved in creating, generating, classifying, storing, distributing, communicating, tailoring, and reusing knowledge.

Knowledge can be differentiated from data and information as a higher level of abstraction. Data are the nuts and bolts or piece parts, similar, for example, to the components that constitute a kit for a chair that requires assembly.

__Pollock__ is on a rotational assignment as the Chief Knowledge Engineer at Department of the Navy Chief Information Office, Arlington, Va.

Once the major assemblies are formed and recognizable (e.g., the seat, the back, the legs), they are comparable to information. The completed chair is likened to knowledge. Thus, information is an arrangement of a set of data in a meaningful form.

Knowledge is a set of processed information with appropriate context to be understandable and actionable. The main characteristic distinguishing knowledge from information is the user's ability to easily act upon the knowledge.

If a ship is under attack, giving the captain a pile of sensor data does no good; giving the captain a drawing of numerous intersecting lines, status reports of ship systems, or even the latitude and longitude of the attacker still doesn't (in and of itself) do any good. One must provide a succinct, appropriate level of abstraction — actionable knowledge — that pinpoints the direction and range of the target in terms that the ship's weapons system can interpret, and the "go" status of that system. Only then can the captain decide when or whether to shoot back. That decision depends upon the knowledge provided — but is not constituted by it.

> **Social Network Analysis maps the interactions between and among the people within an organization. Such interactions are not at all homogeneous. Specific people serve as Connectors, Salesmen, and Mavens for the organization ... the value of such people is often hidden from view. Organizations that eliminate such functions learn of the losses through hard experience.**

Knowledge is decision input. The decision, however, requires the captain's understanding and wisdom. Nevertheless, a knowledge base can provide some benchmarks of past actions taken by other captains under similar circumstances and the results from such actions. As David W. Aha explains in a 1992 conference paper on "Generalizing Case Studies: A Case Study," such tools as Case-Based Reasoning (an artificial intelligence application), for instance, can provide insight into the present based upon the past.

Q

What methods does Knowledge Management typically employ?

A

Two main viewpoints of KM exist: social and technical. Some claim that the former constitutes about two-thirds of KM, while others tend to emphasize the latter due to its familiarity and ease of implementation and measurement. Unfortunately, similar to business process reengineering, implementing technical solutions to KM problems or opportunities provides very limited return on investment (ROI). Similarly, implementing KM while only addressing social aspects can have marginal impact and is usually not measurable in a meaningful way — at least not from a financial perspective.

The large potential gains come from marrying the two aspects by using technology to leverage social interventions or implementations. Thus, IT is well suited to enable the many potential gains of KM. It should be noted, however, that for most people, many KM activities are instinctive. People, by their very nature, share knowledge all the time. KM adds purpose, organization, consciousness, and organizational recognition to the process. Mere institutional acceptance of the organizational value of KM can go a long way in facilitating its effectiveness.

Q

What are the social innovations employed by KM?

A

Communities of Practice (CoP) can be formed to provide a "place" for people working in particular areas of interest to share methods or concerns and establish a history of cooperation and mutual support. This history can be made available to members. The DON CIO leads the KM CoP; however, this is a special case. (Note that this site is currently open to members only; however, other activities may request membership from the public DON CIO Web site at *http://www.don-imit.navy.mil/quickplace/.)*

The Naval Facilities Engineering Command (NAVFAC) has numerous CoPs. At a high level, the NAVFAC Technical Discipline Leaders (TDL) share their separate areas of expertise in a CoP that cuts across all of NAVFAC's building endeavors. Each TDL, however, has a CoP for his or her own specific Discipline. These CoPs are not collocated, but are spread throughout CONUS and certain foreign countries in which NAVFAC maintains facilities. Numerous CoPs exist throughout the U.S. Government as well as industry.

Social Network Analysis maps the interactions between and among the people within an organization. Such interactions are not at all homogeneous. Specific people serve as Connectors, Salesmen, and Mavens for the organization (as well as in other aspects of life). The value of such people is often hidden from view. Organizations that eliminate such functions learn of the losses through hard experience. With the declining U.S. Government workforce, identifying such people within an organization and creating contingencies for their replacements as the workforce ages are critical to the overall health of the organization.

Similarly, the recognition of generalized reciprocity can lead to a re-orientation of an organization's values or definition of what constitutes work. The leading Ford Motor Company general manager used the quality and quantity of his direct subordinates' helping each other as one of his main criteria for evaluating their performance. He would even eliminate subordinates who did not actively participate in helping their peers. As a result, when Ford needed new general managers, those reporting directly to him became the candidates of choice. Helping co-workers can be an active part of one's job, not only tacitly, but also explicitly.

Author Stephen Denning, in his 2001 publication, *The Springboard: How Storytelling Ignites Action in Knowledge Era Organizations*, relates how he introduced KM at the World Bank. Indeed, storytelling as a technique of change management has come into its own. Recognized as a fundamental and powerful way in which organizations codify their norms, energize personnel, and achieve corporate cohesion, storytelling is also exemplified in a 1982 book by Tom Peters, *In Search of Excellence*. Peters illustrates how archetypal stories about the exploits of founders establish a company myth, which maintains the company's environment.

The DON CIO holds an annual Knowledge Fair (usually in August), which provides a setting for knowledge workers to share their efforts with their peers throughout the government. It also serves as a one-stop shopping forum for past and ongoing efforts, tools, techniques, and considerations relating to the successful (or unsuccessful) implementation of KM. This then, is the very essence of managing knowledge — "KM of KM" or "meta-KM," which focuses on reuse and lessons-learned and doesn't limit KM to mere problem solving or best practices. Rather, it provides an opportunity to break new ground.

As stated by the poet Lucan in the first century, "Pygmies placed on the shoulders of giants see more than the giants themselves."

Q

How can IT Leverage KM?

A

Web portals are frequently used to connect KM workers such as CoPs. A KM-supportive Web site would include threaded discussions orchestrated directly by the leader of a CoP. It would also include synchronous and asynchronous sharing software, which would facilitate members at geographically separated locations discussing, sharing, and mutually devising solutions, resolutions, and pilot programs. Many Web tools are available, but some are better optimized or supportive of KM and sharing.

Tacit Knowledge Transfer involves the capture, storage, distribution, and reuse of tacit knowledge. Explicit knowledge has usually been written down in one way or another and, therefore, is readily available for exploitation. Tacit knowledge, however, is far more difficult to tap. Often, people have difficulty accessing their own tacit knowledge until the circumstance or some stimulus triggers the tacit knowledge. Thus, someone who learned Cardio-Pulmonary Resuscitation (CPR) decades ago would probably be unable to answer specific questions about it. Nevertheless, such people can and do react as trained, performing CPR when the need arises.

Not all tacit knowledge is as difficult to recall. Hopefully, one doesn't need to encounter a heart attack victim to recall tacit knowledge. But neither is it easy to recall. An interviewer, for instance, may need the skill of Barbara Walters to elicit tacit knowledge on a given topic during a videotaped interview. Though perhaps lacking a Barbara Walters-type finesse, the Space and Naval Warfare (SPAWAR) Systems Center Charleston is employing the interview technique for their KM initiative.

Knowledge Bases or Banks (KB) parallel their lower-level data and information counterparts. Multimedia adds the necessary versatility to make KBs feasible and utilitarian today. KBs can now include video segments, presentations, Internet hyperlinks, and many more. Today, virtual libraries abound. With appropriate middleware, they can be all but invisible to the user, allowing for one-stop shopping and rendering them far more user-friendly. The Integrated Business Support System (formerly Integrated Contracting System) now in development is attempting to build a virtual library for Navy procurement, including a knowledge base of processes as well as information.

Port Hueneme has used Case-Based Reasoning Tools to reduce the number of service trips required for equipment repair and maintenance. Such tools can emulate BITE, or Built-In-Test-Equipment, which is designed into a piece of equipment or a system. Primarily hardware, software, or a combination of the two, BITE is especially useful on ships. In fact, the author can personally attest to the overall reliability of Case-Based Reasoning tools due to knowledge gained from experience working with BITE on the Surface Ship Torpedo Defense program at the Naval Sea Systems Command, as well as the Advanced Signal Processor (AN/UYS-1) at the Naval Air Systems Command.

High-quality BITE enables "better, faster, cheaper" on-site maintenance and can also assist the user in creating new documents based upon the efforts of predecessors in creating the same type of document for other projects. Using a question-and-answer format, these tools assist the user in selecting the best example for each paragraph or section of the document.

A good example is the Navy International Programs Office, which developed the International Agreements Generator (IAG) to assist authors in creating first drafts of new international agreements. IAG paragraphs have now been pre-approved in OSD so that any paragraphs included in the final draft cannot be challenged — only tailored and negotiated changes can be challenged during the review cycle at OSD.

Content analysis tools are presently in their infancy. They promise, however, to greatly reduce workload by condensing documents into more readable, user-friendly formats that take much less time to read. Presently, some efforts are in place to instruct authors in techniques designed to be more user-friendly, which reduce the latency in both absorption and in finding embedded knowledge and information of interest.

Both mentoring and shadowing have been used to familiarize personnel with the ways in which more seasoned workers and managers perform higher-level functions. Most long-term training programs such as the Executive Leadership Development Program and the Defense Leadership and Management Program use these techniques, as well as developmental and rotational assignments to provide their participants with a wide assortment of experiences and perspectives. Electronic media such as video teleconferencing, group sharing, Web

If Enterprise applications are envisioned as a chain or system, the new application, once integrated into the whole, must strengthen the entire chain or system as a whole.

sites, and e-mail can facilitate such efforts through virtual mentoring and similar approaches. Push (vs. pull) techniques can be used to expand involvement by recipients either as observers (for training purposes) or as active participants (for empowerment purposes).

Participation is often a prerequisite for buy-in. Keeping stakeholders "in the loop" can serve to maintain their support over the long run. Virtual techniques, however, are not replacements for face-to-face communication. Rather, they can augment less frequent meetings where participants are required to be physically present. Virtual Reality capabilities (now under development) may add a more complete dimension to such tacit transfer methods.

Q

What KM implementation methods and processes are used in DON?

A

The DON CIO provides KM "Assists" and "Consults" to requesting DON (U.S. Navy and U.S. Marine Corps) activities. Likewise, the DON CIO Enterprise Integration Teams help activities implement various KM initiatives via pilot programs designed to support the vision, mission, objectives, and values of the requesting activity. Each team helps such activities in selecting, designing, and orchestrating these projects. Activities also use their membership in the KM CoP to gain access to the KM CoP Web site. When such activities are colocated with others, a CoP can be initiated at that location so that the co-located activities can share their efforts and facilitate cross-pollination, mutual assistance, and transportable learning and insight. The Washington Navy Yard Community of Practice is one example. Established earlier this year as a subset of the Knowledge Management community, the Navy Yard CoP maintains its controlled Web site by linking to the KM CoP Web site.

The primary implementation tool used by the KM Assist Teams and their supported activities is the Knowledge Centric Organization Toolkit Compact Disk (KCO CD). The KCO CD includes documents, methods, procedures, and processes useful in implementing a KM program within an activity. KCO CDs are available from the DON CIO office, which distributes them to assisted activities and those considering such assistance. The DON *Sharing e-Government Successes or Compendium of KM and eBusiness Initiatives* CD is also available, which documents presentations from the initial Knowledge Fair of August 2000. Certain additional CDs are also available on a select basis, as needed, and within legal restrictions.

KM also works well under the Balanced Scorecard regimen advocated by authors Robert Kaplan and David Norton in a 1996 article appearing in the *Harvard Business Review*: "Using the Balanced Scorecard as a Strategic Management System." The Balanced Scorecard regimen has now been adopted by a number of DON activities. By its nature, KM improves communications so as to tend to balance the many factors affecting decisions and organizational posture. By empowering individual contributions, KM tends to improve commitment and more optimal use of extant resources.

According to the Activation Theory findings of author Elizabeth Duffy in her 1962 *Activation and Behavior,* and C. Lueba, in a 1955 article published in *Psychological Reports,* entitled "Toward Some Integration of Learning Theories: The Concept of Optimal Stimulation," individual productivity has an optimal or characteristic point with regard to stimulation — quantity of input. Thus, quality is related to quantity. KM, through lessons learned, best practices, and knowledge sharing, can effect improvements in quality, while decreasing unnecessary quantity of input. Participants can then reallocate their time and efforts more optimally across a spectrum of concerns and possibilities.

While knowledge sharing and distribution are, in truth, a normal part of doing business, KM institutionalizes such sharing and related activities. Since it requires a different emphasis, the principles of Change Management can be employed to facilitate the acceptance of KM within an organization. However, as described in Stephen Denning's *The Springboard,* stories are most efficacious in gaining acceptance for KM (and other initiatives). Denning describes the optimal construction and structure for his "springboard stories" — success stories illustrating how KM can work effectively to perform the organization's mission in support of its vision. Such stories tend to inspire buy-in and action in contrast to intellectual agreement. Analysis and fancy slides can only support such stories — not vice versa. The best stories are idiosyncratic of the audience.

Q

How does Knowledge Management affect Navy/Marine Corps Internet (N/MCI) applications?

A

The many KM approaches previously described provide numerous possibilities for potential applications, which could be hosted on N/MCI, to expand KM and enable Department of the Navy to become a Knowledge Centric Organization. The outcome of such efforts would be synergistic in nature so as to improve not only effectiveness and efficiency within DON, but also to facilitate empowerment and result in a more horizontal organization.

In the present world of fierce competition for human talent and a time-sensitive brain drain within DoD, improvements in human and intellectual capital may become the paramount issues facing the Department in the near future. Nevertheless, it is incumbent upon Department of the Navy to minimize applications fielded across DON and integrate them across DoD to be mutually supportive and to minimize training requirements.

Extensive training of hundreds of thousands of members of the workforce is not generally affordable. Potential applications should, therefore, be usable by multiple DON activities and large numbers of personnel throughout DoD. They should, for the most part, enable autonomous use by employees to accomplish an increasingly wider variety of tasks requiring extensive, widespread knowledge based upon rapidly changing data and information.

Thus, these IT solutions must support knowledge processes that are primarily intellectual capital-oriented and social capital-intensive. In other words, technology should support psychological and sociological processes that create positive organizational outcomes. Outcomes (unlike outputs) are results that affect how the organization interacts with outside individuals and organizations (not just internal ones). The Learning Organization approach (as described in author Peter Senge's *The Fifth Discipline*, published in 1990), implies an Open Systems perspective. The KCO is an example of such an institution, which maintains its agility and timeliness through knowledge and learning.

Q

How can an Applications Acquirer specify knowledge solutions?

A

No longer is it sufficient merely to enable an individual to work better, faster, and cheaper because, in systems engineering terms, "optimizing the parts de-optimizes the whole, and optimizing the whole de-optimizes the parts." Therefore, new applications must enable the "Enterprise." (While Enterprise is a somewhat relative term, it usually refers to a large, cohesive, organization that interfaces with external entities. It can vary, for instance, from the entire corporate Space and Naval Warfare Systems Command [headquarters plus all subordinate commands], to the entire Department of the Navy or Department of Defense. As a familiar adage reminds us, "Where you stand depends on where you sit.")

To enable the Enterprise, each application must support the generation, storage, distribution, and re-use of knowledge. Of course, no individual application is expected to do all of these. But if Enterprise applications are envisioned as a chain or system, the new application, once integrated into the whole, must strengthen the entire chain or system as a whole.

For instance, strengthening the strongest link in a chain may be a complete waste of effort. The weakest link may be a better target. Furthermore, a new application may be wonderful in and of itself, but may provide little institutional gain to the Department as a whole. In financial management, for instance, the proposed new project with the best ROI may be rejected if it does not fit into the optimal set of projects, including both existing ones as well as new ones.

The main thrust of N/MCI lies in its Enterprise orientation. Therefore, the acquirer's Business Case Analysis must show convincingly that the new application improves the Enterprise as a whole — and does this better than alternative uses of required resources.

Editor's Note: The author welcomes comments on this article. Contact him at *Pollock.Neal@hq.navy.mil.*

General Officer Announcements

Secretary of Defense Donald H. Rumsfeld announced Jul. 13, 2001, that the President has nominated Army Maj. Gen. John S. Caldwell Jr., for appointment to the grade of Lieutenant General with assignment as Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology; and Director, Army Acquisition Corps, Washington, D.C. Caldwell is currently serving as Commanding General, U.S. Army Tank-Automotive and Armaments Command, Warren, Mich.

On Aug. 2, 2001, Rumsfeld also announced the President's nomination of Army Lt. Gen. Paul J. Kern, for appointment to the grade of General and assignment as Commanding General, United States Army Materiel Command, Alexandria, Va. Kern is currently serving as Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology; and Director, Army Acquisition Corps, Washington, D.C.

Editor's Note: This information is in the public domain at *http://www.defenselink.mil/news.*

Michael Wynne

Sworn in as Deputy Under Secretary Of Defense for Acquisition, Technology & Logistics

Michael W. Wynne was sworn in Tuesday, July 17, 2001, as Deputy Under Secretary of Defense for Acquisition, Technology and Logistics (DUSD [AT&L]). He also serves as the Principal Deputy to the Under Secretary of Defense for Acquisition, Technology and Logistics.

As the DUSD (AT&L), Wynne serves as the Principal Staff Advisor to the Under Secretary of Defense for Acquisition, Technology and Logistics. In this capacity, he is responsible for overseeing policies and procedures governing the DoD acquisition system and ensuring compliance with applicable laws and DoD regulations relating to small and disadvantaged business utilization.

He is also responsible for improving and strengthening DoD component technology access and development programs, and encouraging open market competition to increase military capabilities at lower cost with streamlined fielding times. Additionally, he is responsible for development of agreements with friendly and allied nations and international organizations relating to acquisition matters. He brings to this position more than 35 years of experience in defense matters.

Most recently, Wynne has been involved in venture capital, nurturing small technology companies through their start-up phase as a member of the NextGenFund Executive Committee, and serving in executive positions within two companies.

In 1999, Wynne retired as senior vice president from General Dynamics, where his role was in international development and strategy. He spent 23 years with General Dynamics in various senior positions with aircraft (F-16), main battle tanks (M1A2), and space launch vehicles (Atlas and Centaur).

Wynne also spent three years with Lockheed Martin, having sold the Space Systems Division to then Martin Marietta. He successfully integrated the division into the Astronautics Company and became the general manager of the Space Launch Systems segment, combining the Titan with the Atlas Launch vehicles.

Prior to joining industry, Wynne served in the Air Force for seven years, leaving active duty as a captain and assistant professor of astronautics at the U.S. Air Force Academy, Colo., teaching control theory and fire control techniques. A graduate of the U.S. Military Academy, Wynne holds a master's in Electrical Engineering from the Air Force Institute of Technology and a master's in business from the University of Colorado, and has attended short courses in business at Northwestern University and Harvard Business School. He is a fellow in the National Contracts Management Association, and has been a former president of the Association of the United States Army, Detroit Chapter, and the Michigan Chapter of the American Defense Preparedness Association. He has published numerous professional journal articles relating to engineering, cost estimating, and contracting.

Editor's Note: This information is in the public domain at *www.defenselink.mil/news.*

Acquisition and Logistics Excellence

DAU's New PMT-401 — A Systems Approach to Program Manager Development

BRIG. GEN. EDWARD HIRSCH, USA (RET)

"I've decided to move into something called *Acquisition and Logistics Excellence* — we're moving from *Acquisition Reform* to *Acquisition and Logistics Excellence* … that's my theme, and you're going to hear a lot about that from a lot of people I'm sure over the next months and years. We sincerely hope it will be the right message we want to put forth."

—Edward C. "Pete" Aldridge Jr.
Under Secretary of Defense
(Acquisition, Technology and Logistics)
June 6, 2001

One of the case studies developed for DAU's new PMT-401 Program Manager's Course focuses on technology insertion (new mast) for the LPD 17. Pictured is the LPD-17, *USS San Antonio.*
DoD Image

The Defense Systems Management College, the premier College in the Department of Defense dedicated to the professional development, education, and training of members of the Program Management career field, is striving to support Under Secretary Aldridge's theme of *Acquisition and Logistics Excellence.* Most notably, the current education and training requirements for members of the Program Management career field are being changed to accord with a systems approach that recognizes Program Management as a career track that demands a career-long commitment to learning. The former Program Management career track had evolved over time, responded to changing requirements, and presented students with increasingly complex issues to resolve as they progressed from Level I through Level II and ultimately to Level III certification.

The future Program Management career track identifies and builds upon lessons learned from the former Program Management track and relies upon new courses that are designed from the outset to create a career-long learning experience. Each new course is designed to be dependent upon the learning derived from the previous course and is preparation for the learning expectations of the next course.

Important New Steps

Under the new systems approach, students who complete the Intermediate Systems Acquisition Course (ACQ-201) will continue Level II certification with the newly activated Program Management Tools Course (PMT-250). However, a significant change occurs in achieving the Level III certification, which is dependent upon satisfactory completion of the new Program Man-

__Hirsch__ is a Visiting Professor at the Defense Acquisition University, Fort Belvoir, Va. A retired Army brigadier general, he served for many years as Provost and more recently, Acquisition Management Chair at the Defense Systems Management College. Also contributing to the article was __Ethan Smith,__ a Technology-Based Education Specialist who helped develop online training courses for DAU.

F-22 Raptor Photo courtesy The Boeing Company

An ATACMS missile is fired from the Multiple Launch Rocket System (MLRS) M270 weapons platform. Photo courtesy Lockheed Martin Missiles and Fire Control — Dallas

agement Office Course (PMT-352). Following completion of those courses, certain students are selected for PMT 401, the Program Manager's Course (PMC)—based on past performance and future potential — to continue their training with the new Program Manager's Course.

The new Program Management career track differentiates between personnel who have demonstrated capabilities as acquisition leaders and do not aspire to be program managers of Acquisition Category (ACAT I or II) programs, and those that seek these positions and have been selected by their Service as being potential candidates for these positions.

The chart at the bottom of the next page highlights the differences between the former Program Management career track and the new Program Management career track.

The New Program Manager's Course, PMT-401

The Program Manager's Course is an intense, executive-level, highly integrated 10-week, case study-based learning experience. Most importantly, the case-study approach that will be used in PMT-401 accurately develops the critical thinking skills necessary to lead major ACAT programs. Learners will actively participate in two to three case studies every day, and be required to devote two to three hours of study every evening in preparation for the next day's classes. The case studies are presented by a specially selected teaching team of senior faculty members who will use a variety of learning methodologies, including role playing, simulations, distinguished guest practitioners, team projects, study groups, and an elective feature designed to enable learners to customize a portion of the course to meet specific needs.

Time will be available to internalize the material through independent study and informal work and interaction with peers through small group discussions. Course content will rely upon challenges, problems, and dilemmas derived from extensive interviews with program managers, program executive officers, and other stakeholders. The case-based

Harvard Business School A Case-Based Success

The HBS case-study method incorporates three essential elements inherent to the case study that facilitate a student's understanding of the major dilemmas found in the acquisition programs (cases) being studied. The pure Harvard model, which will be used to help guide the faculty as they modify case studies, usually contains most or all three of the following critical elements:

- A myriad of general business knowledge is included, so that several important business (or acquisition) applications can be explored.
- Successful application of the case study often relies on situation-specific variables applied to the managerial action; that is, students are able to understand what matters in any given dilemma and relate those situations to real-life problems.
- The case writer has sufficient knowledge to understand and apply the dilemmas identified in a highly relevant way that will help students better understand some of the issues taking place in major ACAT programs.

dilemmas will be those that course graduates can expect to confront when they return to their workplace.

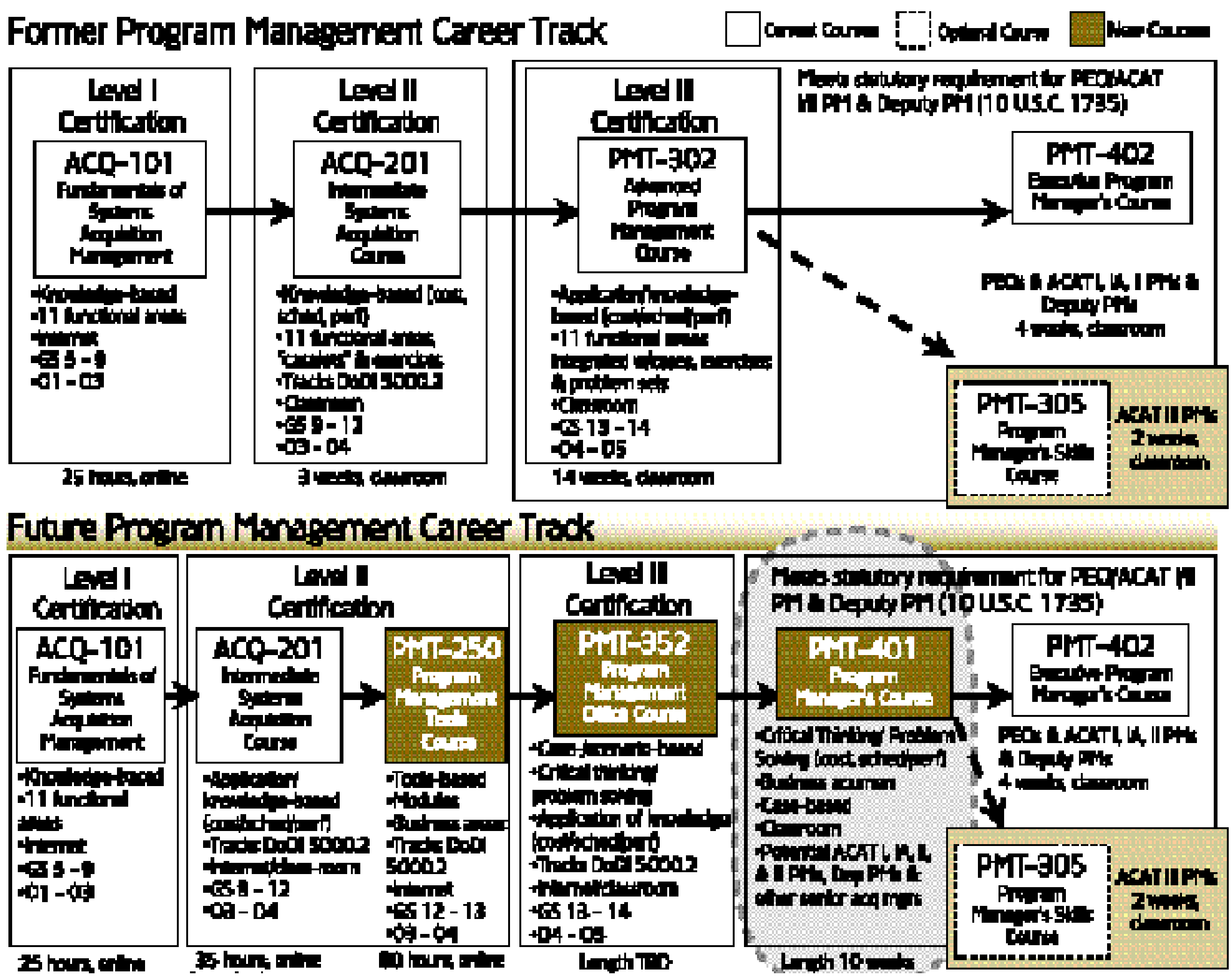
Objectives

Graduates will be able to:

- Apply critical thinking when confronted by problems and dilemmas on a day-to-day basis.
- Lead and integrate disparate functional groups and develop a cohesive team capable of coping with the complex problems that are common to program management and program executive offices.
- Identify and apply best business practices to achieve win-win relationships with their industry partners.

Who Should Attend

This course is designed expressly for specially selected, Level III-certified members of the acquisition workforce motivated to,



and capable of, becoming the DoD senior acquisition leaders of the future. Attendees must be 0-5/GS-14 or above with extensive experience in acquisition, including four years in a Program Management Office or in direct support of a Program Management Office.

"The challenges and problems that program managers, program executive officers, and other stakeholders in the defense acquisition community have encountered or expect to encounter in their conduct of business — properly emulated in the classroom — can provide the basis for a profound, practical learning experience," says Stephen Israel, who is responsible for the design, development, and production of the course.

Stephen Israel, Leader, PMT-401 Course Development Team, DAU.

Photo by Army Sgt. Kevin Moses

About the Case Method

He notes that many of the leading universities that have offered executive development programs over the past 50 years have used the case method to provide such learning. Their experience has established as fact that a course based on the case method can provide students with the opportunity to consider, analyze, and discuss the kinds of challenges and problems they can expect to face in their future assignments — and do so in a challenging and risk-free environment.

This reality-based learning, he adds, demands that the participants analyze issues, define problems, compare options, formulate solutions, and implement action plans by placing themselves in the position of the acquisition leaders involved. Of paramount significance, Israel emphasizes, is the fact that a case-based course demands the learner apply critical thinking — as the norm — both when confronted by problems on a day-to-day basis during the course and when returning to the workplace.

"The new PMT-401 course is not only a different approach — case studies — but will be a student-directed learning environment, as well," he explains. "Within this type of learning environment, the faculty has the responsibility of facilitating the students' learning by analyzing the case studies with them and working through them together, rather than using a traditional lecture format."

> "This course [PMT-401] is a harbinger for how the DoD is changing training and education at the senior acquisition level. We see this as a way for DAU and DSMC to really raise the bar on Program Management training overall, and feel that this case-based approach is the best way to accomplish that."

According to Israel, the course will incorporate a modified version of the case-based approach practiced at Harvard Business School (HBS), where students are submerged in 10 weeks of rigorous case-study evaluation, known as the "pure Harvard model." Although the format for PMT-401 won't be quite that time-intensive, it will be equally rigorous, he adds.

One of the primary aspects of the HBS experience is the networking and bonding that takes place as a result of the extensive time that the students spend working together on these cases. "Although the PMT-401 course won't be quite as time-intensive," says Israel, "we are definitely trying to replicate the HBS networking and bonding experience for our own students."

To prepare for writing and developing the course material needed for PMT-401, DSMC faculty completed intensive training in case-writing methodology and case-study presentation. Distinguished guest lecturers, including Dr. J. Ronald Fox and Dr. Michael J. Roberts of Harvard University, as well as Dr. Mike Leenders and Dr. Jim Erskine of the University of Western Ontario, Canada, conducted extensive onsite training for the faculty.

Key Dilemmas

The primary aspect of the case-study approach is that it focuses on specific activities in the life cycle of the acquisition program being studied, where a decision had to be made on a "key dilemma" faced by the program manager or deputy program manager — a decision that might have significantly impacted the overall program. Students will develop and hone critical-thinking skills by evaluating these common dilemmas and looking at how decisions made at these stages can impact the overall success of the program. The dilemmas will then be replicated in the simulation exercises that take place throughout the course.

Identifying and articulating the key dilemmas, which is considered essential to the success of the course, represents a significant challenge to the faculty responsible for developing the new Program Manager's Course. The faculty team has conducted dozens of personal interviews and hundreds of surveys with Program Management Offices, Program Executive Offices, and other stakeholders to obtain specific examples of challenges and problems they have encountered — or expect to encounter — in their conduct of business. As a result, the cases developed reflect current reality and are updated on a continuing basis by faculty contact with serving program managers and program executive officers. Approximately 100 learning experiences will be created for the course. Twenty percent of the cases are expected to be updated or discarded/replaced on an annual basis to ensure currency.

One case study involves the Multiple Launch Rocket System (MLRS) program while it was undergoing a software-based weapons systems upgrade. The case study centers on the program manager's dilemma about whether to stay with the original contractor software, try a new software developer, or even to integrate a commercial off-the-shelf product instead. In making that decision, cost trade-offs, market research, and robust design are some of the many dilemmas the program manager evaluated, all of which directly impacted the upgrade.

"With the latest acquisition reform, many regulations are shrinking. Program managers are being told to be more creative rather than following a specific decision-making checklist that they might have had in the past," explains Dr. Chris Roman, Professor of Systems Acquisition Management and a member of the PMT 401 development team that wrote the MLRS case study. "Our mandate has been to tackle the hard decisions, where the current regulations don't necessarily tell a program manager what to do in each situation." Roman adds that the program manager involved in the MLRS was partially responsible for initiating the case study in an effort to analyze what went right and wrong during his program's life cycle.

By contrast, DSMC faculty, in an effort to create a pool of case studies available to the new course, spent extensive time researching, interviewing, and analyzing cases from project start to production. "There are case studies you can write based on tips or your own experience, but a successful case study ultimately requires a lot of networking," says Roman. "It requires significant time from the program manager, and you need to mine those key activities or dilemmas in their program to make the case study useful."

In addition to the MLRS, other case studies include the Bradley Fighting Vehicle, the F-22 fighter, the Advanced Amphibious Assault Vehicle, the DDG-51 Guided Missile Destroyer, and other high-profile acquisition projects throughout all of the Services.

A Significant Improvement

Even though much work remains in writing and honing the case material that will be used in the March 2002 pilot offering, Israel expresses confidence that this new approach will provide a significant improvement in the education and training of our program management professionals. "This course is a harbinger for how the DoD is changing training and education at the senior acquisition level," says Israel. "We see this as a way for the Defense Systems Management College to really raise the bar on Program Management training overall, and feel that this case-based approach is the best way to accomplish that. We are developing a world-class Program Manager's Course based on the Harvard case-method approach."

Editor's Note: The author welcomes questions or comments on this article. Contact him at *ed.hirsch@dau.mil*.

PMT-401 Timeline

First Pilot • March 4, 2002
Second Pilot • Sept. 9, 2002
First Offering • Jan. 6, 2003

HELP FOR SURVIVORS OF SEPT. 11 ATTACK ON PENTAGON

Department of Defense officials say they have been inundated by donations of goods and funds, and they want to make sure people are sending their donations to reputable charities. Below is a list of organizations DoD officials recommend individuals contact to make donations to assist survivors of those killed in the Sept. 11th attack on the Pentagon.

- Army Emergency Relief Society, Pentagon Victims Fund, (703) 325-0463, *www.aerhq.org*.
- Navy and Marine Corps Relief Society, Pentagon Assistance Fund, (703) 696-4904, *www.nmcrs.org*.
- Federal Employee Education and Assistance Fund, (303) 933-7580, *www.feea.org*.

ACQUISITION & LOGISTICS EXCELLENCE

An Internet Listing Tailored to the Professional Acquisition Workforce

Surfing the Net

DEPARTMENT OF DEFENSE

Under Secretary of Defense (Acquisition, Technology and Logistics) (USD[AT&L])
http://www.acq.osd.mil/
ACQWeb offers a library of USD(AT&L) documents, a means to view streaming videos, and jump points to many other valuable sites.

Director, Acquisition Initiatives (AI)
http://www.acq.osd.mil/ar
Acquisition news and events; reference library; AI organizational breakout; acquisition education and training policy and guidance.

DoD Inspector General
http://www.dodig.osd.mil/pubs/index.html
Search for audit and evaluation reports, Inspector General testimony, and planned and ongoing audit projects of interest to the acquisition community.

Deputy Director, Systems Engineering, USD (AT&L/IO/SE)
http://www.acq.osd.mil/io/se/index.htm
Systems engineering mission; Defense Acquisition Workforce Improvement Act information, training, and related sites; information on key areas of systems engineering responsibility.

Defense Acquisition Deskbook
http://web1.deskbook.osd.mil
Automated acquisition reference tool covering mandatory and discretionary practices.

Defense Acquisition History (DAH) Project
http://www.army.mil/cmh-pg/acquisition/acqhome.htm
The DAH Project is a multi-year program to produce a detailed history of defense acquisition since 1947, to be published in six volumes. The site features a quarterly online newsletter, project status announcements, acquisition history links, and contact information.

Defense Acquisition University (DAU)
http://www.dau.mil
DAU Course Catalog, *Program Manager* magazine and *Acquisition Review Quarterly* journal; course schedule; policy documents; and training news from the Defense Acquisition Workforce.

Defense Acquisition University Virtual Campus
https://dau1.fedworld.gov
Take DAU courses online at your desk, at home, at your convenience!

Acquisition Reform Communications Center (ARCC)
http://clc.dau.mil
Acquisition Reform training opportunities and materials; announcements of upcoming Acquisition Reform events; and Issues Forum for discussion.

Army Acquisition Corps (AAC)
http://dacm.rdaisa.army.mil
News; policy; publications; personnel demo; contacts; training opportunities.

Army Acquisition
http://acqnet.saalt.army.mil
A-MART; documents library; training and business opportunities; past performance; paperless contracting; labor rates.

Navy Acquisition Reform
http://www.acq-ref.navy.mil/
Acquisition policy and guidance; World-class Practices; Acquisition Center of Excellence; training opportunities.

Navy Acquisition, Research and Development Information Center
http://nardic.onr.navy.mil
News and announcements; acronyms; publications and regulations; technical reports; "How to Do Business with the Navy"; much more!

Naval Sea Systems Command
http://www.navsea.navy.mil/sea017/toc.htm
Total Ownership Cost (TOC); documentation and policy; Reduction Plan; Implementation Timeline; TOC reporting templates; Frequently Asked Questions (FAQ).

Navy Acquisition and Business Management
http://www.abm.rda.hq.navy.mil
Policy documents; training opportunities; guides on areas such as risk management, acquisition environmental issues, past performance, and more; news and assistance for the Standardized Procurement System (SPS) community; notices of upcoming events.

Space and Naval Warfare Systems Command (SPAWAR)
https://e-commerce.spawar.navy.mil
Your source for SPAWAR business opportunities, acquisition news, solicitations, and small business information.

Air Force (Acquisition)
http://www.safaq.hq.af.mil/
Policy; career development and training opportunities; reducing TOC; library; links.

Air Force Materiel Command (AFMC) Contracting Laboratory's Federal Acquisition Regulation (FAR) Site
http://farsite.hill.af.mil/
FAR search tool; *Commerce Business Daily* Announcements (CBDNet); *Federal Register;* Electronic Forms Library.

Defense Systems Management College (DSMC)
http://www.dsmc.dau.mil
DSMC educational products and services; course schedules; job opportunities.

Defense Advanced Research Projects Agency (DARPA)
http://www.darpa.mil
News releases; current solicitations; "Doing Business with DARPA."

Defense Information Systems Agency (DISA)
http://www.disa.mil
Structure and mission of DISA; Defense Information System Network; Defense Message System; Global Command and Control System; much more!

National Imagery and Mapping Agency
http://www.nima.mil
Imagery; maps and geodata; Freedom of Information Act resources; publications.

Defense Modeling and Simulation Office (DMSO)
http://www.dmso.mil
DoD Modeling and Simulation Master Plan; document library; events; services.

Defense Technical Information Center (DTIC)
http://www.dtic.mil/
Technical reports; products and services; registration with DTIC; special programs; acronyms; DTIC FAQs.

Defense Electronic Business Program Office (DEBPO)
http://www.defenselink.mil/acq/ebusiness/
Policy; newsletters; Central Contractor Registration; Assistance Centers; DoD Electronic Commerce Partners.

Open Systems Joint Task Force
http://www.acq.osd.mil/osjtf
Open Systems education and training opportunities; studies and assessments; projects, initiatives and plans; reference library.

Government Education and Training Network (GETN) (For Department of Defense Only)
http://atn.afit.af.mil
Schedule of distance learning opportunities.

Government-Industry Data Exchange Program (GIDEP)
http://www.gidep.corona.navy.mil
Federally funded co-op of government and industry participants that provides an electronic forum to exchange technical information essential during research, design, development, production, and operational phases of the life cycle of systems, facilities, and equipment.

ACQUISITION & LOGISTICS EXCELLENCE

An Internet Listing Tailored to the Professional Acquisition Workforce

Surfing the Net

FEDERAL CIVILIAN AGENCIES

Acquisition Reform Network (ARNET)
http://www.arnet.gov/
Virtual library; federal acquisition and procurement opportunities; best practices; electronic forums; business opportunities; acquisition training; Excluded Parties List.

Federal Acquisition Institute (FAI)
http://www.faionline.com
Virtual campus for learning opportunities as well as information access and performance support.

Federal Acquisition Jump Station
http://nais.nasa.gov/fedproc/home.html
Procurement and acquisition servers by contracting activity; CBDNet; Reference Library.

Federal Aviation Administration (FAA)
http://www.asu.faa.gov
Online policy and guidance for all aspects of the acquisition process.

General Accounting Office (GAO)
http://www.gao.gov
Access to GAO reports, policy and guidance, and FAQs.

General Services Administration (GSA)
http://www.gsa.gov
Online shopping for commercial items to support government interests.

Library of Congress
http://www.loc.gov
Research services; Congress at Work; Copyright Office; FAQs.

National Technical Information Service (NTIS)
http://chaos.fedworld.gov/onow/
Online service for purchasing technical reports, computer products, videotapes, audiocassettes, and more!

Small Business Administration (SBA)
http://www.SBAonline.SBA.gov
Communications network for small businesses.

U.S. Coast Guard
http://www.uscg.mil
News and current events; services; points of contact; FAQs.

TOPICAL LISTINGS

MANPRINT (Manpower and Personnel Integration)
http://www.MANPRINT.army.mil
Points of contact for program managers; relevant regulations; policy letters from the Army Acquisition Executive; as well as briefings on the MANPRINT program.

DoD Specifications and Standards Home Page
http://www.dsp.dla.mil
All about DoD standardization; key Points of Contact; FAQs; Military Specifications and Standards Reform; newsletters; training; nongovernment standards; links to related sites.

Joint Advanced Distributed Simulation (JADS) Joint Test Force
http://www.jads.abq.com
JADS is a one-stop shop for complete information on distributed simulation and its applicability to test and evaluation and acquisition.

Risk Management
http://www.acq.osd.mil/io/se/risk_management/index.htm
Risk policies and procedures; risk tools and products; events and ongoing efforts; related papers, speeches, publications, and Web sites.

Earned Value Management
http://www.acq.osd.mil/pm
Implementation of Earned Value Management; latest policy changes; standards; international developments; active noteboard.

Fedworld Information
http://www.fedworld.gov
Comprehensive central access point for searching, locating, ordering, and acquiring government and business information.

GSA Federal Supply Service
http://pub.fss.gsa.gov
The No. 1 resource for the latest services and products industry has to offer.

Commerce Business Daily
http://www.govcon.com/
Access to current and back issues with search capabilities; business opportunities; interactive yellow pages.

INDUSTRY AND PROFESSIONAL ORGANIZATIONS

DSMC Alumni Association
http://www.dsmcaa.org
Acquisition tools and resources; government and related links; career opportunities; member forums.

Electronic Industries Alliance (EIA)
http://www.eia.org
Government Relations Department; includes links to issue councils; market research assistance.

National Contract Management Association (NCMA)
http://www.ncmahq.org
"What's New in Contracting?"; educational products catalog; career center.

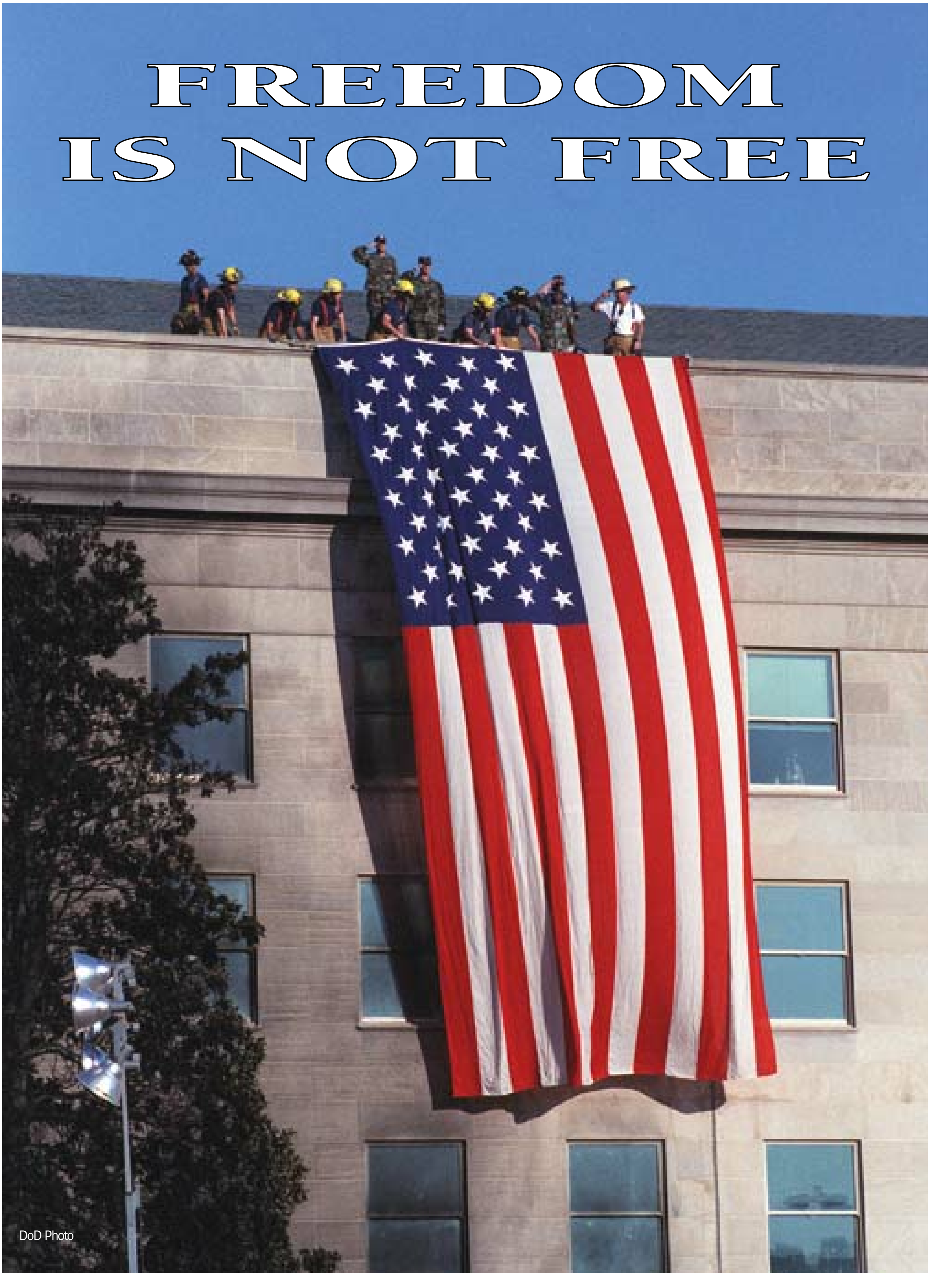
National Defense Industrial Association (NDIA)
http://www.ndia.org
Association news; events; government policy; *National Defense* magazine.

International Society of Logistics
http://www.sole.org/
Online desk references that link to logistics problem-solving advice; Certified Professional Logistician certification.

Computer Assisted Technology Transfer (CATT) Program
http://catt.bus.okstate.edu
Collaborative effort between government, industry, and academia. Learn about CATT and how to participate.

Software Program Managers Network
http://www.spmn.com
Site supports project managers, software practitioners, and government contractors. Contains publications on highly effective software development best practices.

Association of Old Crows (AOC)
http://www.crows.org
Association news; conventions, conferences and courses; *Journal of Electronic Defense* magazine.



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