



# **Contingency Contracting and Logistics and Sustainment**

USA ASC

ACQUISITION SUPPORT CENTER



#### From the Army Acquisition Executive

## Delivering Better Products and Capabilities to our Soldiers Faster



he Army has taken significant steps in recent years to improve and institutionalize the process of developing, procuring and sustaining our weapon systems and equipment. All efforts are focused on delivering better products and capabilities to our Soldiers faster. At our Life Cycle Management Command (LCMC) in Huntsville, AL, for example, the men and women of the U.S. Army Aviation and Missile LCMC work directly with combatant commanders and Soldiers

in the field to maintain readiness rates above Army average for our fleet of more than 4,000 manned and unmanned aerial vehicles. Because of work at the Communications-Electronics LCMC in Fort Monmouth, NJ, our Soldiers and their commanders have a common operating picture of the battlespace updated automatically because of a network package known as the Mounted Battle Command on the Move that fits in their Humvees, Bradleys and Strykers. At the TACOM LCMC in Warren, MI, Add-on-Armor (AoA) kits were developed in response to an urgent need to combat improvised explosive devices (IEDs), roadside car bombs and rocket-propelled grenades.

In addition to these efforts, the Army has adopted a process to view acquisition in its entirety from concept to disposal. I have termed this the "Big A(cquisition), Little a(cquisition)" one-process, one-team approach to acquisition. For decades, we viewed acquisition as a small "a" — acquire, develop, contract, test, produce and field. Now, the acquisition process starts when the Soldier says "I want," and ends when the Soldier says "I have."

It is clear that we have the world's best Acquisition, Logistics and Technology Workforce to keep our Army the most capable land force on Earth. Let me provide a few examples of our success:

- Our Rapid Equipping Force and Rapid Fielding Initiative have substantially changed the normal acquisition process by enabling commanders and Soldiers to purchase and field commercial-off-the-shelf technologies to respond as rapidly as possible to changing operational environments.
- •Through our acquisition and logistics processes, we have increased or improved equipment to meet operational needs in Afghanistan and Iraq as follows:

- Increased the fielding of body armor to Soldiers in the field from 10 percent in September 2003 to 100 percent by January 2006.
- Boosted the number of Up-Armored Humvees in theater from 500 in September 2003 to 11,000 as of January 2006.
- Augmented all theater aircraft with basic Aircraft Survivability Equipment as of January 2005.
- Equipped more than 37,000 wheeled vehicles with AoA kits as of January 2006.
- Revived a program for Armored Security Vehicles in 2005 and deployed 194 of them as of January 2006.
- Issued to each Soldier a new chitosan blood-clotting bandage and a new one-handed tourniquet.
- Created an Army IED Task Force in October 2003 to assist in coordinating and synchronizing ongoing efforts to mitigate the threat of IEDs. In 2004, the Army led a Joint IED Defeat Integrated Process Team to pull together all counter-IED efforts within DOD.
- Delivered Strykers to the Stryker Brigade Combat Team just 18 months after the Army's contract go-ahead. In Iraq, Strykers continue to maintain a superb operational ready rate. More than 5 million miles have been driven by the first two deployed Stryker brigades.
- •The Army's Future Combat Systems, the concurrent procurement of 18 systems in tandem, is on cost, on schedule and performing to plan. While unprecedented oversight confirms program management success, an extensive testing plan will validate performance and reduce development risk.

My office manages 22 percent of the Army's current monies, roughly \$44 billion. Do you know how much it costs to manage and train the workforce that executes 22 percent of the Army's Total Obligation Authority? The answer is \$208 million or 0.5 percent. This, in itself, is exceptional. It is outstanding. In my humble opinion, we have the best workforce in DOD and perhaps the federal government.

Our challenge in the future is to continue to manage programs effectively and efficiently so we have the right product, in the right place, at the right time. Our Soldiers and their commanders depend on us. HOOAH!

**Claude M. Bolton Jr.** Army Acquisition Executive



PB 70-06-04

CLAUDE M. BOLTON JR. Assistant Secretary of the Army

and Army Acquisition Executive

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This medium is approved for official dissemination of material designed to keep individuals within the Army knowledgeable of current and emerging developments within their areas of expertise for the purpose of enhancing their professional development.

By order of the Secretary of the Army

PETER J. SCHOOMAKER General United States Army Chief of Staff Official: Joyce E. Morrow

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## 2006 Readership <u>Survey</u>

This issue of *Army AL&T* Magazine features our 2006 Readership Survey. *Army AL&T* Magazine's goal is to publish articles of interest and value to its readers. The survey's purpose is to acquire as much information and feedback as possible so that we can continue providing our readers an informative and useful publication. Knowing what our readers want will allow us to better tailor the magazine's content, look and feel to the professional development needs of the Acquisition, Logistics and Technology Workforce.

To determine how satisfied our readers are, we would like you to take a moment to fill out this brief survey. After you've completed the survey, you can either mail it or fax it back to us. Detailed instructions are provided on the survey insert. You also have the option of taking the survey online at http://asc.army.mil/go/altsurvey.

Thank you for your participation!

Army AL&T Magazine Editorial Staff

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## Contingency Contracting and Logistics and Sustainment

As the Army continues to wage the global war on terrorism, the October-December 2006 issue of *Army AL&T* Magazine focuses on the acquisition community's efforts to equip, supply and support the Army's warfighters through improved contingency contracting, logistics and sustainment initiatives worldwide.

In an article by Jeffrey P. Parsons, we look at the U.S. Army Materiel Command's (AMC's) efforts to institute a deployable civilian contracting cadre. This article also examines the Army's new contingency contracting structure, which is assigned to AMC's Army Sustainment Command (ASC), Rock Island Arsenal, IL.

For a more in-depth look at the new ASC, turn to our interview with Greg Kee, AMC Deputy Chief of Staff, Strategy and Concepts, G-5. Kee explains how ASC is performing new missions, such as materiel management, reset synchronization and contingency contracting operations, to help streamline end-to-end logistics and maintenance support to the Army's modular force.

In this issue, we bring you an overview of the Procuring Contracting Officer Training (PCOT) Symposium held in July, with remarks from Shay Assad, Director of Defense Procurement and Acquisition Policy, about the importance of services contracting and cost and pricing skills.

We also feature another PCOT Symposium speaker, MG Eric B. Schoomaker, Commanding General, U.S. Army Medical Research and Materiel Command (USAMRMC), who discusses how USAMRMC has become the center for Joint medical logistics for the Navy, Air Force and Army. Schoomaker also explains how the command is now responsible for managing numerous contracts through the Defense Logistics Agency and Defense Supply Center in Philadelphia for the bulk of medical materiel sent to all warfighting combatant commanders, especially the U.S. European Command and U.S. Central Command.

It is our honor to bring you a final interview with LTG Joseph L. Yakovac Jr., Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology, and Director, Acquisition Career Management, before he retires at the end of 2006. Yakovac reflects on the Life Cycle Management Commands, the Theater Support Command concept, improving professional development opportunities for the civilian workforce, and the acquisition community's accomplishments and future challenges.

When you opened this issue of *Army AL&T* Magazine, you probably noticed the Readership Survey that we inserted. We sincerely hope that you will complete this survey by Nov. 17, 2006, and give us guidance as to what you like or dislike about *Army AL&T* Magazine. We value your feedback and carefully consider every recommendation we receive. You can mail, fax or complete the survey online at **http://asc.army.mil/go/altsurvey**. I thank you in advance for taking a few minutes from your busy schedule to let us know if the magazine's content continues to meet your informational and professional development needs.

Michael I. Roddin Editor-in-Chief

# Army Contracting – One Community Serving Our Soldiers, Serving Our Nation

Meg Williams

eputy Assistant Secretary of the Army for Policy and Procurement (DASA (P&P)) Tina Ballard welcomed more than 400 contracting professionals to the first annual Procuring Contracting Officer Training (PCOT) Symposium, July 10-14, 2006, in Miami, FL. "Keep these words at the forefront of your mind," Ballard said, as she repeated the conference theme – Army Contracting: One Community Serving Our Soldiers, Serving Our Nation. "We gather as one community to learn new skills and share experiences."

*Editor's Note:* Throughout this article are selected remarks from PCOT Symposium attendees.

Our vision is to be "One Community Serving our Soldiers, Serving our Nation" to ensure that wherever our troops put "boots on the ground," the Army contracting community will be there alongside them to provide the necessary contractual expertise, decision authorities, procurement oversight and capacity to rapidly manage the U.S. Force's and host nation's contracting processes and contract infrastructure. These initiatives will help our Army field better equipped Soldiers who are more lethal, survivable and sustainable, regardless of where the mission or operational contingency takes them.

-Tina Ballard, Deputy Assistant Secretary of the Army for Policy and Procurement

"This is a chaotic time in the world, in the Army and at the Pentagon," Ballard said. "It's important for the contracting workforce to meet and discuss the issues that challenge us. As contracting professionals, it's important for us to learn and share our knowledge as we perform our mission and provide for our ultimate customer, the Soldier."

The PCOT Symposium resulted from efforts conducted by the Army Contracting Think Tank, formed by Ballard in March 2004. Its members are dedicated to the contracting workforce and excellence in business processes. "Army

I enjoyed the Small Business Administration workshop with Tracey Pinson, the panel and LTG Carl A. Strock. A lot of good is going to come from this conference. I'll have a lot of interesting information to take back. Julie Bowell, KO, Directorate of Contracting, Fort Riley, KS.

leadership endorsed this event to every Army command," Ballard emphasized. "This symposium sends a message to the entire Army that our leadership is dedicated to the contracting workforce. I hope each of you realizes how important you are to the Army mission."



The conference featured DOD and Army leaders who acknowledged the crucial role contracting plays in arming, feeding, housing, and taking care of Soldiers and their families. The symposium delivered instruction on

contingency contracting, Lean Six Sigma and the acquisition process, fiscal law, Army source selection, ethics, the Vice Chief of Staff of the Army's guidance on service contracting and other critical topics. Following are highlights from selected symposium speaker presentations.

#### Deliberative Speed Is Necessary

Shay Assad, Director of Defense Procurement and Acquisition Policy, was one of the conference's most

oft-quoted speakers when he urged those

assembled to practice "deliberative speed," as they carry out their duties. In the past 8 years, contracting officers (KOs) have been encouraged to get things done quicker and the quality of the deal has suffered as a result. What deliberative speed means is that KOs must be deliberate but quicker. Don't bypass anything.

Assad is responsible for all DOD acquisition and procurement policy matters. He serves as principal advisor to the Deputy Under Secretary of Defense for Acquisition, Technology and Logistics and the Defense Acquisition

This symposium sends a message to the entire Army that our leadership is dedicated to the contracting workforce. I hope each of you realizes how important you are to the Army mission. — Tina Ballard Board for acquisition and procurement strategies for all major weapon systems programs, all major automated information systems programs and services acquisition.

"What are we trying to do as an acquisition and contracting community? Our vision is pretty straightforward," Assad remarked. "It's procurement and acquisition excellence, leadership and integrity. Every day. Our mission is to supply the Soldiers of the U.S. Army and the men and women of the

Armed Services with the goods and

The information being presented is relevant, really good. It's something you can take back home and apply, especially the changes to FAR Part 15 in the Source Selection Manual presentation. Where they've given references, I plan to go back and check them. Source selection is really important.

Clarence Hairston, Albuquerque District Corps of Engineers.

services that they need, on time, while being stewards to the taxpayer. And we cannot forget that we are stewards for the taxpayers."

He counseled the procuring officers foremost to lead their own people. That includes making sure there are assets available to train and develop the workforce. "Be thinking how you can be a more effective leader, whether you're leading an entire contracting command, leading your branch or leading a negotiating team. It's all about leadership coming forward," Assad directed. "The Army, Navy, Air Force and Marines planned to gather in late July to examine human capital strategy and overall capabilities of the Acquisition, Logistics and Technology Workforce. They will also look at how to improve gaps in competencies, one of which is a lack in cost and pricing analysis skills, a problem across all the services," Assad continued.

"One of the most important things is to recognize what your weaknesses are and do something about them," Assad explained. "In the case of cost and pricing, we are going to improve the community in general in terms of these capabilities — whether it be major systems acquisition or whether it be our field commands in understanding what it takes to adequately price services contracts."

"We are going to turn services contracting on its head," Assad promised.

"We're going to do it more effectively and we're going to give you the tools you need to effectively do it," he said. "We're stepping back and, really, everything is on the table what should we purchase from the General Services Administration?



relief operations (DROs), explaining the new "push system" the Corps has implemented in the aftermath of Hurricane Katrina.

concerned, Assad says there is no need for acquisition reform. There is an incredible set of best practices that must be put into play across all four services. Assad has spoken to the U.S. Army Communications-Electronics Life Cycle Management Command (CELCMC) about its contracting analysis tool. Meanwhile, he said, the Navy is purchasing services contracting in new ways.

This is probably the best acquisition conference I've ever attended. All workshops have been well attended, well thought out and well put together. My only comment to one of the speakers this morning is that there is another area in SWA where folks can deploy — Kuwait. My folks have had a great experience meeting other MACOM people here at the conference. COL Robert Kendrick, PARC SWA.

How should we do services contracting? Should we be looking at a cost department? Should we decide that we have



A warranting ceremony was held the night before the PCOT Symposium began and 21 KOs were presented with their warrants. From left: DASA (P&P) Tina Ballard; PCO Craig Robinson, Surface Deployment and Distribution Command, after receiving his warrant; and Director of Defense Procurement and Acquisition Policy Shay Assad.

one particular technique that makes sense? Should it be service centric? Should it be command centric? We're going to explore all of those ideas."

As far as best practices are

Contingency contracting is another area in which KOs from each service are trained differently, use different methods and work from different operating plans. Assad is assisting MG Darryl A. Scott, Commanding General (CG), Joint Contracting Command-Iraq/ Afghanistan (JCC-I/A), in improving contingency contracting training.

"And finally, I'd like you to remember why you're all here," Assad reminded the audience. "It is a privilege to serve the men and women of the U.S. Army. It is a privilege to serve the men and women of our Armed Forces. Be proud and thankful that you have the opportunity to do so. I certainly am."

## USACE Support During DROs and Reconstruction

LTG Carl A. Strock, CG and Chief of Engineers, U.S. Army Corps of Engineers (USACE), praised Ballard for putting on a well-received and successful PCOT Symposium. "I'm delighted that so many Corps of Engineers contracting personnel are here to share in this experience and learn how to do things better," he told the audience. "Everyone knows it costs money to put on a conference, but in the long run, I think we will save money for the Army and avoid costs. Thank you, Ms. Ballard, for having the courage to stand up for doing things the right way and push for this conference."



October, USACE comprises 9 divisions that are geographically based, and within the divisions, 45 districts.

Military support is USACE's primary mission, which in the past year has primarily encompassed facility construction in Iraq. The secondary mission is civil works. USACE is Joint, supporting the Air Force and Navy. It works with other federal agencies and is international with a footprint in 90 countries.

I liked hearing from senior leaders about their philosophy and what direction they're taking. It was also good to hear the perspective of contingency contracting because it affects everyone whether you're there or not. It's been a real shot in the arm. It's great to be thanked by our senior leaders. Stephen Foster, Contract Specialist and PCO, Yuma Proving Ground, AZ.

USACE is one of the Army's specialty contracting agencies. As an Army major command (MACOM), soon to become a Direct Reporting Unit in



PARC Jim Loehrl advocated better integration between contracting and the warfighters that the community supports.

USACE operates on a reimbursable basis. "When the Corps comes knocking on the door to help you, we also put our hand out to be reimbursed," Strock said. "We're a public agency that acts like a busi-

ness. We don't have excess capacity. We do only what people need from us and pay us to do." Key to this business model is the Corps' contracting and acquisition professionals who help expand the capacity, through industry, when the need arises. USACE also works through local sponsors and federal agencies to execute that effort.

Strock spoke about USACE's role in DROs. During a domestic disaster or terrorist act, USACE follows the National Response Plan and has responsibility for Emergency Support Function (ESF) #3 (public works and engineering) and supports ESF #6 (temporary housing/roofing and human services).

During a natural disaster, the Corps is the primary agency responsible for ice, water and temporary power. Also, the Federal Emergency Management Agency assigns the Corps to remove debris following disasters. In the future, the Corps will already have contracts in place for ice, temporary power and water through the Advanced Contract Initiative (ACI). These indefinite delivery indefinite quantity contracts are competitively awarded ahead of time so that the Corps can rapidly respond to emergency situations when disaster strikes.

"One of the lessons learned after Hurricane Katrina was that we in the federal government must anticipate switching to a 'push' system during a natural disaster the magnitude of Katrina because the state doesn't even know what it needs and can't ask for help," Strock said. "Beginning this year, we are ready to push."

Lessons learned after Katrina include pre-training and planning exercises with ACI contractors; becoming more consistent with Army practices; leveraging existing contracts; planning for sole-source

Overall, the conference was very good. They picked current topics for KOs right now. I liked that they are hot topics. I would have liked to hear about special acts that we have to comply with like the Buy American Act or the Service Contract Act. Nancy Norton, S3 KO, CELCMC Acquisition Center. letter contracts; employing small, local businesses; and deploying internal review and auditors early.

## **USACE Task Force RIO**

The PCOT Symposium featured a "Serving Our Soldiers Panel," in which BG Robert Crear, President-designee, Mississippi River Commission Commander, Mississippi Valley Division, USACE, outlined a few of the many projects KOs have helped USACE with.

Crear was in charge of Task Force RIO to restore oil production following the outbreak of *Operation Iraqi Freedom*. USACE contracted with KBR and Parsons to put out fires. "It is unbelievable the work they did under those conditions," Crear recalled.

All of the topics were pretty good and extremely relevant and current. The Source Selection Manual workshop was very important. I was previously a Navy civilian for 7 years, and I've never been to a conference like this with all of the leadership here sharing ideas. James Watkins, KO, U.S. Army Medical Materiel Agency, Fort Detrick, MD.

When KBR's ties to the vice president and its noncompetitive cost-plus-fee award contract were questioned at election time, Crear was called to testify before Congress. "We made the decision to use KBR for all the right reasons," Crear said. "We used all the right processes, the Justification and Approval was approved. Ballard was right there with us, testifying and supporting us," he remarked.

After this experience, Crear advised the KOs to always review their documentation, to ensure their processes are beyond reproach and to have inspectors and auditing personnel there from the



first day. Not only was this contract looked at by the U.S. Army Audit Agency and Defense Contract Management Agency, the FBI and the U.S. Army Criminal Investigation Command were also involved — and the KBR contract withstood all scrutiny. "It shows the integrity of the people

and processes involved," Crear said.

## U.S. Army Sustainment Command (ASC)

Jim Loehrl, Principal Assistant Responsible for Contracting (PARC) for the U.S. Army Field Support Command (AFSC), explained that as the Army

becomes modular, units in the field will no longer have embedded KOs. Those positions will now be tied to the seven Army Field Support Brigades (AFSBs), based in Southwest Asia (SWA), Iraq, Europe, Korea, CONUS East and West, and Pacific.

As the AFSC transitions to ASC, four OCONUS PARCs will now report to MG Jerome Johnson, ASC CG. These four are the PARC Americas, PARC Korea, PARC Europe and PARC Kuwait. During peacetime, PARCs obtain their authority from the U.S. Army Contracting Agency (ACA). When they are deployed, they get their contracting authority from Johnson and are under his authority.

Some of the issues Loehrl would like to see improved are:

- Better integration between contracting and the warfighter. JCC-I/A has improved on this greatly already and the AFSBs are helping with this as well.
- Establishment of a requirements review board that can help ensure that what the commander wants and what the commander can afford are clear. This would help contracting professionals set priorities and allocations correctly.
- Ensure that contingency contracting strategies fold into operational strategies. Contingency contractors should participate in exercises so that they can understand Soldier needs and requirements better.

"I personally feel there is not a military officer today who can execute his mission without some support from contracting," Loehrl proclaimed. "We need to make sure that the institutions that train our officers give more exposure to contracting so that they have a better understanding of contracting. At



From top left, Contingency Contracting Officers SFC Venus Griffin and MSG Cortorcha Rucker, and Procurement Analyst Charlene Wilson, all of whom serve with the SWA PARC at Fort McPherson, GA, networked with fellow KOs at the PCOT Symposium.



the same time, the onus is on us to make sure that they understand what we do."

## Join the Team

MG John M. Urias, former CG, JCC-I/A, presented lessons learned during his command tour. He explained that when he arrived in Iraq in January 2005, there were great folks doing great things. However, there was a lack of contracting centralization and synchronization, duplication of effort, and limited efficiencies and economies of scale. "Generally, there was warfighter frustration because the warfighter had to focus on contracting," Urias said. "One of our first jobs was to make contracting transparent to warfighters. Organizationally and doctrinally, we weren't structured to do that. So in 2005 we formed the JCC and CENTCOM [U.S. Central Command] loved it. They loved it so much they added Afghanistan to our mission."

When the JCC was formed, it became one of six major subordinate commands under Multi-National Force-Iraq CG GEN George W. Casey Jr. and CG Combined Forces Command-Afghanistan LTG Karl Eikenberry — a tremendous step forward in centralizing under one command. "Many of you supporting from the rear, who I

never saw, I want to thank each and every one of you for what you did during my watch," Urias said. "You are combat multipliers."

Urias saw to it that KOs were where the work was being performed and that they established habitual associations with unit commanders so that the commanders knew who to go to when they needed something from day one during their time in the desert. KOs on the ground were empowered to make instantaneous decisions at high-dollar thresholds so warfighters could be supported very quickly.

During his tour of duty, Urias worked with U.S. Army Research, Development and Engineering Command PARC Jim Warrington and ACA-The Americas PARC COL Tony Bell on \$6 billion in contracts that were let during the reconstruction efforts.

COL Ted Harrison from JCC-I/A gave me answers to questions I've had regarding contracting in theater opposed to contracting for them from our local office. I really enjoyed U.S. Army Criminal Investigation Command agent Richard Drill and his presentation of different cases and how you should maintain your integrity and not be pushed into things that you know aren't right. Sheryl Calderon, KO, Contract Administration Division, Contracting Command, Fort Hood, TX. Some of the contracts JCC-I/A oversaw provided what Urias termed "capacity building" — reconstruction contracts in which Iraqis and Afghans were trained in rebuilding efforts and how to form contracts, manage a workforce, and engender fair and open competition. "We'll never make them clones of us," Urias said, "but we need to teach them and give them a framework in which to conduct their business. We made a lot of headway in that end."

Urias related how the JCC model worked in combat environments and must be institutionalized. He believes it could work in DRO environments as well. He urged those present to volunteer for service overseas. "There is no better place to serve than in direct support of warfighters in Iraq and Afghanistan," he said. "We need more government civilians. I highly encourage you to join the team. It will change your life."

*Editor's Note:* An additional article from the PCOT Symposium about business writing by Richard Zimmerman can be found online at http://asc.army.mil/events/conferences/ 2006/pco/briefs.cfm. All PCOT Symposium photos by Meg Williams.



MEG WILLIAMS provides contract support to the U.S. Army Acquisition Support Center through BRTRC Technology Marketing Group. She has a B.A. in English from the University of Michigan and an M.S. in marketing from Johns Hopkins University.

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# 'We're in an Era in Which Nobody Can Do It Alone' – MG Eric Schoomaker, USAMRMC CG

Meg Williams

physician vows to serve humanity; a Soldier never leaves a fallen comrade. When the two entwine, a powerful force for warfighters' survival and wellness ensues. Schooled in medicine and forged by an Army career, MG Eric B. Schoomaker brings a determination to work jointly and across federal agencies to bring meaningful medical solutions to Soldiers and their families as the Commanding General (CG), U.S. Army Medical Research and Materiel Command (USAMRMC), Fort Detrick, MD.

Schoomaker spoke with Army AL&T Magazine Senior Editor Meg Williams on July 10, 2006, following a presentation at the Procuring Contracting Officers Training (PCOT) Symposium in Miami, FL. (See Page 4 for PCOT Symposium article.)



A UH-60 Black Hawk medical evacuation helicopter crew chief prepares to load an injured Iraqi soldier aboard his aircraft near Tal Afar, Iraq, on May 19, 2006, following a fire fight with insurgents. (U.S. Army photo by SSG Aaron Allmon II.)

### Getting Healthcare Services and Products to Soldiers

Schoomaker's command falls under the U.S. Army Medical Command (MEDCOM), one of the Army's 11 Direct Reporting Units. MEDCOM CG LTG Kevin C. Kiley, M.D., who is also the Army Surgeon General, leads MEDCOM, which is made up of approximately 50,000 officers, enlisted and civilian members who manage healthcare, medical facilities and medical research worldwide.

### "Although USAMRMC contains

'Army' in its title, it is increasingly the site of Joint forces medical research, electronic medical records, health services and medical materiel procurement," Schoomaker explained. On the medical logistics side of the command, US-AMRMC works jointly with the Navy and Air Force to shape the future healthcare logistics support in the military healthcare system. All services contribute requirement definitions with the Defense Logistics Agency's (DLA's) Defense Supply Center at Philadelphia (DSCP) for the bulk of medical materiel sent to all warfighting combatant commanders, especially the U.S. European Command and U.S. Central Command (CENTCOM).

**USAMRMC** works jointly with the Navy and Air Force to shape the future healthcare logistics support in the military healthcare system. All services contribute requirement definitions with DLA's DSCP for the bulk of medical materiel sent to all warfighting combatant commanders.

There are two acquisition activities within MEDCOM. The first being the Health Care Acquisition Activity (HCAA) headed by the Commander/ Principal Assistant Responsible for Contracting (PARC) COL Earle Smith II. HCAA is collocated with MEDCOM Headquarters at Fort Sam Houston, San Antonio, TX, and delivers healthcare — mostly provider services — to patient facilities. The second is the U.S. Army Medical Research Acquisition Activity (USAMRAA), collocated with USAMRMC at Fort Detrick. Directed by Paul G. Michaels, Director/PARC, USAMRAA is in charge of contracting for medical research and acquiring products and devices that are required for care of combat Soldiers.

About 150 contracting professionals work at USAMRAA, which provides

contracting support to USAMRMC and to the TriCare Management Agency, Department of Homeland Security (DHS) and the Department of Health and Human Services. USAMRAA's management structure is organized by customer-based teams to provide support from acquisition planning through contract closeout.

"USAMRMC is a Life Cycle Management Command, from basic science and concept to delivery of the materiel to Soldiers," Schoomaker said. "We are responsible for an enormous number of products and for the expertise to deliver services to Soldiers daily. Smith's activity contracts for public health-

care services at more than \$1 billion a year and Michaels' activity contracts about \$1.6 billion annually on the research side."

USAMRMC is in charge of six Army CONUS laboratories, three OCONUS



MG Schoomaker, USAMRMC CG, spoke to more than 400 PCOT Symposium attendees July 10, 2006, about how the Army's procuring contractors are assisting in getting medical research and services to Soldiers in a timely manner. (U.S. Army photo by Meg Williams.)

laboratories, five nonlaboratory facilities and six medical logistics operations throughout the world. Its logistics operations are centered around the U.S. Army Medical Materiel Agency (US-AMMA), Fort Detrick, and the U.S. Army Medical Materiel Central Europe (USAMMCE), Pirmasens, Germany. USAMMCE provides medical logistics support to more than 500 deployed customers within CENTCOM using prime vendor contracts.

Prime vendor contracting, explained Schoomaker, has made it much easier for USAMMA and USAMMCE to move products to the battlefield. A prime vendor contract is a large contract held by the DSCP that manages thousands of devices, drugs and medical materiel from the factory to foxhole, ship or flightline directly to Soldiers. Prime vendors are experts at managing large inventories of commercially available items sold to civilian healthcare facilities and USAMRMC leverages that capability versus standing up its own capability.

USAMRAA fills the gap for deployed medical units when the prime vendor system does not have or cannot get items to the units on time. Recent acquisitions have included pain management pumps, suction apparatuses and rescue devices. Indefinite delivery indefinite quantity contracts have also been used to move medical equipment into theater. When repair parts are



needed for medical equipment, US-AMMA works with USAMMCE and DSCP to get them. "This is critical because sustaining medical equipment ensures it operates correctly in a harsh environment," Schoomaker said.

## Infectious Disease and Vaccine Development

USAMRMC protects Soldiers against invisible threats — whether mental health threats, viruses or bacteria. A global command, USAMRMC has laboratories in Nairobi, Kenya, that are studying vaccines for malaria, the number one killer of human beings worldwide and a major problem for deployed U.S. Forces. "Malaria infected 80 Marines during the 2003 riots in Liberia and killed two Special Forces Soldiers who were training peacekeepers in Nigeria," Schoomaker said.

In fact, DOD investigators have contributed to the development of approximately 25 percent of novel

U.S. Food and Drug Administration (FDA)licensed vaccines since 1962, when the FDA required documentation of vaccine effectiveness as well as safety. "Novel" refers to a vaccine for a new pathogen or combination of pathogens, or a dramatically innovative approach to vaccine manufacturing. Further, the U.S. military contributed to the development of approximately one-half of nonpediatric vaccines that are currently administered to service members at the time of induction or predeployment.

Schoomaker enumerated the medical research tak-

ing place at USAMRMC laboratories. The Armed Forces Research Institute of Medical Sciences (AFRIMS), in Bangkok, Thailand, a joint operation with the Royal Thai Army, is responsible for tremendous medical advances in protection of Joint forces. AFRIMS is conducting the largest trial of antihuman immunodeficiency virus vaccine in the world in collaboration with the Royal Thai Ministry of Public Health.

The U.S. Army Medical Research Unit-Europe in Heidelberg, Germany, has been tracking the mental health aspects of Joint forces deployment for several years and it is responsible for scholarly work in identifying post traumatic stress-like symptoms that may arise in Soldiers stretching as far as six months after they return from deployment.

In another example of Joint collaboration, the Army works with the Navy on global infectious disease surveillance at two OCONUS laboratories. "The avian flu material that the Centers for Disease Control and Prevention obtained for development of a firstgeneration vaccine was gathered by the Naval Medical Research Unit 3 laboratory in Cairo, Egypt," Schoomaker said. "We're a great surveillance tool for deployed forces."

"The laboratory you might be most familiar with is located at Fort Detrick — the U.S. Army Medical Research Institute of Infectious Diseases [US-AMRIID]. This is the setting for *Outbreak*, the movie starring Dustin Hoffman and Morgan Freeman. I'm Morgan Freeman, by the way, and, no, I don't have a refrigerator stocked with plasma that protects you against the Ebola virus. But if you visit my office, you can get a diet soda."

## Successful New Medical Products

In his briefing to the PCOT Symposium, Schoomaker listed some of the medical products contracting officers at USAMRAA helped bring to warfighters:

- Chitosan Hemorrhage Control Dressing. This wound dressing staunches lethal hemorrhage, the number one cause of battlefield deaths. "From concept to delivery, the chitosan dressing went into the combat pockets of our medics and first-aid kits of our combat lifesavers in only 18 months," Schoomaker emphasized. "Bandages are getting into the hands of Soldiers because of the contracts that have been in place at USAMRAA for their production and delivery."
- Battlefield Medical Information System-Telemedicine (BMIS-T). This small, hand-held device is carried by more than 20,000 medics in Southwest Asia who can upload medical information about a casualty and send it over the Internet to the

AHLTA database repository of military medical information. The BMIS-T is also loaded with electronic versions of medics' manuals.

- Combat Application Tourniquet (CAT). This new tourniquet is in the Individual First-Aid Kits of every Soldier in the field of operations. It can stop the flow of arterial blood in an extremity and its windlass system can be operated with one hand. USAM-RMC worked with Program Executive Office Soldier to field the CAT.
- Golden Hour Blood Container. This container was created by the Walter Reed Army Institute of Research in Silver Spring, MD, to transport red blood cell units without using batteries, ice or electricity. It was designed to transport the blood cell units within military facilities and to the Forward Surgical Teams where delayed evacuation of wounded Soldiers can occur.
- Burn Treatments. The U.S. Army Institute for Surgical Research's (USAISR's) Burn Center admits 300 patients annually and provides burn flight teams to ensure safe military aeromedical transfer from the initial hospitalization site to Fort Sam Houston. It also provides training programs for physicians, nurses and allied health professionals.
- Environmental Sensors. The U.S. Army Center for Environmental Health Research (USACEHR), Fort

Detrick, develops environmental sensors and biomarkers that notify Soldiers when a living system is in a toxic environment. USACEHR has patented its research on sentinel fish that cough when they don't like the water. The fish are used to monitor water supplies at Fort Detrick; San Francisco, CA; Washington, DC; and New York City.

USAMRMC partners with materiel developers at the U.S. Army Research, Development and Engineering Command (RDECOM). "We are not part of developing tools or materiel — we do the research to improve them," Schoomaker said. "We did research on the caffeine gum that is placed in rations for long-range patrols. This gum contains the caffeine equivalent of a double shot of espresso. We research chemical drugs that extend performance without altering a Soldier's judgment."

## Disaster Relief Operations (DROs)

USAMRMC's experience with contingency contracting and its ability to meet urgent needs expeditiously has positioned it as a "go-to" player in responding to certain aspects of DROs. In July 2005, USAMMA entered into a memorandum of agreement with the Federal Emergency Management Agency (FEMA) to assist in building a mobile field hospital. Several components were procured and the last piece,

the shelter system, is in the final stages of procurement. USAMMA also acts as a clearinghouse for all the medical assembly requirements that the deployed force and the DHS would require. USAMRAA has helped both DHS and FEMA in the monumental contracting requirements to meet their infrastructure needs in the aftermath of the destruction wrought by Hurricane Katrina — whether these are commands, mobilization sites or contractors who can move mobile homes into areas where disaster has struck. "Michaels' crew picked up the contract for the FEMA trailers and emergency housing requirements post-Katrina," Schoomaker said.

Schoomaker explained his command's goal in collaborating with other federal agencies. "The idea is not to become the contracting agency or materiel supplier for a non-DOD community. Rather, in this era of rapid acquisition and of new missions, requirements and massive materiel needs, we will assist agencies like FEMA and DHS by not forcing them to reinvent the wheel for things that we already have in place. We allow them to leverage the interagency process across executive agencies."

## Contracting Support to Military Medical Care

Schoomaker outlined a number of instances in which his contracting officers at USAMRAA have supported the Army Medical Department mission. For instance, the Walter Reed Army Medical Center (WRAMC) Amputee Center, Washington, DC, was established by a grant awarded by USAM-RAA from special funds made available in FY04 through congressional appropriations led by Senator Bill Nelson.

"That's a combination of congressional interest in a project that grew out of the rapid emergence of these grievously injured Soldiers, Marines and other service members," Schoomaker said. "Because of our improved body armor, tourniquets and hemostatic dressings, we have saved warfighters from bleeding to death. However, as a





"Care in the air" for burn patients is one specialty of the USAISR, Fort Sam Houston, TX. The USAISR conducts medical research to provide medical solutions and products across the full spectrum of combat casualty care. (U.S. Army photo courtesy of USAMRMC.)

result of increased survival, we are having to treat and then rehabilitate many very grievously injured Soldiers."

Between two and three percent of returning casualties are amputees. There are more than 400 patients who have lost a limb and one in five have lost two or more limbs. Currently, amputee service men and women are treated at WRAMC and Brooke Army Medical Center, Fort Sam Houston. A new Comprehensive Combat Casualty Care Center at San Diego Naval Medical Center is in the works to assist West Coast-based service members.

The Military Amputee Research Program in Washington, DC, uses stateof-the-art technology for rehabilitating Soldiers. For example, the C-leg prosthetic is the first knee joint system controlled and adjusted by microprocessors. Schoomaker talked about the next generation of prosthetics that map small mechanical devices in the prosthesis to the nerve that once controlled the muscle that is now gone. "Eventually, we'll have the prosthetic device mapped to the brain itself," Schoomaker said. "So you think 'move my thumb' and the prosthetic hand moves."

A consortium of academic partners, industry and engineering firms, including USAMRMC, are working on advancing prosthetic devices. (See sidebar "DARPA Revolutionizes Prosthetics" on Page 15.) "This is a time when our returning force of Soldiers comes home either with evident wounds or with hidden wounds," Schoomaker said. "They need our care and they need it with speed but also with the highest quality possible. We've had success in putting Soldiers and Marines back in uniform and back in service."

### Contracting Professionals Work With Development Teams

Nearly all of USAMRMC's products in some way physically touch a human being or are actually inside a human being, and, in the United States, this requires FDA approval. Advanced developers at USAMRMC work closely with RDECOM and other materiel developers to provide the regulatory oversight and research that are necessary to obtain FDA approval of products for Soldiers.

The command's product teams — typically composed of scientists and advanced developers — have also taken on contracting experts to ensure that products move smoothly from the tech base through regulatory requirements to procurement.

"One of the things we've done under MG Schoomaker's leadership is to place contracting professionals on all the product teams," explained Michaels. "So our contracting procurement professionals know what's happening and it's not a surprise when it comes to us as a new requirement. Contracting officers are included very early in the process and that allows us to decrease the timeline from concept to actual product." Schoomaker praised the contracting procurement professionals at USAMRAA for the specialized, complex acquisition support they give to major medical product lines, infectious disease, combat care, military operational medicine, mental health challenges, and medical chemical and biological defense. "For all of this, I want to extend the congratulations and appreciation of my command and the medics who I represent," he said.

## **Collaboration and Partnerships Are Essential**

USAMRMC continues its essential work in protecting Soldiers; researching vaccines, drugs and diagnostics; building medical facilities; and providing medical materiel and services across all services and other federal agencies.

"We're in an era in which nobody can do it alone," Schoomaker concluded. "USAMRMC is about teamwork. We're about partnering across the Joint force with industry and academia and working together through an interagency process. We see ourselves as a materiel developer and fielder, but also as a knowledge broker to find the best source of a solution and the best source of a contract that will provide the solution — either the expertise in the form of a service or the product itself. Neither I nor my command is proprietary or parochial about whose idea it is. We're more interested in making sure we get products and expertise to the field in as rapid and as timely a fashion as possible."

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#### **DARPA Revolutionizes Prosthetics**

Throughout history, the battlefield loss of limbs has driven technological progress in the prosthetics field. As of August 2006, there are more than 460 amputees as a result of combat operations in Iraq and Afghanistan who underscore the urgent need to accelerate progress in this field. The Defense Advanced Research Projects Agency (DARPA) is bringing together advances across disparate scientific disciplines with its Revolutionizing Prosthetics initiative.

"DARPA has undertaken the monumental task of fulfilling its pact to our Soldiers by embarking on an effort to provide fully integrated limb replacements that enable victims of upper body limb loss to perform arm and hand tasks with the strength and dexterity of the natural limb," explained COL Geoffrey Ling, M.D., Ph.D., Revolutionizing Prosthetics Program Manager. "In four years, we anticipate having a prosthetic arm that will be neurally controlled identically to the way that we control our biological arms."

While the DARPA initiative focuses on upper-extremity prosthetics as the most challenging technical problem, it is expected that the technologies developed will be readily adaptable to lowerextremity amputees as well. There are two separate programs that fall under DARPA's Revolutionizing Prosthetics initiative, Revolutionizing Prosthetics 2009



and Revolutionizing Prosthetics 2007. Each program has a lead contractor and includes a large team of researchers.

The Army Research Office, Research Triangle Park, NC, is contracting and coordinating the Revolutionizing Prosthetics 2007 program. Several other projects are feeding into the effort as it matures. Among these are research projects exploring alternative methods of signal extraction from the nervous system, new materials that can redefine the concept of biocompatibility to include functional as well as structural integration and ways to regenerate neural pathways to control and sense the prosthetic directly.

At the end of the 2-year Revolutionizing Prosthetics 2007 program, a prosthetic arm system will be ready for human clinical trials. This program will leverage recent research advances to develop a prosthesis that will dramatically improve the capability of upper-extremity prosthetic limbs beyond those that are available commercially. It will incorporate the best possible technologies and the most revolutionary short-term developments into a highly advanced, neurally interfaced prosthetic arm. The focus will be on providing near-human strength in a prosthetic limb, and creating a prosthetic arm that is both functional and similar in appearance to the native limb. The new prosthesis will have increased range of motion, strength, endurance and dexterity, and it will significantly improve an arm amputee's ability to perform daily living activities.

The longer-range Revolutionizing Prosthetics 2009 program seeks to create a neurally controlled artificial limb that will restore full motor and sensory capability to upper-extremity amputee patients. This revolutionary prosthesis will feel, look and perform like the native limb. At the end of the 4-year program, the resulting prosthesis will be ready for human clinical trials. Key to this is a prosthetic that has:

- Sensors for touch, temperature, vibration and proprioception — the ability to sense the position of the arm and hand relative to other parts of the body.
- A power source that will allow at least 24 hours of normal use.



- Mechanical components that will provide strength and environmental tolerance of heat, cold, water, humidity and dust, among others.
- Durability such that the device will last at least 10 years with normal use.

In short, with this revolutionary mechanical arm, an upper-extremity amputee would be able to feel and manipulate objects as a person would with a native hand. Ideally, the device would grant an amputee the fine motor control necessary to thread a needle, use a computer keyboard, play a piano or perform fretwork on a guitar. Amputee service men and women could return to activities of their choice either within the services or civilian society.

"We will do whatever is necessary to restore these people who have given up so much for the idea of freedom and in service to their country," Ling concluded. "Taken together, these two programs will advance the state-of-the-art in prosthetics while delivering an advanced upperextremity prosthetic device in two years."

*Editor's Note:* For a related story on prosthetics, go to Page 78.

# Achieving Velocity — The Armed Reconnaissance Helicopter

LTC Neil Thurgood and MAJ Chris Mills

elocity is a vector that includes two components
– speed and direction. Velocity also appropriately describes the rapid progress of the Armed Reconnaissance Helicopter (ARH) program from inception to contract award. The ARH program has been moving expeditiously through the acquisition process with a specific direction and mission – to field an operational ARH squadron in FY08.

The new Bell/Textron ARH was developed to meet the Army's need for a fast, agile, armed reconnaissance helicopter. The ARH is powered by a proven and reliable engine platform that provides optimum performance, maneuverability and confidence for an array of diverse missions. (Photo courtesy of Bell Helicopter Textron.)

In June 2004, the Army approved a full and open competition procurement to meet the ARH program's requirements. A year later, an Office of the Secretary of Defense (OSD) Overarching Integrated Product Team (OIPT) was convened. The OIPT gained approval for a successful Milestone (MS) B Defense Acquisition Board (DAB). One year is an amazingly short amount of time to accomplish the myriad requirements to get a successful MS B decision, as highlighted by Figure 1 on Page 18. This article will provide insight and describe a few important lessons learned during the ARH effort and, hopefully, help prevent other acquisition programs from repeating mistakes and set the conditions so that others may capitalize on the ARH program's success.

The ARH is a fully-integrated, lightweight, armed reconnaissance weapons platform designed to support the Joint force commander. It replaces the current OH-58D Kiowa Warrior and is interoperable with organic and Joint fires systems and manned/unmanned aviation platforms.

On June 17, 2004, the Army Systems Acquisition Review Council (ASARC) approved the ARH program. The Army proposed a streamlined acquisition strategy for the ARH program. At the initial DAB review in July ARMY AL&T





2004, the ARH program was designated a prospective Acquisition Category (ACAT) 1D program. The ARH Acquisition Strategy Report (ASR) detailed the path ahead as a source selection, implementing full and open competition. The ASR set the conditions for the MS B decision in July 2005. An Acquisition Procurement Objective of 368 aircraft was set to fulfill the armed reconnaissance requirement across the force.

The ARH program's journey through the Joint Capability and Integrated Development System (JCIDS) process was aggressive. The ARH Initial Capabilities Document (ICD) was approved by the Army Requirements Oversight Council on June 8, 2004, and the Joint Requirements Oversight Council (JROC) on Nov. 3, 2004. The ARH ICD recommended that a modified existing helicopter fulfill the ARH requirement. Following the ICD's approval, the ARH Capability Development Document (CDD) was approved by the JROC on Dec. 7, 2004. The ARH request for proposal (RFP) development was conducted in parallel with the requirements process to reduce time. Requirements risks were minimized by a close working relationship between the program management office (PMO) and the U.S. Army Training and Doctrine Command Systems Manager (TSM). A draft RFP was provided to industry to permit as much planning as possible. Additionally, an "Industry Day" was held to provide as much detail on the program requirements to potential offerors as possible.

Within 16 hours of the CDD JROC, the formal RFP was released to industry. The RFP's quick release was the result of early involvement of the ARH PMO and matrix organizations while the CDD and RFP were being written.

The Army awarded a contract to Bell Helicopter Textron to meet the ARH requirement. The ARH consists of a modified Bell 407 aircraft integrating a nondevelopmental item (NDI) mission equipment package. The Systems Development and Demonstration (SDD) effort consists of integration of NDI subsystems (see Figure 2), and testing/ qualification to support the MS C Low-Rate Initial Production decision.

There are three distinct areas where the elements of velocity proved crucial





in the battle to move the ARH program through MS B and to contract award: process, consistency and documentation.

### Process

Learning to develop velocity within the established system is a key element of the ARH program's success. Contrary to popular belief, the fundamental acquisition process works fairly well for the traditional development program. However, it is a one-size-fits-all solution and is cumbersome for short-schedule integration programs. There are three processes that PMs negotiate as they manage programs. PMs must track these three processes in parallel to ensure that they stay synchronized. It is important to understand that all parts of the process move at different speeds, and not all parts of the process are treated with equal priority and effort. They should ensure that they have a primary contact leading each of those fights:

- For the JCIDS process, it should be the TSM.
- For the acquisition process, it is the PM.
- For the contracting process, it is the PM with assistance from the local contracting office.

PMs should remember that in terms of the process, the Army's or OSD's priority may not be the program's priority. Therefore, the

The fundamental starting place for all programs is a thorough understanding of your ACAT level, what statutory and regulatory requirements a program must complete and what the MDA will accept. PM should balance those priorities in terms of scheduling meetings, meeting locations and who will attend. It is not enough for PMs to understand just their program. They must also understand the impact of their program on other Army and OSD programs. It's important that PMs realize the impact of what they are doing and their programs' relationship with competing priorities and programs within the Army and OSD.

It's also critical that PMs understand there are no short cuts. Every program is different,

ore, the short cut

Creating

consistency in

terms of briefings,

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but the fundamental starting place for all programs is a thorough understanding of your ACAT level, what statutory

and regulatory requirements a program must complete and what the Milestone Decision Authority (MDA) will accept. PMs should choose to embrace the process of getting to the milestone decision. Understand early, via the ASARC secretary and through the OSD DAB secretary, what is required and what the MDA expects. The PM

can then focus on what the MDA needs by working through the Integrating Integrated Process Team (IIPT) process.

The PM should strengthen ties with program allies. Conversely, the PM should find those who have issues and engage them directly. It's important that issues are defined and ownership is clearly identified. PMs should engage with as much information as possible when briefing primary staff ele-

> ments from the Army and OSD. The ARH program chose to engage fully, and this proved a wise decision.

#### Consistency

Consistency is a critical element that facilitates velocity within the process. Creating consistency in terms of briefings, meeting formats and strategy saves time, reduces redundancy

and breeds familiarity with the program. The ARH team used the smartbook approach. The team started with a set of slides that was consistently used as the foundation as the program moved forward. This set the conditions for successful Army IIPTs, OSD IIPTs, OIPTs, ASARCs and DABs. Changes occur frequently. Managers must maintain their smartbooks and track changes over time and keep everyone in the process on the same sheet of music.

## Documentation

Documentation is a key tenet that enabled velocity within the ARH program. The JCIDS, acquisitions and contracting processes require documentation — more than 37 various documents. PMs should understand the start and end points of each document in the process. The ARH team created a matrix that included the document requirement, writer, reviewer, staffing chair and status.

Within programs, decisions will be made and changes will undoubtedly occur. These critical decisions must be tracked. The ARH program had about 10 key Army decisions over the last year. PMs should ensure that when a decision is required, clear courses of action (COAs) are laid out in a typical military decision-making format. The COAs



Fielding an operational ARH squadron by FY08 requires consistency, documentation and organization throughout the acquisition process. (Photo courtesy of Bell Helicopter

should include the programmatic impact in terms of cost, schedule, performance, their relationship and their requirements. For example, the Army decides to go with a commercial-off-the-

shelf solution to fulfill an aircraft requirement, which means that the Army accepts a Federal Aviation Administration certification that may, or may not, equal the military standard. It is important to consistently communicate the impact of critical decisions throughout the process.

Textron.)

A key aspect of this documentation effort is the program office organization. Generally speaking, a smaller program office provides the ability to perform the requisite tasks. Implementation of the Life Cycle Management Command concept is an integral piece of PMO organization. ARH collocated its testing, engi-

neering, safety, logistics and software personnel within the program office.

All these personnel teamed to write JCIDS, acquisition and contracting documents. Collocation facilitates ownership in the program and encourages a healthy IPT process, ensuring

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consistent synchronization to MS B and beyond.

The PM must keep documents coordinated. To efficiently coordinate the writing and staffing of documents, there must be a single point of contact or "documents master" in the PMO. Traditionally, program offices have hired contractors to write these documents, but the ARH program decided against this. The advantage of this approach is that everyone knows what is going on and eventually the same group of people will be making decisions during the program's SDD phase.

Fundamentally, acquisition reform is not about the process — it's also about the people. The acquisition reform that all programs

desire is not just a function of acquisition laws and processes. Acquisition reform is really about people going the extra mile. From a leadership perspective, that means ensuring that the team understands where they are going and why they are doing it. Once everyone clearly understands the purpose, the process is much easier. A sense of purpose supports the necessary element of direction required to obtain velocity. The areas of consistency, documentation and organization provide focal points where leaders can focus their efforts, gain efficiencies and create velocity throughout the acquisition process.

#### LTC NEIL THURGOOD is the PM

ARH. He holds a B.S. in business management with a minor in communications from the University of Utah, an M.S. in systems management from the Naval Postgraduate School, an Executive M.B.A. from Harvard University and a Ph.D. in organization development and leadership.

MAJ CHRIS MILLS is the Assistant PM (Test) ARH. He has a B.S. in engineering and an M.S. in aviation systems, both from the University of Tennessee. Mills is Level I certified in program management.

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# ARH Source Selection Evaluation — An Evolution in Planning and Execution

MAJ Eric W. Ludwig and Joseph McVeigh

n the wake of the RAH-66 Comanche's termination, Army leaders began to review the process to equip the aviation reconnaissance force and to ensure a swift movement to that action. With the critical field necessity to rapidly acquire an Armed Reconnaissance Helicopter (ARH), the traditional acquisition process could not be used. Extensive problem solving ensued to determine how to reduce the days and months to get the helicopters in the hands of Army aviators. One major area requiring reevaluation for expediency was the Source Selection Evaluation Board (SSEB) process.

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With the critical field necessity to rapidly acquire an ARH, the traditional acquisition process could not be used. By planning well in advance, building a strong management team and integrating a user-friendly database, the ARH SSEB finished all proceedings required in less than six months. (Bell Helicopter Textron photo by Ed Garza and Ben Gillian.)

Planning for the SSEB took primary focus following the ARH Industry Day in Huntsville, AL, Oct. 8, 2004. The ARH Project Management Office (PMO) directed a sizeable portion of its staff to switch from working the request for proposal (RFP) process to readying for the evaluation of the offerors' proposals.

### The Planning Process Begins

An intense planning process was required — from setting up the right team, through all the tasks required to run the SSEB, to the source being selected and debriefs to offerors. References such as the Army Guide to the Source Selection Process and the Federal Acquisition Regulation (FAR) were instrumental. Our mission was to conduct the SSEB, starting by February 2005, to obtain a source decision by June 30, 2005, setting the conditions for a successful program. Any slip of time by the SSEB would produce severe consequences for the program and additional risk to the PMO. We knew this SSEB would differ from those in the past because of the extremely aggressive schedule planned. We had less than six months to complete an SSEB, which usually takes 12 months to accomplish.

Within the first few days of planning, the following key milestones were determined as crucial:

- Set up a planning cell and management team to immediately begin the planning process.
- Determine the appropriate SSEB team.
- Obtain facility space and equipment required to execute SSEB.
- Determine plan to coordinate/work with the Source Selection Advisory Council (SSAC) and the Source Selection Authority (SSA).

The Army has contracted with Bell Helicopter Textron to produce the force's next-generation ARH. The new ARH fleet will replace the battle-tested but aging OH-58D Kiowa Warrior helicopter fleet. Here, an OH-58D crew from the 1st Battalion, 4th Cavalry Regiment, 1st Infantry Division, lands at Forward Operating Base MacKenzie, Iraq, following an air combat patrol over the local province. (U.S. Air Force photo by SSGT Shane A. Cuomo, 1st Combat



- Scope the entire SSEB event and obtain concurrence from the SSAC Chairman.
- Obtain SSA approval of the Source Selection Plan (SSP).
- Determine schedule of events (macro and micro levels).
- Train all SSEB personnel.
- Develop database management and plan.

#### **Selecting the Right People**

The Army Guide to the Source Selection Process was our number 1 reference, but

it lacked guidance on how to set up an SSEB. To manage this large SSEB, with a multidisciplined team exceeding 100 personnel, we knew the operational challenge would be overwhelming for just one or two people. We put together the "management team" to plan and execute all activities, as shown in the figure on the following page. Positions such as operations officer, operations assistant and data-

base manager were additions to a typical SSEB management team.

We selected the appropriate personnel to lead at all levels and detailed the smallest feasible number of personnel required to work as evaluators. Efficiency directed that we have a limited number of personnel in specific areas of discipline and to have other personnel on-call. Fortunately, the request for a government facility had already been submitted more than six months prior to the SSEB's start. This forethought expedited the finalization of the SSEB setup process. Obtaining a government facility is by far the best choice in

Our mission was to conduct the SSEB, starting by February 2005, to obtain a source decision by June 30, 2005, setting the conditions for a successful program. support of security and control, but mainly because it comes at no additional cost to the PMO. A request for space should be made to the appropriate garrison facility management as soon as the need for an SSEB has been identified. A 6- to 12-month advance request is not uncommon, and a planner could be at great risk within a 6-month period. Not having to be immersed in this debacle

saves valuable time for setup and, of course, program money.

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In October 2004, the SSEB chairman was selected and began working with the planning cell. This was done to speed the entire process by ensuring that the lead was acquainted with the RFP process and had a good ARH program understanding. The chairman worked with the operations officer to finalize SSEB members, had recurring meetings with key leaders tasked to the SSEB and was involved in finalizing the SSP as well as obtaining both SSAC endorsement and SSA approval.

Dealings with the SSAC, SSAC Chairman and SSA were very important to planning our schedule. We knew we could internally contain the evaluators and SSEB leadership timelines for evaluations and roll-ups of such, but the highest risk overall was the scheduling inclusion of the advisors and authority to the process. This meant planning all dates for briefings within the sequence of events well prior to the SSEB's start, working to deconflict Army general officer and senior executive service civilian schedules, attaining the SSAC Chairman's concurrence and briefing the SSA for ap-

proval. One approach taken was omitting separate briefings between the SSAC and SSA. Though a risk, we opted to conduct the initial and the final evaluation briefings with both the SSAC and SSA members combined. To reduce potential conflict, our management team had an open door to the SSAC Chairman at all times, and this senior official kept the SSAC informed on critical SSEB issues and findings.

## **Implementing Training**

Phase 1 orientation training was completed for all members no later than 15-30 days prior to SSEB start with key tasks to deliver information on organization, source-selection process basics, SSP evaluation criteria and ratings, logistics such as room assignments, security operations, *FAR* and the macro-level schedule of actions from

The internally developed Microsoft® Access centralized database provided the medium for the SSEB members to pass evaluations and reviews seamlessly.

The detailed Phase 2 training was planned two days prior to start of evaluation at the facility. Here, a short organizational update was presented, but the bulk of training was targeted at

inception of proposals

through SSA selection.

ensuring that all leaders and evaluators were provided a detailed microlevel schedule of the process of initial evaluations, final evaluations

and any additional elements or processes. Additionally, the database manager was tasked to provide a detailed presentation on use of the database followed by a "rock drill" conducted by all participants for an entire half-day. This drill gave all members confidence in database use and provided a final operational test to the program and server to ensure that any quirks could be fixed prior to reception of proposals from offerors and the actual SSEB onset.

## **Managing Information**

The first step in managing the dataflow requirements for an SSEB is to identify all the potential issues upfront, such as:

- SSEB size number of personnel, locations for the people and computers, such as centrally located or distributed to several locations.
- Centralized server contains the master database or decentralized database sections that must be merged to create a complete database.
- Location of database manager is the manager on-site or on-call?
- Network infrastructure are there sufficient nodes (connections) to accommodate all SSEB personnel who will require database access? Is it able to handle the data traffic throughput generated by the SSEB's size? The process speed is governed by the slowest component, such as computer network card, network cabling, network switch/hub or server.
- Software what software will be used to generate and manage the database? Are there sufficient copies or licenses to cover all SSEB participants?
- Training often an overlooked step or not given the level of importance it is due. This is tied directly to the effort placed in designing the database. The more user-friendly and intuitive the screens, the less training and procedure memorization required by users.

For the SSEB to efficiently handle the large volume of data to review in each proposal, and to eliminate the chance of data mix-up between offerors, we had to keep each offeror's proposals separate during the evaluation process. The internally developed Microsoft<sup>®</sup>



Access centralized database provided the medium for the SSEB members to pass evaluations and reviews seamlessly. Each SSEB is unique and its structure is tailored to the SSEB Management Team's desires. For the ARH SSEB, the evaluation of each offeror's proposal passed through four separate levels and specific frames/screens — evaluator, element, subfactor and factor — with accompanying reviews at each level. The SSEB process began with the evaluator's input of his/her evaluation and continued through the different leaders at three levels.

Data security and integrity must be strictly maintained. All users had ownership of separate computers and passwords to access the network and database. All evaluations and reviews were traceable back to the originator. The complete database was backed up and verified daily. Keeping all the individual daily backups allowed the SSEB Management Team the flexibility to go back to any particular day to see what the status was of all evaluations; roll-ups; errors, omissions and clarifications; and discussion items. By planning well in advance, building the appropriate management team and integrating the appropriate tool — a user-friendly database to support execution — the ARH SSEB finished all proceedings required in less than six months and the contract was awarded without protest.

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Karim Abdian

his article is intended to inform Army materiel developers abo the change in DOD and Army policy that affects the manner in which specifications and standards can be applied in solicitations and contracts. DOD rescinded its policy requiring a waiver to cite military detail specifications and process standards in a solicitation or contract when the Under Secretary of Defense for Acquisition, Technology and Logistics signed the Defense Acquisition Guidance (DAG) in October 2004. The DAG specifically stated that acquisition organizations are no longer required to obtain a waiver from the Milestone Decision Authority (MDA) to cite such documents. This action led to a reexamination of the even more stringent Army waiver policy stated in Army Standardization Improvement Policy 95-1, March 1, 1995, and Change 1, Jan. 26, 1996. The Army Standardization Manager, at Headquarters, U.S. Army Materiel Command's (AMC's) Office of the Deputy Chief of Staff for Business Transformation, G-7, developed a coordinated consensus among the Army standardization community in favor of the waiver policy cancellation. As a result, the Army Standardization Executive (ASE) rescinded the Army policy memo and *Change 1* in April 2005.

DOD's acquisition requirements have transitioned from "detail specifications" to "performance requirements." This means that reprocurement of legacy systems, parts, spares and recap/reset will be subject to the new procurement rules, guidelines and contract forms. Here, an M1A1 Abrams tank crew from the 3rd Armored Cavalry Regiment, Fort Carson, CO, patrols the streets of Tal Afar, Iraq, last year. (U.S. Air Force (USAF) photo by SSGT Aaron Allmon, 1st Combat Camera Squadron.)

## **Waiver Policy Origins**

The waiver policy originated in the early 1990s as one of many Office of the Secretary of Defense (OSD) initiatives and legislative changes intended to bring about transforming the way DOD conducts its acquisition business. The waiver's purpose was to drive the use of performance-based specifications unless *detail-type specifications* were needed to provide an exact design solution or interface requirement. Over the past decade, program offices have had to obtain permission from their MDA before citing military detail specifications, designated by the military detail (MIL-DTL-XXXX) identifier on the title page, or manufacturing and management process standards, as requirements in contracts. In the beginning, a few MIL-DTL specifications and process standards that were frequently and widely used were

exempted from the waiver requirement by DOD and the Army.

#### Acquisition Reform Institutionalized

Now, OSD has determined that the waiver policy's intent is institutionalized. A consensus among Army and other service and agency acquisition organizations supported that conclusion. Revision of *Department of Defense Directive (DoDD* 5000.1), *Operation of the* 

Defense Acquisition System, and cancellation of DoDD 5000.2-R, Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information System Acquisition Programs, effectively rescinded the mandatory requirement for the MDA to approve waivers. To clearly document these

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changes, Louis A. Kratz, Assistant Deputy Under Secretary of Defense (Logistics, Plans and Programs) and Defense Standardization Executive, issued a memorandum in March 2005 eliminating the waiver requirement across DOD. He noted that elimination of the waiver requirement should not be interpreted as returning to the "old way of

doing business," but as recognition that cultural change had taken place in DOD regarding the proper application of specifications and standards. Waiver requirement cancellation greatly

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The ASE has indicated his office will continue to monitor contract requirements to ensure the language uses the new performance-type military specifications. This will ensure that Army legacy systems will continue to perform at the highest standards as new and better technology is integrated into these aging weapons platforms. Here, a Multiple Launch Rocket System from 2nd Battalion, 20th Field Artillery Regiment, 4th Infantry Division, sits staged at Camp Fallujah, Iraq, on April 22, 2006. (U.S. Marine Corps photo by LCPL James J. Vooris, 1st Marine Division Combat Camera.)

reduces the time and effort required for solicitation development by Army acquisition organizations.

In the future, DOD intends that all acquisition requirements be cited in performance terms. The conversion of existing detail specifications to performance requirements is to be continued and applied in the reprocurement of legacy systems when supported by business case analyses. Nevertheless, if performance specifications cannot meet program needs, or if stating requirements in performance terms is not practicable because of essential interface or interoperability features, the acquiring activity may state its needs using prescriptive requirements for dimensions, materials and other attributes. DOD acquisition policy leans toward use of commercial item descriptions (CID) or nongovernment standards (NGS), including international standards, unless performance- or detail-type documents are required to describe the requirement adequately.

## Continued Process Surveillance

Does this signal open season for citing extensive and restrictive product details, DOD-unique management practices or costly manufacturing processes? No, that is not the intent. Program offices must continue to assess requirements and apply only those specifications and standards military, federal, NGS or international — necessary to define essential needs and manage risk. Program executive officers, program managers, acquisition directors and others in the acquisition and technical communities must consider appropriate use of specifications and standards. Furthermore, ASE Ronald J. Davis has

In the future, DOD intends that all acquisition requirements be cited in performance terms. The conversion of existing detail specifications to performance requirements is to be continued and applied in the reprocurement of legacy systems when supported by business case analyses.

indicated that to ensure that the Army does not return to the old way of doing business and lose the gains achieved during acquisition reform, he will continue to review proposed new performancetype military specifications and standards to screen for lapses into detail requirements, and randomly examine solicitations released by Army acquisition centers to gauge the proper application of military specifications and standards.

# Why a Waiver Policy?

In 1994, Dr. William Perry, then Secretary of Defense, set in motion the DOD policy for military specifications (MilSpec) and standards reform to end what was believed to be the automatic and unthinking imposition of prescriptive specifications and standards on contracts for military materiel. While recognizing that there were times when MIL-DTLs were the best and only way to ensure that DOD received the requisite quality, performance and reliability for its military equipment expenditures, Perry wanted to ensure that they were used only when they were really needed. To enforce that idea, he directed that use of detail specifications as mandatory requirements in new or major modifications to weapon systems be subject to the approval of the MDA - the executive charged with acquisition or development approval authority for the end item system. The requirement had a dramatic effect. Contracts went from having hundreds of required specifications and standards to having only a few, if any. Some thought this was progress. Others thought that overturning a process that had seemingly

worked well for decades was a recipe for disaster.

To implement Perry's waiver policy in the Army, the ASE issued *Policy Memorandum 95-1 with Change 1*. *Change 1* applied to rebuys of systems and procurement of spares, and it imposed the same restrictions on those categories as were being applied to new procurements. In keeping with the DOD objective, the Army policy's intent was to eliminate the prescriptive or "how to" nature of MilSpecs and standards cited in materiel contracts.

### Acquisition and MilSpec Reform

Prior to acquisition reform, DOD maintained an inventory of approximately 40,000 MilSpecs, standards, handbooks and related standardization documents. The Army's share of that inventory numbered about 12,000 documents. Many specifications called

out specific design, manufacturing, material and finishing requirements that limited the ability of commercial products to compete with the uniquely designed, MilSpec-derived products. As an unintended consequence, the practice limited the ability of commercial manufacturers to offer their best technology and designs to DOD. Further, many military standards dictated DODdesigned processes such as configuration management, management of technical data, parts management, quality management, supplier management, reliability prediction and maintainability requirements that were not compatible with commercial business practices. Compounding the problem, system developers cited specifications and standards but did not tailor them to eliminate excessive requirements in contracts, system specifications and statements of work. Consequently, mandatory compliance of irrelevant requirements and verifications was often directed.

New procurement policies ensure that "rebuys" of systems and spares impose the same restrictions as new system acquisitions. Here, an M2A2 Bradley Fighting Vehicle crew from Alpha Troop, 1st Battalion, 4th Cavalry Regiment, 1st Infantry Division, departs Forward Operating Base MacKenzie, Iraq, for a combat mission. (USAF photo by SSGT Shane A. Cuomo, 1st Combat Camera Squadron.) As it turned out, MilSpec Reform was a catalyst for a thorough scrubbing of the standardization document inventory. Military departments and defense agencies reviewed their MilSpecs and standards, canceling unnecessary documents, replacing many with NGS and rewriting others to state requirements in performance terms. In some cases, the documents defined militaryunique requirements that could not be restated in performance terms without jeopardizing performance, reliability or safety. In such cases, the MilSpecs and standards were retained and a select few were exempted from the waiver requirement. The MilSpec Reform actions resulted in a refined inventory of documents that had been screened to ensure that they were necessary; that they were written in terms of form, fit and function; and that they reflected commercial practices.

Currently, there is a mix of more than 30,000 military and federal specifications, standards, handbooks, CID and international standardization agreements in the inventory. Of that number, the Army is the preparing activity

responsible for maintenance of slightly more than 8,000 documents.

### Guidance for Standardization Document Development

Military Standard (MIL-STD)-961, DoD Standard Practice, Defense and Program Unique Specification Format and Content, cov-

ers the requirements for developing military performance and MIL-DTL specifications. *MIL-STD-961* applies to specifications used on multiple programs or applications and programunique specifications that are used for a single program or system with little or no potential for use with other programs or systems. Specifications are intended to provide a basis for obtain-

The Army policy's intent was to eliminate the prescriptive or "how to" nature of MilSpecs and standards cited in materiel contracts.

ing products or services that satisfy particular needs at an economical cost and to invite maximum reasonable competition. To this end, specifications may not be unduly restrictive and should be written to encourage competition, consistent with obtaining the required performance and quality, while seeking

overall economy. By definition, a specification sets limits, thereby providing a basis for eliminating items that are outside the boundaries drawn.





Program offices must continue to assess requirements and apply only those specifications and standards necessary to define essential needs and manage risk for equipment being procured, maintained or reset for combatant commanders and their Soldiers. Here, SPC John L. Jackson, Alpha Battery, 3rd Battalion, 83rd Field Artillery, 2nd Brigade CombatTeam, 1st Cavalry Division, sites the M109A6 Howitzer using a collimator during combat operations near Fallujah, Iraq. (U.S. Army photo by SFC Johancharles Van Boers, 55th Signal Co. (Combat Camera).)

As a supplement to *MIL-STD-961*, the Army has issued specific guidance for writing military performance specifications. Using the unique format in the guide, the writer can specify requirements for form, fit, function, interface, interoperability and environmental considerations.

MIL-STD-962, DoD Standard Practice, Defense Standards Format and Content, addresses the requirements for interface standards, standard practices, design criteria standards, test method standards and manufacturing process standards. Standards also include application guidance to help users know when and how to use a document. Such guidance might include:

- How to apply a document to different contract types and different program phases.
- How to make use of any flexibility allowed by the standard.
- Lessons learned.
- The extent of government review and approval.
- The relationship between the standard and other documents.

MIL-STD-967, DoD Standard Practice, Defense Handbooks Format and Content, covers the requirements for handbooks. Handbooks are guidance documents that are not mandatory and they cannot be cited as requirements in contracts. Handbooks offer an opportunity to preserve institutional memory and suggest solutions that have worked, without requiring that those solutions be used for new contracts.

### Resources

The Army Standardization Program Web site contains tools and links to aid materiel developers. The site also provides guidance on the preparation of standardization documents; DOD, AMC and Defense Standardization Program policy and guidance; specification writing aids; and answers to some frequently asked questions. The Web site can be accessed at http://www.amc.army.mil/amc/ rda/milspec/index.html.

The Acquisition Streamlining and Standardization Information System (ASSIST) is a database containing MilSpecs, standards and handbooks; federal specifications and standards; qualified products/manufacturers lists; international standardization agreements; commercial item descriptions; and a catalog of DOD-adopted NGS with information on how to obtain them. These resources are available to registered military, civilian agency and industry subscribers. ASSIST can be accessed at http://assist.daps.dla.mil/ online/start/.

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# Foreign Military Sales — Building Partnerships for the Future

Carl Brieske

ever in the history of warfare have Soldiers been as mobile, as well equipped and as lethal as those in today's U.S. Army. However, even the fastest microchips and the most sophisticated digital battle command systems cannot ignore the glaring need for Soldiers to have the right weapons at the right place at the right time. How can we ensure that our defense industry supplies the weapons and technologies America needs in the future? This overriding concern has been present in every administration from John F. Kennedy's to the present. The fact is, the American defense industry has significantly downsized since the Cold War's end. The issue now is how to preserve America's military industrial base while also converting excess capacity to civilian production.

This M1A2-SEP (System Enhancement Package) Abrams main battle tank gets put through the paces during recent testing by General Dynamics Land Systems (GDLS) technicians. The Saudi Arabian government has requested 58 tanks — the M1A1/2S (Saudi) version — complete with the "export armor package," through USASAC. (Photo courtesy of GDLS.)

The U.S. Army Security Assistance Command (USASAC) has served as an Army Materiel Command (AMC) major subordinate command since 1975. USASAC — responsible for the Foreign Military Sales (FMS) program - has supported our allies and other friendly nations with the "right weapons at the right time" while simultaneously finding opportunities where international military sales bring benefits back to the U.S. Army and the American defense industrial base. Former Secretary of Defense William Perry said in testimony to Congress, the "first and dominant test" of an international arms sale must be that it

supports national security interests. Providing U.S.manufactured military equipment to foreign customers continues to be a primary tool of U.S. foreign policy — it is not simply an economic question of promoting exports.

#### A Historical Perspective

The U.S. has been in the business of exporting military equipment for more than a century. During World War I, the U.S. exported roughly \$4 billion in munitions to its allies. In World War II, the Roosevelt Lend-Lease program provided approximately \$49 billion in aid to our allies. Most exports after World War II were grants from the Military Assistance Program. When U.S. de-

fense industry spending peaked in 1985, exports of U.S.-made defense products still totaled less than 10 percent of all U.S. defense industry sales. The large defense budget reductions of

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global war on terrorism (GWOT) have

It has been 16 years since President George Herbert Walker Bush informed Congress of his intent to sell M1A2 tanks to Saudi Arabia. This sale was in response to a request from the Saudi Arabian government for a total package sale that included training, support equipment, spare parts and ammunition. To provide this equipment to the Saudis quickly, there was a lot of hard work by industry, the Army, the Defense Security Cooperation Agency, then the Defense Security Assistance Agency, and the

Department of State to prepare the formal announcement to Congress. Once Congress approved the sale, a strong signal was sent to our foreign customers that they were dealing with a pragmatic government and industry. While completing this sale, the Army decided to terminate all U.S. tank procurements after the FY91 buy. It was only through this FMS program sale to Saudi Arabia and the follow-on co-production of M1A2 tanks that we were able to sustain our tank production line and not lose our position as the preeminent main battle tank producer in the world.

Following a 16-year partnership with the Saudi government, President George W. Bush notified Congress of a Saudi request for another possible sale and reconfiguration for 58 M1A1 Abrams tanks, which, together with the 315 M1A2 Abrams tanks already in Saudi Arabia's inventory, were to be upgraded to the M1A2S (Saudi) Abrams. USASAC provided a total package consisting of configuration kits, spares and repair parts, communications and support equipment, publications and technical data, personnel training and training equipment, contractor engineering and technical support services, and other related elements of logistics support. This is an example of how the United States recognizes nations that stand firmly with us in the GWOT and, as a result, both countries benefit.

#### Maintaining a Delicate Balance

The Army and industry have recognized the need to seek out economy-of-scale



The AH-64D Apache helicopter is now in co-production in Japan under an FMS agreement between the U.S. Army and the Japanese Self Defense Force. The first aircraft rolled off the assembly line in May 2006. (Photo courtesy of USASAC.)



Djibouti Armed Forces personnel inspect one of five newly arrived 2-litter M1035A2 Humvee ambulances purchased under FMS by their government for military use in March 2006. (Photo courtesy of USASAC.)

advantages by coupling international hardware orders with domestic requirements. This makes the combined volume more affordable to both parties and, in some cases, the production line remains open sustained by FMS orders. FMS has bridged the production gap in sales for Apache attack helicopters; Tube-launched, Optically-tracked, Wire-guided anti-tank missiles; and Patriot Advanced Capability-3 air defense missiles. Maintaining a robust industrial base through FMS has maintained our legacy systems while allowing sufficient time for Army leaders to develop the technological capability necessary to field the interoperable, complementary and transformational systems required for 21st-century warfighting.

The best measure of whether the Army is managing its military industrial base appropriately is whether its force structure receives the latest in technology. It was President Ronald Reagan's emphasis on armed forces' technology modernization that led directly to the quick victory and low casualities in Operation Desert Storm (ODS). However, the release of sensitive military or dual-use technologies has always been a point of contention between the government and defense

exporters who need to show their best products to be competitive in an evershrinking global market. Notwithstanding, a critical priority will always be protecting our Soldiers and U.S. interests at home and abroad by maintaining our technological advantage over potential adversaries. At the same time, U.S. industry is trying to counter foreign competition that often puts forward its most advanced technology when marketing a new system. All this results in a delicate balancing act as competing agendas force the

entire security cooperation community to reconcile U.S. defense requirements with U.S. defense industry interests.

As the GWOT has unfolded, USASAC has actively managed developing complex FMS cases with coalition partners and engaging potential customers at international trade shows. USASAC's contributions are often in the form of active support to, and participation in, industry marketing efforts. A less visible but equally important tool is the industrial outreach at USASAC. Following the end of the Cold War, many new allies and partnership nations emerged requiring defense equipment from the United States. GWOT and other international security concerns have placed added emphasis on getting equipment to the right place at the right time. USASAC has worked to enhance customer focus while transforming Letter of Offer and Acceptance processing to be more reactive to customer requirements, while also working closely with AMC's Life Cycle Management Commands and industry to get the items on contract. The Army's support for the FMS customer can also be found


FMS helps DOD bridge the production gap in sales for tanks, personnel carriers, helicopters, missiles and equipment. Here, an AH-64 Apache helicopter, which has been sold to numerous allies and is currently being co-produced in Japan, maneuvers over Camp Taji, Iraq, last July. (U.S. Air Force photo by TSGT Russell E. Cooley IV, 1st Combat Camera Squadron.)



at U.S. Embassies where dedicated Security Assistance Officers (SAOs) assist the U.S. defense industry with FMS, either through FMS or Direct Commercial Sales.

During 2006, USASAC has also established liaison officers (LNOs) to assist combatant commanders (COCOM) and their staffs. The benefits of having an individual forward deployed work-

ing with the COCOM staffs to assist in the planning and execution of FMS cases has been immeasurable. USASAC LNOs have been assigned to the U.S. European Command, U.S. Southern Command and U.S. Pacific Command, and are collocated with the Multi-National Security Transition Command-Iraq and the Combined Security Transition Command-Afghanistan. USASAC LNOs are actively assisting the COCOM staffs

As Americans witness the rebuilding of Iraq and Afghanistan, very few realize assist the efforts that USASAC and the Army's Security Cooperation programs having have played in enhancing our allies' ability to assist us in the GWOT. Former Secretary of Defense

It is our objective to use these LNOs at the COCOM HQs to assist our allies and friendly nations to develop capable, selfsufficient militaries able to sustain themselves and assist in the GWOT.

and their SAOs in the formulation and preparation of FMS requests. According to USASAC Deputy Commander Richard Alpaugh, "It is our objective to use these LNOs at the COCOM headquarters [HQs] to assist our allies and friendly nations to develop capable, mer Secretary of Defense Frank Carlucci told Congress that "security assistance promotes the interoperability of U.S. and allied forces, thereby increasing their effectiveness. Security assistance also forms a vital part of the cooperative arrangements through which our forces gain access to critical military facilities throughout the world." Carlucci's words ring true today as America's foreign policy objectives have remained fairly constant

self-sufficient militaries able to sustain

themselves and assist in the GWOT."

**Supports Foreign Policy** 

**Security Assistance** 

over time. Security assistance and arms sales will continue to be critical components of U.S. foreign policy.

The value of arms sales is not necessarily in the capabilities provided by the equipment itself. In the case of the

M1A2 Abrams tank sale to Saudi Arabia, both countries benefited from the longterm bilateral relationship. The Saudi Arabian army acquired the world's premier battle tank to enhance regional security, while the U.S. government continues to build on a strong military-tomilitary relationship in this important economic and potentially unstable geographic region. When it came time to ramp up for operations in the Middle East during ODS, and now again for Operation Iraqi Freedom, we did so with unprecedented efficiency and inspired confidence. The effectiveness of our response was, to a large extent, a direct result of years of patient work building political relations via military assistance and sales in Saudi Arabia, Kuwait, Bahrain, the United Arab Emirates and Egypt. These relationships have clearly yielded the intended results.

USASAC's goal today is to find opportunities where international military sales bring the greatest benefits to the Army and FMS customers, balancing Army goals in terms of their political, military and economic contributions to U.S. national security policy. The GWOT will continue to drive future USASAC efforts in supporting the defense industry and FMS customers.

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## Lean Goes to War

Kim C. Russell

n Sept. 11, 2001, the world as we once knew it changed forever. Little did Letterkenny Army Depot (LEAD), PA, realize it was about to undergo a major transformation in the way it had been doing business. "Lean Goes to War" exemplifies the art of the possible when both management and workers' philosophies are focused on making changes in business models. The key to making new processes work is by having the workforce, including union leadership, believe in it. Once workers "buy in" to the Lean Six Sigma process championed by Toyota, organizations can truly eliminate waste, redundant or obsolete functions and work toward achieving greater efficiencies and sound manufacturing processes.

The Avenger system features a gyro-stabilized air defense turret mounted on a modified heavy Humvee. It is a highly mobile and transportable surface-to-air missile/gun weapon system. The turret has two Stinger missile launcher pods, each capable of firing up to four fire-and-forget infrared/ultraviolet guided missiles in rapid succession. Avenger is operated by a 2-man crew for defense against helicopters and fixed-wing aircraft at low altitude, day or night, in clear or adverse weather. The Avenger first entered military service in 1989, and saw considerable service in 2003 during the march to Baghdad, Iraq, at the outset of *Operation Iraqi Freedom*. The air defense systems are in desperate need of reset due to prolonged years of usage in the tough desert environment. LEAD has undertaken the refurbishment process and has already saved the Army an estimated \$1 million in reset costs. (U.S. Army photo.)



Toyota developed the Toyota Production System that applied Lean manufacturing concepts and skyrocketed Toyota's status and automobile sales as the world's leading automobile manufacturer. Lean, ultimately, is a philosophy for deciding what products and services to provide and how to provide them in a rapid, efficient manner. Letterkenny has since successfully adopted the same Lean techniques to provide greater support to an Army that's transforming while at war.

With the onset of *Operations Enduring* and *Iraqi Freedom* (*OIF*) in Southwest Asia, organic depots were called upon to answer our warfighter's immediate needs. Described in some circles as being as agile as a 3-legged turtle, the depots had to transform to meet the increasing demands of an Army prosecuting a global war on terrorism (GWOT). The management's challenge was simple — how do you transform a 3-legged turtle into a thoroughbred racehorse overnight?

LEAD started its journey in 2002 when then Depot Commander COL William Guinn introduced the Lean concept. The original intent was to improve depot maintenance processes to attract new customers. As the depot transformed into "a capabilitiesbased depot," it was imperative the depot provide its customers the "biggest bang for their buck."

#### **LEAD Prepares for War**

In early FY03, LEAD experienced its first opportunity to apply Lean concepts in support of the GWOT. We all remember the television news images of U.S. special operations Soldiers riding horses and camels into war in Afghanistan. The U.S. Army Special Operations Command (USASOC) had designed a specially modified Humvee known as the Ground Mobility Vehicle (GMV) to provide a fighting platform for the anticipated invasion of Iraq. As the inevitability of war crept nearer, USASOC turned to a trusted friend to accelerate GMV production.

LEAD had established a special relationship with USASOC in 1998 with the production of GMV kits for the specially modified Humvees. When the Special Forces advisors made their urgent request known to LEAD, the depot decided to employ its newly formed Lean team to make improvements in the GMV process. The first task was to transform the depot's existing GMV



maintenance and rebuild production line. The initial goal was to modify new Humvees into GMVs with a 10week turnaround. Before the project could be completed, urgent requirements quickly changed turnaround time to just 3 weeks.

As USASOC's requirements changed, LEAD successfully ramped up production to 24 vehicles per week, and turnaround time from a vehicle coming in the door to that same vehicle going back out the door was reduced from 10 weeks to 3 weeks to just 8.8 days. In addition to providing warfighters with vehicles more quickly, LEAD also remanufactured the GMVs more efficiently, returning a \$990,000 savings to the customer. Through successful implementation of Lean principles, LEAD reduced its production floor plan by 50 percent as well. When LTG Philip Kensinger, then USASOC Commanding General

(CG), was presented with a ceremonial check, he requested that LEAD produce more vehicles at no cost to his command. LEAD produced 18 more GMVs with the savings generated, thereby providing additional fighting capability to USASOC that was previously unfunded.

This early success indicated that a change in management philosophy was also paramount. The depot needed a Strategic Business Plan and a business office to facilitate Lean. That task went to Mark Sheffield who was leading the depot's quality initiatives at the time. Sheffield, who is now the Chief of Staff, explained, "We built an 8-person team drawn from throughout the installation. We looked at the range of issues, problems and opportunities, from personnel and production to financial and cultural. We had to know if we had the right number of people with the right skills, how to

improve production and work flow, and if we were accurately capturing costs. We focused on our customer the Soldier — and how we could better support him or her in the field. We wanted to use Lean to develop a flat, team-based structure with a high degree of work autonomy." He continued, "A Lean organization breaks down barriers and develops highly trained, motivated employees who investigate problems and find solutions as part of their job, and that's what we wanted to become."

#### **Achieving Results**

The original strategy established in October 2002 was to initiate Lean in the depot's core mission. The Patriot Recapitalization (recap) program is designed to bring the ground support system to near zero hours/miles. LEAD is responsible for the recap of one battalion per year. In FY03, LEAD transformed its Patriot Launcher Rebuild

Arldean Benson, a LEAD mechanic, assembles an armored door. (U.S. Army photo courtesy of LEAD.)

Program into a Lean operation. After a value stream analysis was completed, LEAD executed seven Rapid Improvement Events.

Once again, LEAD was able to generate a significant savings for its customer. The depot presented a ceremonial check of \$1.2 million to COL Tommy Newberry, Project Manager, Patriot Lower Tier Project Office (LTPO), recognizing these savings. When presented with the check, Newberry remarked, "Letterkenny is the first depot to achieve these accomplishments, and they are to be commended for sharing these savings with us." Ultimately, the warfighter benefited from the changes implemented at LEAD. Newberry asked the depot to

overhaul four additional Patriot launchers that had not been funded in his program. The process resulted in the following:

- Reduced 23,334 direct labor hours per year.
- Generated \$11.9 million in U.S. Army Aviation and Missile Command (AMCOM) LTPO savings.
- Redeployed 24 people to other functions.
- Eliminated 1,155 miles per year in travel.
- Freed 1.2 acres of floor space for other projects/ programs.

### **Breaking the** Paradigm

LEAD was truly in a transformation mode and wanted to find new areas to employ Lean concepts. By this time, OIF was in

full swing and Baghdad, Iraq, had just fallen. The Scud missile and air threat

In addition to providing warfighters with vehicles more quickly, LEAD also remanufactured the GMVs more efficiently, returning a \$990,000 savings to the customer. Through successful

- implementation of
- Lean principles, LEAD reduced its production floor plan by 50 percent as well.

porting. LEAD completed these missions ahead of schedule and saved the customer a

whopping \$1.5 million in the process. attention was turned to resetting both The final product was a revitalized Patriot air defense system that Soldiers Patriot and Avenger sys-

respective missions.

could trust to accomplish their

Patriot and Avenger benefited from the application of Lean efforts at LEAD. The Avenger had seen considerable action during the march to Baghdad. The air defense systems were sandblasted by windstorms, and many had suffered battle and transportation damage. Lean events were conducted and substantial changes were made in the assembly and disassembly processes. The Lean concept eliminated unnecessary steps in the refurbishment process and created a "parts supermarket" close to the work cells. The Avenger reset program saved the Army another \$1 million.

LEAD implementation of Lean returned Patriot and Avenger missile systems back to the field faster than expected and provided a total of \$2.5 million to the customer to be used to support other unfunded requirements associated with the GWOT.



tems returning from the

war. LEAD decided to

incorporate Lean con-

cepts in the initial plan-

missions. This meant a

shift in traditional think-

ing, and required a vir-

tual view of what a reset

line would look like and

the engagement of Lean

prior to the induction of

member was dispatched

to Fort Bliss, TX, to es-

The results were astound-

successfully reset three Pa-

weeks ahead of schedule.

The turnaround time was

critical to the redeploy-

ment schedule of the air

defenders LEAD was sup-

ing. Team Letterkenny

triot battalions eight

tablish the reset line.

assets. A Lean team

ning sessions for the reset



#### Floor Space Generated

Lean cuts waste, consolidates operations and, in turn, generates free floor space. The additional floor space was critical as the depot worked quickly to

bring in "new missions" to support combatant commander requirements. A phenomenal 64,000 square feet of floor space was created after Lean improved the Patriot recap process. The 64,000 square feet of floor space then became available for the new workload. The money generated from this new workload amounted to \$166 million. Several mission areas that directly supported Soldiers on the front lines

were: chemical-biological, Army Humvee recap, generator rebuilds, deployable tent city or Force Provider and multiple add-on-armor kit programs.

#### **Armor Programs**

Letterkenny quickly put the additional floor space to good use. The first

involved an urgent call for armor boxes that were used in the battle for Fallujah, Iraq. The armor plating for these trucks arrived on a Friday night, was cut over the weekend and was de-

livered for ballistic testing to Aberdeen Proving A Lean Ground, MD, in less organization than 72 hours. LEAD breaks down implemented a true Lean "pull system" to produce barriers and 36 of these boxes in less develops highly than 14 days. trained, motivated employees who investigate problems and find

solutions as part

of their job.

The next call was for Humvee armor door kits. LEAD was initially asked to produce 410 kits. Lean concepts were incorporated into the production system. Weekly

output increased by 200 percent. The one-piece flow allowed changes in the configurations to be immediately implemented in the production run. LEAD was then asked to increase its production to 860 Humvee armor door kits. The last of the armor door kits was produced a full two weeks ahead of schedule.

#### **Armor Soldier Protection**

Other up-armor projects followed. The M969 5,000-gallon tanker provided a new challenge with the variety of design changes. However, LEAD produced 150 of these kits, and plans are underway to produce more of this armor. Each kit contained 82 pieces and weighed more than 2,400 pounds. The letter of intent to build the kits was received on Nov. 19, 2004, and the last kit was completed Jan. 21, 2005. The M969 kits were completed 4 weeks ahead of schedule and \$1 million under budget. Lean manufacturing rapidly became an integral part of the depot's planning efforts.

As the depot transformed into "a capabilities-based depot," the word spread that LEAD gives its customer the "biggest bang for their buck." Soon the depot was asked to produce M939 armor cabs for the 5-ton truck. LEAD began with a modest production rate of five kits per week in January 2005. The kit included 382 pieces and weighed 5,870 pounds. By using Lean processes, production was steadily increased to 25 kits per week while using the same amount of floor space. Based upon the accelerated production rate, LEAD was asked to produce 70 percent more kits above the original program. The 400th cab



MG Pillsbury, AMCOM CG, addres oyees after the depot won t for Excellence in Manufa oto courtesy of LEAD.)

was completed in early July 2005.

A significant development from the Lean armor processes was the use of a "pull system." Workers did not walk back and forth for parts or tools. Everything they needed for the process was located beside their work areas in carefully marked bins. Using Lean tools enabled the depot to provide quality products to our warfighters ahead of schedule and under cost.

#### Shingo Public Sector Prize

In October 2005, Letterkenny was recognized as the Army's first-ever winner of the Shingo Prize for Excellence in Manufacturing. The prize was established in 1988 to

promote excellence in manufacturing, but was not made available to the public sector until 2005. The Shingo

Team Letterkenny successfully reset three Patriot battalions eight weeks ahead of schedule. The turnaround time was critical to the redeployment schedule of the air defenders LEAD was supporting. LEAD completed these missions ahead of schedule and saved the customer a whopping \$1.5 million in the process.

Public Sector Prize was established to "recognize entities in the United States that have demonstrated outstanding achievements in manufacturing/MRO

[Maintenance, Repair and Operations] and the supporting business processes leading to outstanding quality, cost, delivery and business/financial results." The 3-legged turtle had won the coveted prize referred to by *Business Week* as "the Nobel prize of manufacturing."

While attending Shingo Prize celebration ceremonies at LEAD,

AMCOM CG MG James H. Pillsbury spoke to the men and women who work at LEAD, "Let me tell you



Army photo courtesy of LEAD.)

something, this is a big deal! This is the first time a public sector Army depot has won a Shingo Award. You have taken the Patriot, the most complicated war system the Army has, and fixed it." Pillsbury acknowledged the use of Lean in providing support to the warfighters. "Letterkenny has been able to put equipment in Soldiers' hands at the right time, in the right amount and in the right quality. ... You do it better. You do it better every day. I couldn't be prouder to be part of the team."

### **The Journey Continues**

Today, Toyota continues to use the Toyota Production System in its quest to maintain its worldwide reputation as the leading manufacturer of quality automobiles. LEAD also continues to use Lean to provide greater value and responsiveness to the Nation's warfighters. LEAD has continued to return savings to its customers, increase throughput and respond to customer needs faster, better and cheaper. We are a Nation at war and our warfighters deserve the very best.

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# Interview With Greg Kee, AMC Deputy Chief of Staff, Strategy and Concepts, G-5

119B

Michael I. Roddin and Cynthia D. Hermes

n July 28, 2006, Greg Kee, Army Materiel Command's (AMC's) Deputy Chief of Staff for Strategy and Concepts, G-5, graciously met with *Army AL&T* Magazine editorial staff to discuss the new U.S. Army Sustainment Command (ASC).

Army vehicles are rail-loaded for deployment to a port of embarkation. The U.S. Army Transportation Command (TRANSCOM) and the Surface Deployment and Distribution Command (SDDC), ASC's partners, help with all weapons platforms and equipment deployments. (Photo courtesy of AMC.)

AL&T: On Oct. 1, 2006, AMC's Army Field Support Command (AFSC) at Rock Island Arsenal, IL, will be newly designated as ASC. How will this new command help streamline end-to-end logistics and maintenance to support the Army's modular force?

Kee: To reduce the logistics footprint, the Army compressed echelons of support by eliminating theater, corps and division support commands and replaced those organizations with a more streamlined structure consisting of sustainment brigades, four regionally focused and globally employable Theater Sustainment Commands [TSCs] and ASC. Originally, the Army's modular logistics force design concept did not include formation of the ASC, but with impending Corps Support Command and Division Support



Kee discusses the importance of performancebased logistics and contingency contracting capabilities to the modular force. ASC will be the acquisition and logistics community's single face to the warfighter and will tie acquisition, logistics and technology (AL&T) together on the battlefield. (Photo courtesy of AMC Public Affairs.)

Command deactivations and no national-level TSC to provide logistics connectivity, units were facing logistics shortfalls, particularly in the area of materiel management, unless the Army activated a command to replicate some of the TSCs' functions.

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Converting AFSC into the "CONUS TSC" was a natural fit since the command was already executing a number of core competencies the Army sought in a CONUS-based command including logistics field assistance, equipment set maintenance/management and logistics integration with AMC's Life Cycle Management Commands [LCMCs].



through their Logistics Assistance Representatives [LARs], focused their support at the division, corps and Army levels. Previously, our primary focus was on logistics readiness. As the Army transforms to a modular and expeditionary force, AMC will support end-toend AL&T across the board. Our challenge has been to restructure the design all the way down to brigade level to support the brigade-centric Army with the

Elements [LSEs]

Figure 1. The New ASC Support Structure

Additional military personnel were given to the command to perform new missions such as materiel management, reset synchronization and contingency contracting operations [CCOs]. Combining these new missions with traditional AFSC roles will help streamline end-to-end logistics and maintenance support to the Army's modular force. So it's more than just a name change — it's a cultural change that will better enable AMC to support the field Army worldwide.

The modular force is transforming the Army and the way we do business. As you look at the overall structure and how we're modularizing, we're streamlining logistics, reducing that end tail and, as a result, we're eliminating some key pieces of the organization. At the theater level, we're eliminating support commands at the corps and division levels. At the same time, we're standing up these area TSCs to better support operations worldwide. ASC, as the CONUS-based TSC, is going to help AMC redefine how we support the warfighter with end-to-end logistics.

ASC is our single face to the warfighter and helps to tie together AL&T on the battlefield. And we're doing it through our Army Field Support Brigades [AFSBs] that we're putting in place on the ground that report to the ASC and act as the interface point. We're rebuilding the contingency contracting structure (*Editor's Note:* see related article on Page 54) that's going to tie into ASC and really focus on contingency contracting requirements and provide renewed synergy across the board to tie all of the AL&T elements together.

In the past, the Army used to be aligned with corps, divisions and brigades. AMC supported those formations with an AMC forward. The Logistics Assistance Offices [LAOs] and Logistics Support

Brigade Logistics Support Team [BLST]. Then, we'll tier our way up through the LSE at the division and corps level to the AFSBs at theater level. ASC will plan, prepare and rapidly deploy subordinate units, and execute logistics from the national sustainment base, while also bolstering contingency contracting support along that same tiered approach. So that's how AMC has tied all these elements together in supporting the field Army, and that's how ASC will support endto-end logistics and all AL&T battlefield functions. By providing a single face to the warfighter on the battlefield, we will be able to provide the necessary reach-back capability as well.

*AL&T:* Those contingency contracting assets you mentioned, will they be embedded in the actual modular force structure?

Kee: Contingency contracting will have a modular force design, and so



A Communications-Electronics LCMC LAR troubleshoots a Firefinder radar. (Photo by Chuck Fick, ASC.)

yes, they will be part of the Army modular force structure. However, they won't be embedded with the units as they were before modularization. Before, you had 51 Charlies [Contracting and Industrial Management Officers] that were embedded in each of the units as they deployed to provide the critical contracting capabilities and contracting support. Under the new concept, we've formed contingency contracting teams [CCTs], 4-man teams made up of 2 officers and 2 noncommissioned officers to provide the necessary contracting capability. We now have teams that can provide much-needed capabilities and are METT-TC [Mission, Enemy, Terrain and weather, Time, Troops and Civil considerations] savvy in terms of what the mission requires. They can conduct thorough mission analyses and determine how many contracting teams are needed to meet mission requirements. We will now provide a functional capability rather than individual Soldiers on an ad hoc basis.

AL&T: How will ASC improve logistical and maintenance support to the Army's combatant commanders (CO-COMs) and their Soldiers worldwide?

Kee: ASC has seven organic AFSBs that will provide the full gamut of AMC/ASC logistics capabilities to our warfighters. ASC will provide an "AMC single face to the field" for all AL&T integration support. An AFSB will support the corps in CONUS and is regionally aligned OCONUS to support the corps or the Army Service Component Commander. The AFSB is normally OPCON [operational control] to the TSC in a theater of operations. The AFSB will leverage the enormous power of AMC's LCMCs by providing command and control over field maintenance and sustainment operations conducted by AMC's LSEs, Army Field Support Battalions [AFSBns] and BLSTs as illustrated in Figure 1 on Page 44. These units perform traditional AMC field logistics missions and are aligned with operational Army units as follows:

 LSEs — Formerly known as the LAO, the LSE supports the division and conducts the Logistics Assistance Program by providing units LARs from AMC's LCMCs. LSEs can rapidly deploy and conduct split-based operations.

- AFSBns Are established to provide a consolidated AMC/ASC presence for specialized missions such as installation support at Fort Carson, CO; and Fort Bliss, TX; Army Pre-positioned Stocks [APS] management, and in-theater property accountability. Some of these AFSBns were formerly known as Combat Equipment Battalions prior to Army modularity.
- BLST Supports the maneuver and aviation brigade combat team with LAR support and has four different configurations for aviation, heavy, infantry and Stryker.

The AFSB commander also oversees acquisition and technology support such as the Field Assistance Science and Technology program conducted by the U.S. Army Research, Development and Engineering Command, and various fielding programs executed by the program executive office/program management [PEO/PM] community. The oversight of CCOs was recently added to the AFSB commander's purview and in most deployed scenarios, the AFSB will exercise command and control over attached CCO assets ranging from CCTs to battalions. In an effort to simplify and streamline the environment that existed in the past by having multiple contracting activities in theater, the Army's new contingency contracting



An LAR with the Aviation and Missile LCMC provides technical support while repairing an Apache Longbow helicopter engine in Balad, Iraq. (Photo by Richard A. Mattox, PEO EIS.)



structure and single-provider AFSB concept will help synchronize contracting operations in theater. Over the next 2 years, the Army plans to activate 30 CCTs, 7 senior CCTs and 3 CC battalions. These units will provide an improved and more efficient contingency contracting capability to the expeditionary Army. When deployed, the AFSB will also provide contractor accountability through a Contractor Coordination Cell. The AFSB will also be organized to coordinate reach-back operations with Joint and national partners that will include the Defense Logistics Agency [DLA], among others, when required.

Army logisticians have long understood the tremendous benefits of having one organization that links the national sustainment base to the operating force. ASC, with its forward deployed AFSBs, will provide this single interface to the warfighter who will benefit greatly from having a more responsive logistics organization that provides one-stop shopping for all AL&T needs.

To recap, we have seven AFSBs worldwide providing that support to our CO-COMs today. Below them, the AFSBs provide additional support on a specific site basis. We tie in the LSEs and the LAOs at the corps and division levels to pull logistics and main-

tenance support together and better leverage those capabilities. At brigade level, the BLSTs ensure that we have the necessary top-tobottom support.

AL&T: This logistical support structure is being tested now on the ground in Iraq and Afghanistan, is that correct?

Kee: Absolutely. The seven AFSBs have been stood up as provisional units. The Modified Table of Organization and Equipment [MTOE] has

been approved, so that's a new capability in that they're not Table of Distribution Allowances [TDA] organizations. The AFSBs are actually deployable organizations. The first two AFSBs will be activated on Oct. 16, 2006. The two AFSBs in Iraq and Southwest Asia will be stood up as the first two MTOE organizations that will convert from TDA status to an MTOE organization. And over the next three years, we will stand up all seven and convert them to MTOE organizations.

AL&T: How will ASC forge a strong industrial link between the Army depots and arsenals and the operational and expeditionary Army to provide greater logistical integration, maintenance and combat field services?

Kee: As AMC's logistics integrator for reset operations, ASC will work closely with AMC's LCMCs to expand depot relationships with installation Directorates of Logistics [DOLs], U.S. Army Reserve [USAR] and National Guard Bureau [NGB] maintenance facilities. Building upon existing LCMC reset processes and methods, the LCMCs will focus on fleet planning at the Brigade Combat Team level and blend the capabilities of the original equipment manufacturers [OEMs], depots/arsenals, installation DOLs,

To fully exploit the industrial base's potential, we must continue leveraging partnerships with the depots, arsenals, and PEOs and PMs. Field Logistics Readiness Centers and NGB/USAR maintenance capabilities to provide warfighters a totally synchronized Army Force Generation [AR-FORGEN] sustainment solution. ASC, as a part of the ARFORGEN process, will leverage and integrate the AMC LCMCs' capabilities with those of the national sustainment base to ensure the required materiel

readiness posture as units enter and progress through each phase of the ARFORGEN process. The AFSB will be the warfighters' first entry point in the field, while the LCMC will continue to conduct fleet maintenance planning and work loading at the depots.



The ARFORGEN Model is really key to how the Army is going to provide that sustainment and support, and forms the linkage back to the industrial base. AMC support to the ARFORGEN process is called LOGFORGEN, or Log Force Generation. ASC will provide linkage back to the industrial base as well, helping synchronize the entire AR-FORGEN process. If you refer to Figure 2, the red blocks represent each phase of the ARFORGEN process. There are three major phases as you move through the process - reset training, ready phase and available phase. Depicted in the yellow boxes are the individual elements that need to be addressed as you work your way through the process. Now a clear picture emerges of how the linkage forms back to the industrial base in terms of what you need to leverage. The inner circles are really where we start using and leveraging all the assets that are available to us to support the entire logistical process.

Each organization — the industrial base, depots and arsenals — plays a critical role by tying back into OEMs and leveraging the full capabilities of the DOLs. AMC recently gained control of the field logistics readiness centers, which used to be the old U.S. Army Forces Command [FORSCOM] Contract Maintenance Facilities [FCMFs]. FCMFs will help us provide yet another capability that we can leverage with the industrial base to provide logistics integration of time-critical equipment maintenance and support.

We're trying to balance all our diverse resources and leverage the capabilities of each organization to its fullest extent, thereby providing the most costeffective AL&T solutions to the Army from a strategic integration, sustainment and support perspective. To fully exploit the industrial base's potential, we must continue leveraging partnerships with the depots, arsenals, and PEOs and PMs. We're trying to fully leverage performance-based logistics [PBL] and trying to work within the community to ensure that we again maximize our partnerships with the industrial base. Just because a depot may be government owned or operated, doesn't mean industry can't partner with us to provide the most cost-effective solutions and advance the latest technologies. We're working with the PEO/PM communities and the LCMCs to fully leverage the logistical capacity and the capabilities that are there, and build strong partnerships for the future.

AL&T: You mentioned the role LCMCs will play in providing cuttingedge PBL. In a recent Army AL&T Magazine interview, GEN Benjamin S. Griffin, AMC Commanding General, mentioned that over the next few years several more LCMCs are going to be cycled in. Can you discuss that for our readers?



Two contractor mechanics repair the turret on a Humvee at a refurbishment site near Camp Arifjan, Kuwait. (Photo courtesy of AMC.)

Kee: Yes, GEN Griffin and Secretary Claude M. Bolton Jr. [Army Acquisition Executive] both talked about two that they're exploring for the future the Chemical Materials Agency and the Joint Munitions and Lethality LCMC. So we're exploring the feasibility of establishing two new LCMCs over the course of the next fiscal year.

AL&T: And then these new LCMCs will be brought into this LOGFORGEN system that AMC is currently building?

Kee: Yes, the key point to the life-cycle management process is taking a holistic look to better synchronize and integrate AL&T across the Army. This, ultimately, will help AMC and the AL&T community support the Army's ARFORGEN process. Again, the key point is leveraging our overall capabilities and capacity, to better synchronize AL&T across the board.

AL&T: In addition to AMC's already expanded mission support requirements for the APS and the Logistics Civil Augmentation Program (LOGCAP), how will ASC manage reset synchronization, the Army's distribution and materiel management functions and integration of logistics support with DOD's Joint and strategic partners?

Kee: ASC, in coordination with its strategic partners and its linkages to

the LCMCs, will provide continuous support, equipment and materiel readiness to CONUSbased forces. The ASC will synchronize the national sustainment base operations to support operational and

tactical logistics by leveraging and integrating AMC's full capabilities to quickly and efficiently generate and project combat power. ASC Headquarters [HQ] is being restructured to mirror the TSC and, as such, will have a Distribution Management Center [DMC] that will eventually replicate key functions previously accomplished by all Corps and Division Materiel Management Centers. Managing DMC is a critical new mission and a major cultural shift for the transformed command, and most of the additional military personnel will be assigned against materiel management positions. Logistics managers assigned to DMC will establish strong working relationships with our Joint and strategic

partners to collectively meet the priorities and requirements established by our COCOMs and their warfighters. By leveraging all of its capabilities, subordinate units, and partnering relationships with LCMCs and our strategic partners at TRANSCOM, SDDC and DLA, those organizations are all going to be critical in tying in and leveraging support for the reset process overall. And managing our APS, LOGCAP contingency contracting plays a key piece in the support that's provided there. ASC's challenge is to synergize the entire process and move it rapidly forward to the future.

Another critical piece is the APS and predeployment training equipment that we're currently using and supporting FORSCOM with in providing force projection capability. ASC will manage all APS while providing the support to leverage our structure from the brigade level all the way up to the AFSB level, building on those partnerships with LCMCs and other external agencies to push that support forward to where it is needed most. By leveraging our partnership with SDDC and TRANSCOM to work the transportation elements, we can expedite the



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process. By pushing materiel and equipment forward, ASC can better support the retrograde process in bringing equipment out of theater for repair/reset. As overworked and battledamaged weapons systems and equipment make their way back to the depots and repair facilities, ASC is working with DLA and SDDC to retrograde it all back into the industrial base so we can reset the equipment. Synchronizing and leveraging our combined and collective capabilities and capacities will be ASC's key mission requirement.

AL&T: Looking at the additional missions that ASC is going to undertake under this new modular structure in supporting deployed units worldwide, is AMC as a whole gaining additional manpower and fiscal resources to undertake this massive mission?

Kee: Yes, at the ASC HQ level, they will be increasing their staff from 250 military to support the mission, and those folks are flowing into Rock Island as we speak. So the Army is working hard to staff up and source us to provide the necessary mission support. The contingency contracting mission will be phased in over the next three years and our military structure — the 51 Charlies that are flowing into AMC to stand up our units will help us build CCTs, CC Battalions and Contracting Support Brigades. This will help us align our structure to better



A ship full of Heavy Expanded Mobility Tactical Trucks, Humvees and other trucks headed for Southwest Asia plows through choppy seas. (Photo courtesy of AMC.)

provide responsive support to the modular force and an expeditionary Army.

*AL&T:* Are there any other unique aspects of ASC you'd like to share with our readers?

Kee: If I can drive home one point, it's this — ASC and AMC are transforming to support the modular Army for the future. We're doing it in partnership across the AL&T community and with our Joint strategic partners. The Army is heavily relying on ASC and AMC to put the necessary tools, resources and people in place to ensure that we're providing focused PBL forward support



to our Soldiers worldwide, regardless of where the mission takes them. This combined team effort is made possible by the PEOs, PMs and LCMCs, along with our industry partners. We can't do it without their support.

MICHAEL I. RODDIN is the U.S. Army Acquisition Support Center Strategic Communications Director and *Army AL&T* Magazine Editor-in-Chief. He has B.S. degrees in English and journalism from the University of Maine and an M.A. in marketing from the University of Southern California. Roddin is a former Army Advertising Program Manager and 3-time Army Keith L. Ware Journalism Award recipient. Last year, he was selected by the Secretary of the Army for Editor-of-the-Year honors.

CYNTHIA D. HERMES is Executive Editor of Army AL&T Magazine. In her 26 years of government service, she has worked as an editor for both the Army and Navy. Prior to coming to Army AL&T Magazine, Hermes edited U.S. Navy and Marine Corps aircraft procedural and tactical manuals at the Navy Tactical Support Activity (NTSA). She was also a program analyst at NTSA, managing file conversion of these manuals from print to CD-ROM and overseeing mass CD-ROM production and distribution.

## Expeditionary Logistics Center at Sierra Army Depot — The Army's One-Stop Shop for Joint Logistics

Megan Barr

he Base Realignment and Closure Committee has recommended that Sierra Army Depot (SIAD) transform into a "multifunctional installation that serves as a Joint Expeditionary Logistics Center." This recommendation has prompted SIAD to begin its evolution into what will be known as the Joint Expeditionary Logistics Center at Sierra (JELCS). The current depot, strategically located in Herlong, CA, approximately 50 miles north of Reno, NV, is supporting the implementation of its new force structure by establishing best practices that strengthen its ability to adhere to the new DOD requirements. SIAD's prime location and supportive infrastructure also make it an excellent setting for field training exercises (FTX). SIAD will continue to provide maintenance, assembly and containerization while expanding the size of its open and covered storage facilities.

U.S. Army Soldiers from Alpha Battery, 3rd Battalion, 320th Field Artillery Regiment, 101st Airborne Division, prepare to convoy off base to conduct a mission at Forward Operating Base Remagen, Iraq, April 16, 2006. (U.S. Army photo by SPC Teddy Wade, 55th Signal Co. (Combat Camera).)

#### Infrastructure

Sierra's infrastructure is ideal for performing multifunctional operations while providing expeditionary logistics support and rapid deployment to support and sustain our warfighters. Sierra performs five operations that are vital to the future of Joint expeditionary logistics: long-term storage, transportation management, reset, retail supply and Joint training. All of the operations encompass Life-Cycle Logistics Management and are essential to warfighter readiness and deployment.

#### **Joint Training**

From May 15 to 24, 2006, Sierra played the role of "host nation" (HN) for an FTX for the U.S. Air Force (USAF) named Lightning Fury. Lightning Fury was a 10-day exercise performed at the Amedee Army Airfield (AAF), Herlong, CA, designed to deploy the 570th Contingency Response Group (CRG) to open an airbase in an environment similar to Afghanistan. The exercise included personnel drops, aircraft touch-and-go landings, cargo drops, cargo loading and unloading, flying with the aid of night vision goggles and threat reaction training. "The 570th CRG has been in existence for a little over a year and this is really the first opportunity to go out and practice and train as a full CRG," remarked USAF COL Timothy Grosz, Commander, 615th Contingency Response Wing (CRW).

The 570th CRG resides at Travis Air Force Base (AFB), CA. The 570th, along with the 571st and 572nd CRGs, make up the 615th CRW. The 570th CRG has 113 people from the Global Mobility Squadron and the Global Mobility Readiness Squadron with specialties ranging from security forces to aerial port operations. "Because of the various job specialties, we have to practice," explained Grosz. "The CRG is confirming and finetuning their operations for deployment and they are writing their doctrine as they go. The CRG is still in its developmental stage and the lessons learned

during this exercise will help to write the Air Force instruction," Grosz continued.

The CRG is designed to have a response time anywhere in the world within 12 hours. They are the first ones to act during times of war and/or when humanitarian or disaster relief efforts are needed. The CRG's "open the airbase" activities include predeployment, seizure of a bare base, construction of a tent city and coordination between the CRG

and the HN. These activities establish the essential functions of an airbase, allowing the base to be transitioned over to follow-on forces.

At the beginning of Lightning Fury, an 8-man team flew in on a C-17 aircraft

to survey AAF. This survey team determined that AAF was suitable to use. "The Amedee Airfield is a useful training venue because the weather replicates Afghanistan's," said BG Brooks

ARMY AL&T

The CRG is designed to have a response time anywhere in the world within 12 hours. They are the first ones to act during times of war and/or when humanitarian or disaster relief efforts are needed.

ghanistan's," said BG Brooks Bash, Commander, 15th Expeditionary Mobility Task Force.

> "Sierra Army Depot was chosen because of the desert conditions, mountains and runway conditions," explained CMSG Sidney Brown, Superintendent, 570th CRG. "Once AAF was deemed worthy, the CRG seized the airfield and constructed a tent city. This was the first time that the CRG was able to assemble their shower tent and use it. The exercise demon-

strated how much hard work has to be put into building a provisional city."

Throughout Lightning Fury, the CRG performed many threat reaction simulations. Some simulations consisted of force-on-force exercises that used



Figure 1. Ongoing operations for JELCS



A C-130 lands at AAF, SIAD, after performing cargo airdrops during Exercise Lightning Fury. By year end, construction will begin on AAF's runway to expand its length to 10,000 feet to accommodate the larger C-5 aircraft. (U.S. Army photo by Vision Information Specialist Lynn Goddard.)

Multiple Integrated Laser Engagement Systems (MILES). MILES uses laser bullets that are detected when they hit laser transmitters. The laser transmitters are attached to individuals and weapon systems and assess the lethality of a "hit." Training with MILES increases the CRG's combat readiness. "The training we are doing here is highly important to the U.S. Air Force," stated Bash.

For the duration of Lightning Fury, Sierra played the role of a realistic HN by providing fuel, water, food, disposal and outer security. "We have had outstanding support from Sierra Army Depot, which is playing our host nation. Amedee Airfield is a perfect environment," Grosz remarked. "Lightning Fury was successful as a result of the strong support that was established between the 570th CRG and Sierra."

During next year's exercise, Sierra will move expeditionary supplies from its warehouses to awaiting aircraft to further integrate SIAD's workforce with the Joint Expeditionary Logistics (JEL) concept.

#### Reset

Reset is the reconditioning of equipment that has been returned from war and peacetime operations. The reset process starts with the receiving of equipment that is being returned from operational units. Once the equipment has been received, all of the material that is contained inside and out is unloaded. An inventory is taken of all material to assess what is needed. The equipment is then repaired, painted and assembled back into working condition ready to ship. The reset process is also continuously improving and becoming more efficient with the help of Lean Six Sigma (LSS),

allowing the equipment to be rapidly reintegrated back into operational units for our Soldiers.

### Transportation Management

Sierra's transportation infrastructure supports the JELC structure. Sierra has access to a major highway system and possesses 114 miles

of paved roadways, 59 miles of rail and 3 rail classification yards, and a 7,168 foot-airfield runway that is C-5 capable. Late in 2006, Sierra will break ground at AAF, extending the length to 10,000 feet and adding an Instrument Landing System that will provide all-weather capabilities. These additions will enhance the abilities to load and unload materials, field train and deploy rapidly.

### **Retail Supply**

Retail supply, also known as the reverse pipeline initiative or reverse logistics, is a relatively new function at Sierra. Excess materials from theater and humanitarian operations are sent to Sierra to be broken down and inspected to determine the supply class, condition code and remaining shelf life. Once the material status has been established, it is issued into the Standard Army Retail Supply System, available for Army units to use. Retail supply can potentially save the Army millions of dollars — savings that are passed along to military customers by making excess material available for depot repair, spare parts replacement and parts fulfillment that would otherwise be disposed.

### **Expeditionary Logistics**

Expeditionary logistics includes those functions that are associated with





depot operations and that aid workforce members in their ability to rapidly deploy support directly to the area of operations. This support often includes procurement, maintenance, repair, reset, rebuild, assembly, configuration management, care of supply in storage and containerization. With the help of LSS, SIAD is continuously implementing and improving depot processes while reducing the work-inprocess time.

Army Materiel Command (AMC) Commanding General (CG) GEN Benjamin S. Griffin offered a similar perspective in a recent interview with *Army AL&T* Magazine (see the January-March 2006 edition). "It gets into what we call 'logistical force generation.' When you want to reset the force and sustain the force over time, it becomes a combination of organic direct support and general support — what we have in the depots, what we're doing with contractors and what we're doing with original equipment manufacturers. It involves looking at what is the best combination thereof, trying to remove as much bureaucracy as we can, looking at the layering that we have and reducing, where we can, any kind of obstacles to make the entire acquisition and maintenance process faster, more efficient and more economical. By more efficient, I mean with respect to how quickly we can turn a piece of equipment around and fix it, ensuring that we're fixing it to the right standard and doing this as cost-effectively as we can. This is not unique to the Army. Our sister services are moving along the same path and we are learning from them."

#### Long-Term Storage

Major emphasis is being placed on long-term storage given that Sierra has

massive growth potential for covered warehouse space and open storage space with 37,937 developable acres. The Army has avoided large storage fees by storing materials at Sierra. To see the real-time cost-avoidance calculator, go to www.sierra.army.mil/ savings.html. There are 799 igloos with a temperature between 50 degrees and 70 degrees available for Joint agency storage needs. Sierra's high desert climate makes it a perfect location for long-term storage. The average temperature is 67 degrees with low humidity between 15 and 35 percent. The sun shines approximately 300 days per year and averages an annual precipitation of only five inches. Lassen County has enforced restrictive zoning around Sierra that eliminates private sector encroachment. By combining long-term storage with interagency training development, Sierra will become DOD's JELC of choice.

Sierra maintains itself as a Joint rapid deployment installation by continuing to perform retail supply, transportation management, reset, Joint training and long-term storage activities. The expansion of long-term storage, with the support of interagency missions like the Lightning Fury training exercise, will help transform SIAD and develop the necessary Joint capabilities to fulfill DOD's increasing force projection requirements.

MEGAN BARR is a Logistics Management Specialist Intern at SIAD. She holds a B.S. in supply chain management from the University of Nevada-Reno. She is working on her Level I life-cycle logistics certification. She is an active proponent in SIAD's ongoing transformation of the JELCS. Barr's contributions have been integral to the success of numerous ongoing equipment program and transformation process improvements.

## AMC Establishes a Deployable Civilian Contracting Cadre

Jeffrey P. Parsons

The global war on terrorism and our continued operations in Iraq and Afghanistan have clearly heightened the awareness of how important contracting is in support of our deployed troops and the stabilization and rebuilding efforts in both countries. For the last three years, we have deployed a record number of Soldiers and Army civilians with contracting expertise to support efforts such as the Logistics Civil Augmentation Program, the Army's major contingency contract; rebuilding host nation power plants, hospitals and schools; and the day-to-day contracted combat support/combat service support needed to support our deployed forces.

> AMC's recently launched DCCC program will establish a cadre of highly trained and experienced civilian CCOs capable of supporting complex contingency contracting missions. Here, CCOs helped contract for the necessary contractor support and materiel to uparmor these Heavy Equipment Transporters at a Level 2 armor shop near Camp Victory, Iraq. (U.S. Army photo by SPC Curt Cashour.)

At the same time, the Army has been transforming its force structure. Just recently, Vice Chief of Staff of the Army GEN Richard A. Cody approved a force design update that provides a new contingency contracting structure for the Army. This new structure will include contracting support brigades (CSBs), contingency contracting officer (CCO) battalions,

senior contingency contracting teams and 4-person contingency contracting teams. This entire structure will be assigned to the Army Materiel Command's (AMC's) Army Sustainment Command, Rock Island Arsenal, IL, and AMC, teamed with the Army Contracting Agency to train Army Soldiers to support contingency contracting missions. The CSB commander deploys military CCOs forward in accordance with the contract support plan, but as the area of responsibility matures and forces move to Joint contracting support, there may be a need for civilian augmentees to support the contingency contracting mission. These individual augmentees will be identified on a manning document and filled through



WIAS will equitably task all Army organizations for needed civilian CCOs to support ongoing combat and disaster relief operations worldwide. Here, Pakistani refugees are evacuated to safety following the earthquake that ravaged parts of their country last year. AMC provided logistics and contingency contracting support for this humanitarian relief effort. (U.S. Army photo by Andrew Lawson.)

the Worldwide Individual Augmentation System (WIAS). This system tasks all Army organizations for their fair share of needed civilians to support ongoing operations.

In the last 4 years, AMC has deployed approximately 25 man-years of civilian

contingency contracting support per year. The majority of the deployments were in support of Army taskers issued through the WIAS. While AMC was able to meet most of its AMC taskings with volunteers, there were instances where we deployed a few emergency essential (EE) contracting employees. However, an EE program evaluation conducted by AMC revealed some issues in filling and retaining personnel for EE slots, both OCONUS and CONUS.

### Pilot Program Implementation

Recognizing the increased reliance upon our civilian contracting workforce, LTG Joseph L. Yakovac Jr., Military Deputy (MILDEP) to the Assistant Secretary of the Army for Acquisition, Logistics and Technology and Director, Army Acquisition Corps (AAC), challenged the Army's contracting leaders to reexamine how we can better support warfighter needs. As a result, AMC recently launched a program to establish a cadre of highly trained and experienced civilian CCOs. On April 28, 2006, AMC Deputy Commanding General LTG William E. Mortensen approved an implementation plan for the Deployable Civilian Contracting Cadre (DCCC) pilot program. Program highlights include:



The U.S. Army Sustainment Command will oversee and manage the Army's new contingency contracting structure. As contract support plans are generated, uniformed and civilian CCOs will deploy to the area of operations to provide contracting support for everything from construction and force protection to food, housing and supplies. Here, Gary York, U.S. Army Corps of Engineers (USACE) Construction Representative, meets with an Iraqi engineer and subcontractor to discuss progress on the Khanzad electrical substation construction project contract, Erbil, Iraq. (USACE photo by Jim Gordon.)



maintain a ready

and willing

civilian

contracting

workforce to

support our

warfighters on the

battlefield,

wherever duty

calls.

- Recruit and maintain an AMC cadre of trained, warranted and deployable contracting personnel.
  AMC's goal is to
- Standardize deployment preparation, incentives, training, warranting, oversight and control.
- Reduce or eliminate the current disruption to major subordinate command operations caused by nonstandard, ad hoc deployment procedures.
- Allow personnel to volunteer to be deployable for a 3-year period, then return to a nondeployable status without having to change jobs (unlike the EE slots).

- Provide adequate incentives to attract and reward volunteers who might
  - otherwise seek outside employment if forced to deploy under EE. • Serve as a pilot program
    - Serve as a pilot program for revamping the entire EE workforce program.

Presently, the DCCC program is being introduced to the AMC contracting workforce via briefings, brochures and word of mouth. There has been positive feedback and high interest in the program. The program provides financial incentives

for the volunteers who join, it limits their commitment to a 3-year time period and it will afford the type of training and preparation needed to support deployments well in advance of actual deployment taskings.

Open season for signup will take place over the next few months. AMC expects to meet its initial goal of 25 members for the first year. An additional 50 members signing on during the following 2 years will complete the DCCC force of 75 members. Based on historical data, the 75-member DCCC will be able to meet AMC deployment requirements with an anticipated deployment rate of one deployment per member over a 3-year period.

As the program matures and proves its operational worth as a force multiplier, AMC's intent is to implement this type of incentive program across the entire EE workforce. AMC's goal is to maintain a ready and willing civilian contracting workforce to support our warfighters on the battlefield, wherever duty calls.

JEFFREY P. PARSONS is the Director of Contracting, Headquarters, AMC. The former Director of Contracting at the U.S. Air Force (USAF) Materiel Command, Parsons is a retired USAF colonel. He was appointed to the Senior Executive Service in December 2003. He holds master's degrees in administration with a concentration in procurement and contracting from George Washington University and in National Resource Strategy from the National Defense University. Parsons is an Industrial College of the Armed Forces and Defense Systems Management College graduate. He holds the Acquisition Professional Development Program's highest certifications in contracting and program management. He is also a Certified Professional Contracts Manager, National Contract Management Association.

## Standing up a New AL&T Organization to Integrate New Capabilities

Gordon L. Campbell

The same is true for the acquisition, logistics and technology (AL&T) community. Army Acquisition Corps (AAC) transformation had its official kickoff in April 2004. AAC Director and Military Deputy (MILDEP) to the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) LTG Joseph L. Yakovac Jr. mandated the creation of a capability – through the use of modular concepts and unit design – to forward project an integrated AL&T force. AL&T would become a single face within the Army component of a geographical Joint major command. This was in accordance with Army Chief of Staff guidance, as well as other, ongoing modular conversion efforts, specifically, the Modular Force Logistics Concept.

> The new ALT-FO will have primary responsibility for integrating AL&T capability into the Army's overall combat development requirements. Here, 2LT Amos Fox, Bravo Co., 2nd Battalion, 8th Infantry Regiment, 2nd Brigade Combat Team (2BCT), 4th Infantry Division, scans the horizon with a Mark 7 laser range finder as SPC Timothy Bozeck reads coordinates. The 2BCT was conducting a show of force mission in Haswah, Iraq, on June 7, 2006. (U.S. Navy photo by PH2 Katrina Beeler, Fleet Combat Camera Group-Pacific.)

The Acquisition Transformation Task Force, which had evolved into a team effort between Yakovac and then U.S. Army Materiel Command (AMC) Deputy Commanding General LTG Richard A. Hack, responded to Yakovac's original mandate to develop a combined Table of Distribution and Allowances (TDA) and Table of Organization and Equipment (TO&E) construct — the Army Field Support Brigade (AFSB). The AFSB integrates all aspects of AL&T functions as a combined AL&T capability in support of military operations, and it provides one AL&T face to the warfighter.

The creation of a new TO&E organization is significant in and of itself, but particularly for a career field devoid of experience in unique TO&E requirements. Use of this new TO&E organization as a combat multiplier raises the question as to how this new AL&T capability will be doctrinally supported. The Quartermaster, Ordnance and Transportation branches, for example, all have "school houses" and "centers" to fulfill this core education, training and professional development requirement. The AAC does not.

A new organization, unique to the AAC, was needed to identify and address the ever-expanding issues emanating from a forward projected and integrated AL&T organization. Pursuant to the recommendation of Task Force AL&T, the ASAALT, MILDEP and AMC directed the establishment of a Combat Development Office to be located within the Combined Arms The ALT-FO

mission is to

develop, oversee

and coordinate

the integration of

AL&T doctrine.

capabilities,

concepts and

TTPs into the

Armv's

warfighting

logistical planning

and doctrine.

Support Command (CASCOM) at Fort Lee, VA. The Acquisition Liaison Office, already located at CASCOM, was transformed into the Acquisition, Logis-

tics and Technology-Futures Office (ALT-FO) to fulfill the combat development office role. The ALT-FO gained resource support from the Contingency Contracting Directorate within the Army Contracting Agency. It was provisionally established in November 2005 and is a unique, multifunctional organization. ALT-FO serves as the proponent doctrinal organization for AFSB capability, with a mandate to develop and integrate AL&T doctrine throughout the Army's warfighting requirements.

Sound doctrine cannot be written in a vacuum and AFSB doctrine is no

exception. ALT-FO works extremely close with AMC and many other organizations. AMC now serves as the technical review authority in our team effort to

> create AFSB doctrine. The AFSB concept integrates current AMC forward organizations and AAC capabilities within an operational theater. Composed of TO&E contingency contracting teams, in addition to modular TDA AL&T capabilities, the AFSB merged with AMC/U.S. Army Sustainment Command (ASC) organizations and is under the operational control of the Theater Sustainment Command. Modular in design and tailorable to support any contingency,

the AFSB offers specific AL&T capability where and when it is needed. Closely aligned with an Army component of any Joint force command, the AFSBs are capable of placing AL&T subordinate organizations at corps, division and brigade combat team levels.

The ALT-FO will exercise control over processes and functions necessary to standardize how the AFSB employs contingency contracting personnel in support of operational Army mission requirements to include Joint operations. In this context, the ALT-FO is responsible for the following:

- Establishing Army doctrine.
- Assisting in the development of Joint doctrine relative to contracting and management and utilization of contractor personnel in Joint operations.
- Developing contingency contracting equipment packages.
- Developing training standards to ensure the AFSB is fully capable of performing contingency contracting missions.
- Participating in force design and rules of allocation issues in the force management review process.





It cannot be overstated that since the capabilities the AFSB provides have never before existed in the AL&T community, cooperation is vital to making it a success. As the ALT-FO grows, it will seek to build broad working relationships throughout the entire acquisition community. The ultimate goal is to ensure the AFSB continues to enhance the Army's warfighting capability through dedicated, responsive AL&T support.

Simply stated, the ALT-FO mission is to develop, oversee and coordinate the integration of AL&T doctrine; capabilities; concepts; and tactics, techniques and procedures (TTPs) into the Army's warfighting logistical planning and doctrine. Specifically, the ALT-FO's key function — in concert with CASCOM, ASC, AMC G-3, AMC G-5 and AMC's Current Operations and Plans sections — is the development, coordination and integration of Doctrine, Organization, Training, Materiel, Leadership, Personnel and Facilities issues within the AFSB framework. While AMC Headquarters retains developmental responsibilities concerning deliberate war planning and AFSB concept of support and related doctrine, the ALT-FO will have primary responsibility for integrating AL&T capability into our Army's overall combat development requirements. The ALT-FO location within CASCOM, along with the collocation of the AMC Liaison Officer

and Logistics Civil Augmentation Program Planner, greatly facilitates this integration effort.

GORDON L. CAMPBELL is the ALT-FO Acting Director, CASCOM, Fort Lee, VA. He holds a B.A. from Augustana College and an M.P.A. from Texas A&M University. A graduate of the National Defense University's Industrial College of the Armed Forces, he also holds an M.S. in National Resource Strategy. An AAC member, he is Level III certified in both contracting and program management. A long-time advocate of military and government ethics, Campbell has presented and published numerous professional papers through the Joint Services Conference on Professional Ethics.



## **Robotic Guards Protect Munitions**

LTC Brian Shoop, Doriann M. Jaffee and Robin Laird

Given the status of locks on bunkers and tracking munitions via radio frequency identification (RFID) tags, are currently patrolling at Hawthorne Army Depot (HWAD), NV.

U.S.ARMY ]

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MDARS will revolutionize the Army's automated robotic intrusion detection and early response capabilities while enhancing physical security and freeing up Soldiers and civilians for higher priority missions. (Photo courtesy of General Dynamics Land Systems.)

## **Robotic Security System**

The robots are part of the Mobile Detection Assessment Response System (MDARS), a Joint Army-Navy development effort to provide automated robotic intrusion detection, response and inventory/barrier assessment capabilities for use on DOD facilities. The Army Product Manager Force Protection Systems (PM FPS) manages the MDARS program. This program fulfills a critical capability identified by the U.S. Army Military Police School for installation security.

The MDARS' primary components are semi-autonomous unmanned ground vehicles (UGVs) and command and control (C2) software termed the Multiple Resource Host Architecture (MRHA). The Space and Naval Warfare Systems Command (SPAWAR), San Diego, CA, is developing the MDARS program's MRHA software and has successfully adapted it to other robotic applications. General Dynamics Robotic Systems, of Westminster, MD, is developing the UGV and is a subcontractor on the Army's Future Combat Systems program.

In addition, other associated items of equipment include the newest Navy high-security Internal Locking Device (ILD), RFID tags and associated RFID tag readers. The entire system is designed to provide a site with significantly enhanced physical security with minimal additional manpower demands.

### MDARS Operations at HWAD

The MDARS deployed to HWAD in late 2004 consists of four UGVs, a C2 console installed in the Guard Operations Center (GOC) that runs the MRHA software and communications equipment. In addition, personnel installed ILDs and RFID tag readers on selected storage bunkers. RFID tags were mounted on critical products stored in those same bunkers. The MDARS program trained site personnel

to perform numerous MDARS functions including system operations, administration and maintenance to include UGV pre- and post-patrol preventive maintenance checks and services.

During testing to date, the semi-autonomous UGVs have patrolled assigned portions of the depot (about 30 square miles) for 12 hours per day on weekdays and 24 hours per day on weekends. Their mission tasking includes intruder detection, monitoring and reporting the status of the ILDs on munitions bunkers, as well as tracking the presence/location of tagged munitions using active RFID technology.

HWAD personnel located in the GOC operate the MDARS C2 console. These personnel operate the system as an additional task along with

their normal functions of guard operations, communications and intruder detection system (IDS) monitoring. During this test period, PM FPS representatives will periodically introduce selected events, such as intruders, obstacles in the robots' paths, opened locks and moved containers, to observe not only how both the system and users respond but also to observe whether the system control is user-friendly. In addition, the test plan introduced more than 75 exercise scenarios with the further objective of identifying other contributions that MDARS could provide in emergencies such as fires, hazardous materials accidents, communications outages and fixed IDS failures.

The robots are part of MDARS, a Joint Army-Navy development effort to provide automated robotic intrusion detection, response and inventory/barrier assessment capabilities for use on DOD facilities. The entire system is designed to provide a site with significantly enhanced physical security with minimal additional manpower demands.

In fact, depot personnel have used these robotic assets for actual mission needs to provide temporary short-term surveillance on incoming/outgoing staged munitions shipments that were not in IDS-protected structures, on storage structures experiencing temporary IDS failures and during increased threat level alerts where additional overwatch of an ammunition storage area was required.

### Console Operations

The heart of MDARS is the C2 console and the MRHA software. One person operates the console, although two people can operate the system simultaneously if needed. In general, a system administrator will develop duty rosters, which are simple text files that assign what each robot will

do during a patrol period. Generally, once a day, the console operator will start a duty roster and the appropriate UGVs will automatically be sent on patrol, to a defined location to perform sentry duty, or to the garage for periodic maintenance.

The system requires no manual intervention from the console operator unless problems arise or there are unplanned mission needs. If necessary, the console operator can take control of any UGV, send it to any location



and assign it to perform IDS, lock status checking and/or RFID tag reading. The console operator also has a joystick with which to take direct control of a robot's cameras or to drive it a short distance to any given position.

#### Intruder Detection

A primary mission of these robotic guards is intruder detection. The robots stop periodically during their patrols to scan for intruders using radar and infrared sensors. When the system detects a suspected intruder, it sends an alarm to the control station. The robot automatically points its onboard camera toward the intruder. A verbal command is issued by the robot, ordering the suspected intruder to "halt and be identified."

The console operator has a variety of options — use the UGV's onboard camera to scan the area and more fully assess the situation, communicate with the suspected intruder via microphones and speakers on the console and UGV, and/or require the person to show identification. If the suspected intruder is determined to be an authorized person, the console operator can identify him/her as "friendly" on the console screen. If necessary, the console operator can dispatch human guards to investigate and, if desired, another UGV to provide additional overwatch. Intruder detection has been quite reliable throughout the MDARS testing to date.

#### **Lock Status Reporting**

A number of the bunkers at HWAD have ILDs installed in their doors. Each heavy-duty lock has magnetic sensors that report the lock's status. During patrols, robots stop at each of these bunkers and read the current lock status. If the lock is open or reports an error, which could indicate the lock has been damaged or tampered with, an alarm is raised at the

console. The console operator can then use the UGV's camera to assess the status of the door and lock. The operator can also dispatch human guards to the bunker to assess its condition and secure it.

#### Munitions Tracking Via RFID

One of the depot's critical functions is stored munitions inventory control. Historically, personnel have done this manually by inventorying the contents of each bunker either annually or semiannually, depending on the priority of its contents. The MDARS product assessment feature provides a streamlined method for tracking these munitions. RFID tags are attached to pallets or containers. RFID tag readers store information on which tags are inside the bunker and when each was last read. When a UGV stops at one of these bunkers, it reads the information and transmits it to the central console.

Personnel in the accountability division have MRHA reports available to them that point out any discrepancies such as tagged items that are missing or not in their assigned locations. This provides near-real-time verification that munitions are present and in the correct locations. If an actual theft occurs, accountability personnel would be aware of the problem much sooner, and have much more information at their disposal, than in a strictly manual system.

### **Materiel Overwatch**

During the receiving/shipping process, HWAD personnel often place munitions in an exterior loading dock area for some period of time. Security



The MDARS console display shows an image, taken at hight, from the infrared camera of one of the robots on patrol. The heat signatures of four persons sitting in a truck can be clearly seen by the console operator. (Photo by Doriann M. Jaffee.)



procedures require a 24-hour overwatch while munitions are stored at the dock. Until now, this has required using a fixed IDS, if available, or posting one or more guards at these areas. The MDARS robots are now being used regularly to provide materiel overwatch at dock areas without an IDS. This eliminates the need for human guards, who are now available to respond to higher priority situations.

#### **Accomplishments to Date** and the Future

Over the course of the system assessment to date, the four UGVs have patrolled in excess of 3,500 hours and traveled more than 12,500 miles. System operators have become very comfortable and competent with normal operations and have acquired significant levels of proficiency in responding to exceptional events such as intruders

and open locks. Automated product tracking using RFID tags has been found to be highly reliable, giving nearreal-time notification of inventory discrepancies. Most importantly, both robot and MRHA developers have gained valuable real-world data on hardware and software performance as well as potential areas for improvement.

Given the complexity of fielding a semi-autonomous unmanned system, these are significant achievements in the area of robotic physical security. MDARS will substantially enhance the force protection posture of any government installation. The MDARS program is on track to begin fielding a production system at HWAD in late

> 2007. Subsequent fieldings at additional Army installations are planned and funded. MDARS is a capability that

shows potential for future growth in many other areas, from reconnaissance to logistics.

LTC BRIAN SHOOP is the PM FPS at Fort Belvoir, VA, and is responsible for the MDARS program. He holds a B.S. in mechanical engineering from the U.S. Military Academy and an M.S. in aeronautical engineering from the Naval Postgraduate School. He is an Army Acquisition Corps member and is Level III certified in both program management and test and evaluation.

DORIANN M. JAFFEE is an RFID subject matter expert and a Senior Computer Scientist for the SPAWAR Systems Center Unmanned Systems Branch, and is employed by Computer Sciences Corp. She has a B.A. in mathematics from the University of California at Santa Barbara and an M.S. in computer science from West Coast University.

**ROBIN LAIRD** is the SPAWAR Systems Center Project Manager for Unmanned Security Systems, which includes internal oversight of both the MDARS and Family of Integrated Rapid Response Equipment projects. He holds a B.S. in computer science from San Diego State University and an M.S. in software engineering from National University. He is Level III certified in systems planning, research, development and engineering, and is an acquisition professional community member.

An MDARS "robotic security guard" patrols a munitions storage area at HWAD. Each robot typically works a 12-hour patrol shift. (Photo by Doriann M. Jaffee.)

## LTG Joseph L. Yakovac Jr. Reflects on Army Acquisition Changes and Accomplishments

U.S.ARMY

Cynthia D. Hermes

n Sept. 1, 2006, LTG Joseph L. Yakovac Jr., Military Deputy (MILDEP) to the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) and Director, Acquisition Career Management, took time out of his busy schedule to speak with Army AL&T Magazine and reflect on the many changes and accomplishments the AL&T Workforce has seen in the three years that he's been MILDEP.

LTG Yakovac stressed that one of the Army Acquisition Corps' greatest challenges for the 21st century is integrating complex solutions across the battlespace and providing synergy across all capabilities for the combatant commanders and the Soldiers we support. (Photo by Karen Sas, U.S. Army TACOM Life Cycle Management Command.)

AL&T: After three years as the MILDEP, what legacy do you feel you've left the Army Acquisition Corps and Army AL&T Workforce?

Yakovac: I've been working in Army acquisition for a long time and there were times that I said if I ever got to the top of the organization, there were some things that I'd like to improve. I felt that we could improve our relationships with other organizations that we partner with to do business.

The first thing that always frustrated me was the question of who is the lifecycle manager for the equipment we field. It always came down to whether it was the program executive officer [PEO]; program, project or product manager [PM]; or U.S. Army Materiel Command [AMC]. In fact, if the system and the resource authorities are laid out side-by-side, it becomes real clear to everybody that acquisition is the combined capability of all of us working together to provide materiel to

Soldiers, and then maintaining and sustaining that equipment once it's fielded. So I always thought that the right question to ask wasn't "who" the life-cycle manager was, but "how" we together — AMC and the PEO community - provide materiel throughout its life cycle. In fact, there's no line between the two organizations from the beginning of a concept for a piece of equipment through its retirement. AMC and the PEO community must work together. One of the things that I really wanted to accomplish during my tenure was bringing together this whole concept of life-cycle

From my perspective, we've come a long way and I think everybody is beginning to understand why this is the way we should be doing business. Even outside of our organization from the Army staff and people in the field — this whole life-cycle management concept, which is really a team sport, has begun to take hold.

management under the Life Cycle Management Commands [LCMCs]. That was one of the first things we implemented within about 8 months of my receiving Secretary Claude M. Bolton's [Army Acquisition Executive] and former AMC Commanding General GEN Paul J. Kern's guidance.

Since then, we have made great progress in working better together in ways that our Soldiers, Sailors and Marines — or anybody we provide equipment to ---will benefit from. That was the first thing that I really wanted to accomplish. Now, after three years, is it perfect? No. But as you walk around and listen to people talk, they talk lifecycle management. And they speak about it from a holistic perspective, not from "the PEO/PM does

this" and "AMC does that." It's not perfect, but people are now talking about a combined responsibility that we share and work

together on.

"In spite of all of the roadblocks the acquisition system puts in front of us, we do a damn good job of providing capability," Yakovac reflected. Here, SSG William Black from the 172nd Stryker Brigade Combat Team puts that capability to work during a recent combat patrol in his Stryker vehicle near Mosul, Iraq. (U.S. Air Force (USAF) photo by TSGT John M. Foster, 1st Combat Camera Squadron.) Yakovac stressed that life-cycle management will help the acquisition community integrate technologies and capabilities to better address combatant commanders' battlefield requirements. Here, 1st Armored Division Soldiers maneuver their M2A3 Bradley Fighting Vehicle through the streets of Tal Afar, Iraq, during a combat patrol. (USAF photo by SSGT Aaron Allmon, 1st Combat Camera Squadron.)

As a result of this progress, there are other things that get done differently now, including how the ASAALT staff interfaces and works with AMC's staff. From my perspective, we've come a long way and I think everybody is beginning to understand why this is the way we should be doing business. Even outside of our organization from the Army staff and people in the field — this whole life-cycle management concept, which is really a team sport, has begun to take hold.

Other things have happened along the way to enable life-cycle management to succeed. As we worked with AMC and reviewed lessons learned from the global war on terrorism [GWOT], we recognized the need to have an organization, an actual unit, to be our face to the field. Working with AMC, we developed the Theater Support Command concept and the Army Field Support Brigades [AFSBs] as modular and highly tailorable organizations with AL&T requirements embedded within them. So we now have units that actually live side-by-side with Soldiers — in peacetime and in war — to carry out all AL&T functions. I think that the philosophy of life-cycle management through organizational construct helps support Soldiers and, from my perspective, I'm pretty happy with where we are, but know that we have a lot of work to do to fulfill all of our combatant commanders' battlefield requirements.

The second thing I wanted to tackle was the challenge of 21st-century

product and project management, which is really a lot harder when you start thinking about what we're required to do in terms of integrating battlespace equipment. We needed a group of professionals — both military and civilian - to do this. I was fairly satisfied with the military system we put in place, and I'll talk about that later. But I really felt that the area where we really weren't doing enough was in convincing a small group of our civilians who really wanted to step up to the plate and become leaders within the civilian workforce. We needed to put some things in place that would allow them to see that, in terms of the path that they took, they could become PMs. We also hoped to begin to build for the future our next civilian workforce leaders and PEOs. We

worked a lot with the U.S. Army Acquisition Support Center [USAASC] at Fort Belvoir, VA, to look for ways that we could improve opportunities for the civilian workforce to become PMs. I think we've done a lot of things in the last three years, including recoding most product and project management jobs as best qualified. In other words, military and civilian personnel could both compete for the same positions. When I came to this job, we had some of that, but we still had too many positions I thought were coded "military only." We opened many new positions up and changed how we allow people to compete. We did away with the idea that to be a PM, you had to proclaim you were mobile. We tried to allow people to compete and then prioritize if they wanted to stay within the area where

they currently live so they wouldn't have to move. So this strengthening of building leaders on the civilian side is something that I wanted to do. Again, it's not exactly where it should be, but I think we've put some things in place that better allow that to happen over time as we redefine our corporate culture.

If I'm not mistaken, at the last board we held, we had more civilians compete than we've had in previous boards. This is an indication that the changes we put in place are beginning to show civilians that there is a way they can compete with the military. We have more civilian PEOs than we've ever had at any time in our history. And we're showing that, at the top, you must be able to manage your military leaders (general officers) and

civilian leaders (senior executive service members) as a leadership entity, not as "military do this" and "civilians do that." Everyone must be managed and our senior leaders must have confidence that civilians can do the job if given the opportunity. I think that Edward Bair [PEO Intelligence, Electronic Warfare and Sensors], Kevin Fahey [PEO Ground Combat Systems], Paul Bogosian [PEO Aviation], Jim Blake [PEO Simulation, Training and Instrumentation] and Kevin Carroll [PEO Enterprise Information Systems] have all proven that, given an opportunity, they have the capability. The challenge now is to grow the next generation of leaders.

As I said earlier, on the military side, I thought we had some issues with the types of jobs we were giving to our





military. In other words, there were a lot of jobs I felt had been carried over from an earlier era when people or organizations wrote job descriptions for military, but never really thought about what that job position would mean — not only for the individuals in terms of their personal growth but also for their competitiveness for promotions down the road against their Army peers. One of the early things we decided was to review every job and every military position within the acquisition community. We spent a week with the folks from USAASC and other organizations in really reading through each description and asking ourselves were these jobs that we would want young officers to have and were they going to give those individuals the skill sets that they needed to be competitive later on in their careers. If

not, then we should do away with some of these outdated position descriptions. So we scrubbed the positions and, as a result, a lot of them were eliminated or moved elsewhere. The opened space was used to get other requirements that were better for the military in terms of personal growth and providing jobs that were really challenging. Again, it's not perfect, but we've made a major move to ensure that job descriptions stay current and our military officers are competitive.

I also felt that we did not have enough military within the PEO and PM shops, so we have restructured and taken slots from other organizations and moved them to where I believe they are most needed. That's not an easy change to implement and it's going to take some time to occur, but we think we're on the right track in better aligning our military personnel to jobs that will give them the tools that they need. And, from an organizational standpoint, we're putting people where we really need them community-wide.

We had a big issue when I first came in regarding this whole new world of contingency contracting and contingency contracting officers. We weren't prepared for what we needed to do and, basically, for the first year or two in Iraq and Afghanistan, we worked on a "hey, let's get some people out there to do the job" basis. First we had to really think through how to provide contingency contracting in a constantly changing, always fluid and frequently dangerous environment, and
GWOT's ever-changing requirements. Within the AFSB, we now have contracting battalions commanded by an acquisition lieutenant colonel with, primarily, majors below him. And for the first time, the Army gave us a small number of noncommissioned officers [NCOs] to be contingency contracting NCOs, where, again, they will be able to train their unit with those paths that are required to deploy to perform contingency contracting missions. Contingency contracting operations are now part of how we do business.

The final thing, from my perspective at least, is the way we assigned officers. In some cases, their first assignment ---not their ability - would either make or break their career. We had assignments for officers that I felt would not give them a good foundation. Now, granted, some of those assignments have to be filled because they are still necessary to the way we do business. For example, there are a lot of jobs at the U.S. Army Training and Doctrine Command. But officers spending four years in one of those jobs will not be competitive in the long term. So we discussed some ideas with the personnel at USAASC and HRC [Human Resources Command] and came up with a new methodology for assigning officers. To give each officer as broad a base as possible on the road to becoming a PM, we decided to move them out in only two years. This idea grew into the regionalization concept where the senior acquisition general officer in that region would really start looking at people's needs and assigning them jobs based on what's needed instead of having HRC and USAASC making assignments from Washington, DC. Again, this process is going to take a while to fully implement because the personnel system must have some things put in place to allow regional assignments — an assignment

within a region versus an assignment to a specific job. This system will facilitate better mentoring between our senior leaders and junior officers, and ensure that when junior officers come out of their respective regions, they have the tools, skills and experiences to compete for product management positions down the road.

So overall, from life-cycle management to both military and civilian careers, these are issues that I've focused on, and I hope that these ideas have made, or will make, a positive difference in the professional development of the AL&T Workforce — present and future.

AL&T: As you look to the future of Army acquisition programs, what challenges do you envision for the future of Army acquisition transformation?

Yakovac: Army acquisition has changed dramatically since I first came into acquisition as a practice. We used to talk about the Big Five — the Abrams, Bradley, Multiple Launch Rocket System [MLRS], Apache and Black Hawk. The fact is, the Big Five programs were all managed well, but were managed in such a way that not until they

were fielded, and through tactics, techniques and procedures [TTPs], were their complementary capabilities really brought to bear. For example, Abrams and Bradley were two programs being developed at the same time. But in terms of requirements and testing, looking at how the Army acquisition community was providing an integrated product and maximizing the capabilities between those two systems wasn't the way we did business back then. Today, it's absolutely critical that as we develop systems, we think about

The skill sets, education and challenges today, I believe, are an order of magnitude greater than in the past. And unless we're committed to looking for ways to meet 21st-century challenges, by understanding that continuing education is absolutely critical to attaining an acquisition workforce that takes advantage of the skills of both military and civilian personnel --- we will fail.

how they must work together and what the integration challenges are. How do we ensure — not through TTPs but actually by design - that these systems will work together when a warfighter gets them? Two things are causing us to do this. First, because of the sheer cost of our equipment today, we must maximize the capabilities of that equipment over its entire life cycle. We can't afford to have individual systems out there with duplicative capabilities. In some cases we must have duplication, and I understand that. But where we can, we want to take advantage of the capabilities and integrate them across the entire battlespace. So that's one challenge that we must continue to work in the future.

Second, is the nature of the battlespace itself. When I came into the Army, it was divided into branches — infantry,

armor, artillery and so on. That pretty much outlined the way the Army operated. The armor, infantry, artillery and signal branches all did specific tasks. But today, for each branch to really be able to perform their specific



tasks, there's a blur of what artillerymen, infantrymen and armormen are supposed to do. Technology has allowed us to provide different capabilities than we've ever provided before, and they are no longer branch-specific. They're just capabilities. Therefore, if you look at what we're trying to provide in the future for the battlespace, the complexity of an integrated capability with enhanced capacity, from requirements through development through testing through fielding is a real challenge. But in most cases, our large project shops will be reliant upon and will have to work with each other. They can no longer say, "Look, I have a product and I control everything

I need to build that product. I don't need to interface with any other PEOs, PMs, or even the Air Force or Marines." Today, when you talk about our products that are really in the battlespace, it is now an integrated battlespace. So we must do a better job of working together from the beginning — from requirements generation all the way through fielding. The Stryker program is an example of various PMs - not just PM Stryker - coming together to provide an integrated capability. Networking is absolutely a piece that needs everyone's attention and they must understand it. So again, we have a capability that delivers what the warfighter needs, but now it has been

engineered to be both affordable and sustainable in the long run. It's a community-wide challenge, and it's one that we must continue to address. We have a professional workforce that knows how to accomplish that.

As I see it, our challenge for the 21st century is integration of complex solutions across the battlespace and how we as acquisition professionals work to provide synergy across all of our capabilities. Additionally, we've been challenged to provide Joint capability and work with our other acquisition professionals in DOD, the Air Force, Navy, Marine Corps, and other government and nongovernment agencies. *AL&T:* Do you have any advice to offer the AL&T community?

Yakovac: We cannot afford to be complacent or to sit back and think that since we've been successful at providing capabilities in the past that doing the same thing that we did back

then will allow us continued success in the future. We must challenge ourselves to maintain and be responsible for all skill sets through continuing education, developmental training assignments and mentoring. In this highly competitive, resourceconstrained environment, we cannot do things the same way that we used to. The skill sets, education and challenges today, I believe, are an order of magnitude greater than in the past. And unless we're committed to looking for ways to meet 21st-century challenges, by understanding that continuing education is absolutely critical to attaining an acquisition workforce that takes advantage of the skills of both military and civilian personnel — we will fail. We owe it to our Soldiers, Sailors and Marines who

are looking to us for capability, as well as to taxpayers and this Nation, to provide the best we can with the resources we are given.

AL&T: As you prepare to pass the torch to future leaders, what do you perceive their challenges to be?

Yakovac: Future leaders must continue to recognize that working

together in an integrated fashion is the only way that we'll be successful. We've talked about this a lot in different conferences throughout the year. When we're implementing new programs, we must instill integration in the way we do business. If you look at Future Combat Systems [FCS] — the next step in terms

In the last three years, we have worked on rapid programs with urgency statements to provide added capability that has really helped Soldiers — from up-armoring vehicles to providing communications capabilities. We've provided a tremendous amount of capability rapidly when our Soldiers have said "I need this."

of management challenges from Stryker — it really takes an entire PEO world working together, along with the Air Force and Navy, to provide the capability that the requirements doctrine has asked for. So again it's an approach — none of us are islands unto ourselves. In most cases, we all rely on each other and must work together to provide a 21st-century Army.

AL&T: As you look toward retirement, what do you consider your greatest accomplishments over your career and what have been your biggest challenges?

Yakovac: I don't think that I, individually, have accomplished anything. It's more about what we, the acquisition community, have done collectively, in spite of the big

acquisition process that in many cases we don't control, including dollars. We've done a tremendous job of adapting to requirements and to accomplishing what we've been asked to do. We've provided a great capability from big programs of record, such as Stryker or FCS. In the last three years, we have worked on rapid programs with urgency statements to provide added capability that has really helped

Soldiers — from up-armoring vehicles to providing communications capabilities. We've provided a tremendous amount of capability rapidly when our Soldiers have said "I need this." The equipment we have produced has been safe, reliable, sustainable and more lethal than ever before. With the support of our strategic partners such as the U.S. Army Test and Evaluation Command [ATEC], we continue to focus on the big programs we have in our budget, such as Stryker, FCS and the restructuring of aviation. Tremendous tasks have been accomplished in the last three years, and we continue to add to that tremendous record. So I look not at my ability, but at the ability of the people who work for me to understand what's required and to go out and do it. At the end of the day, as acquisition, we have the toughest job. Everybody knows how to do it better, whether it's people within the Army, people outside the Army or people over on Capitol Hill. We must always accept that if you really want people to appreciate what we do, we must take our own pride in how we do it and know that, in spite of all of the roadblocks the acquisition system puts in front of us, we do a damn good job in providing capability. Again, it's not about any one person, it's about us collectively working together.

CYNTHIA D. HERMES is Executive Editor of Army AL&T Magazine. In her 26 years of government service, she has worked as an editor for both the Army and Navy. Prior to coming to Army AL&T Magazine, Hermes edited U.S. Navy and Marine Corps aircraft procedural and tactical manuals at the Navy Tactical Support Activity (NTSA). She was also a program analyst at NTSA, managing file conversion of these manuals from print to CD-ROM and overseeing mass CD-ROM production and distribution.

# From the Acquisition Support Center Director

t has been more than five years since our Nation was attacked by terrorists in New York City and at the Pentagon — quite literally in our own backyard. These events on U.S. soil are forever etched in our Nation's psyche. Following these attacks, the global war on terrorism (GWOT) began in earnest



with our troops arriving in Afghanistan to eradicate terrorists hiding from international justice. Since that time, the Army ---with unit rotations numbering more than 550,000 Soldiers with boots on the ground — along with the other services and Coalition Forces, has bravely prosecuted Operations Enduring and Iraqi Freedom, fighting our enemies and liberating more than 50 million people from terror's inhumane grip. The GWOT continues, as the Acquisition, Logistics and Technology (AL&T) Workforce supports the best-trained, motivated and equipped Army in history. Our workforce plays a critical role in keeping our Army - the world's premier fighting force — relevant and ready. Every acquisition, contract, system or service we provide keeps our Soldiers combat capable as they continue the awesome responsibility of providing security against any threat, anywhere, anytime. I'm proud to be part of a dedicated, professional workforce that contributes so much to our Soldiers, our Army and our Nation. Looking forward, I see new challenges that our workforce will be facing together, and I'm confident that we will meet these issues head-on and carry out the mission of supporting our Soldiers, just as we have proven so many times before with so many unprecedented accomplishments.

#### **Regionalization Program Update**

In July 2004, the Army Acquisition Corps (AAC) implemented the Regionalization Program. Designed to provide AAC professional development standardization, the program affords captains and majors (until they are within a year of their primary zone for promotion) the opportunity to grow into positions of increasing responsibility. Regional senior acquisition officials are responsible for providing officers with professional development opportunities through multiple assignments within a region to support diversification and professional development while broadening their overall acquisition experience. The program's goal is to stabilize each officer for 48 months. However, some officers may move after 36 months to pursue other professional development opportunities or to meet the greater needs of the Army and AAC in different assignments. The Regionalization Program is being implemented in Warren, MI; Picatinny Arsenal and Fort Monmouth, NJ; the National Capital Region; Aberdeen, MD; Redstone and Huntsville, AL; and Orlando, FL. For more information on the program, please contact MAJ Andrea Williams at (703) 805-1428/DSN 655-1428 or andrea.williams@us.army.mil.

**Defense Acquisition Workforce Improvement Act (DAWIA)** DAWIA was amended during FYs 04 and 05. The modifications were so significant that DAWIA is now referred to as DAWIA II. Most of the revisions established a single Defense Acquisition Corps, streamlined obsolete and outdated provisions, and provided greater management flexibilities for strengthening the AAC in developing and maintaining a professional acquisition workforce. The following are a few of the key changes to DAWIA:

- An Integrated Management Structure that includes the Workforce Management Group chaired by the Defense Acquisition University president. Its purpose is to guide implementation and integration of program initiatives, policies and daily execution of AL&T Workforce education, training and career development. It also provides advice and recommendations to the Senior Steering Board (SSB).
- The SSB, chaired by the Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L), ensures uniform execution of the DOD AT&L Workforce Education, Training and Career Development Program.
- Key Leadership Positions (KLPs), a subset of Critical Acquisition Positions, identify positions requiring special attention from the Army and Defense Acquisition Executives on qualifications, accountability and position tenure. The Army is reviewing all positions for designation as KLP.
- The certification grace period has been extended to 24 months from 18 months.

The DOD policies and guides that expound on these changes can be found in the following documents:

- DOD Directive 5000.52, Defense Acquisition, Technology and Logistics Workforce Education, Training and Career Development Program, Jan. 12, 2005.
- DOD Instruction 5000.66, Operation of the Defense Acquisition, Technology and Logistics Workforce Education, Training and Career Development Program, Dec. 21, 2005.
- DOD Desk Guide for Acquisition, Technology and Logistics Workforce Career Management, Jan. 10, 2006.

Likewise, specific Army policies subject to *DAWIA* changes can be found at: http://asc.army.mil/info/policies/ default.cfm. For more information on *DAWIA II*, contact Carlyn Diamond at (703) 805-1239/DSN 655-1239 or carlyn.diamond@asc.belvoir.army.mil.

# New Moniker

In closing, you might have seen the new acronym for the U.S. Army Acquisition Support Center — (USAASC). My intent is to make USAASC distinguishable from other organizations that share our old ASC acronym and give it a contemporary, fresh appearance. Please look for it in our publications, on our Web site, and in branded and other USAASC collateral materials.

A. JA

**Craig A. Spisak** Director, U.S. Army Acquisition Support Center

# Managing Customer Requirements for Products

# Harlan Black

The Communications-Electronics Life Cycle Management Command's (CELCMC's) Software Engineering Center (SEC) is the Army's supplier of products, services and skilled personnel for communications-electronics systems. CELCMC is implementing best business practices from both Capability Maturity Model Integration (CMMI®) and Lean Six Sigma (LSS) to provide our products and services cheaper, faster and better. We are using CMMI to define our processes and we are using LSS to improve them. This article is the first in a series that focuses on Requirements Management (REQM), one of 10 CMMI process areas that CELCMC is currently implementing.

In this article, I will introduce REQM and present its goals. I will then present resolutions of issues that surfaced as people in our organization began writing REQM plans for projects that provide products for their customers. In a future article, I will discuss REQM planning for projects that provide customers with services and skilled personnel. I will then conclude with the relationship between CMMI and CELCMC's LSS efforts.



SEC's mission is to deliver life-cycle software solutions that ensure warfighting superiority and information dominance. Therefore, it is crucial that SEC engineers and technicians have an absolute understanding of customer requirements. (*Army AL&T* Magazine stock photo.)

## REQM

REQM consists of two goals and suggests five specific practices for achieving them. The following is the form that the goals and specific practices took within CELCMC.

# Goals for REQM:

- All requirements for project services, products and product components are managed.
- Inconsistencies between all requirements and both project plans and work products are identified and resolved.

# Specific Practices for REQM:

- Obtain an understanding of requirements. *Significance: How can we give customers what they asked for if we are not certain that we understand what this is?*
- Obtain commitment from the project team to implement the requirements. *Significance: How can we give customers what they asked for if we are not certain that the project team is going to provide it?*
- Manage requirements changes. *Significance: How can we give customers what they asked for if we are not certain that we are giving them what they want today and not what they wanted yesterday?*
- Trace the requirements. For Products: Maintain bidirectional traceability of the requirements.

For Services: Maintain traceability between the required services and the delivered services. *Significance: How can we give customers what they asked for if we are not certain that we are giving them everything they asked for and that we are not giving them things that they didn't ask for?* 

• Identify and resolve inconsistencies. For Products: Identify and resolve inconsistencies between all requirements and both project plans and work products.



For Services: Identify and resolve inconsistencies between all requirements and the ongoing work. *Significance: How can we be certain that we are giving customers what they asked for if we have mismatches inside our project?* 

# SEC

To provide some context for REQM implementation, you must understand how SEC is organized. Headquartered at Fort Monmouth, NJ, SEC's mission is to deliver life-cycle software solutions that ensure warfighting superiority and information dominance. SEC consists of 6 directorates and 7 field support engineering offices that span 13 geographic locations worldwide. SEC manages more than 200 projects that fall into 5 classes of products and 14 classes of services.

# Implementing REQM

To implement REQM within our organization, we established a small network of REQM mentors, one in each directorate. We then wrote an REQM Process Description (PD) to relate the process area's needs to the organization. We also developed audiovisual training materials. The implementation approach was to require REQM training for all practitioners and for REQM plans to be written and followed for every project. As the PD was written at a high organizational level, we authored a questionnaire to help practitioners relate REQM to their work and to guide them through the authoring of a plan that complies with the PD.

# The Need for Clarification

The following scenario recently happened and illustrates the need for clarification.

Project Leader (PL): "We don't need to write a REQM plan because the contractor who designs the software already has one."

REQM Mentor: "If the contractor writes the software then what do you get paid to do?"

PL: "The contractor works under contract for Project Manager (PM) XYZ and we monitor the contract for the PM."

REQM Mentor: "Sounds like PM XYZ is your customer and you have a requirement to monitor his contract."

PL: "Yes."

REQM Mentor: "The contractor has a plan for implementing your customer's requirements. Fine. But does the contractor have a plan for how you are to monitor his compliance with the contract?"

PL: "No. Why should he? We don't work for the contractor!"

REQM Mentor: "Then who is going to write the plan for managing the requirement for you to monitor this contract?"

PL: "I guess I will."

REQM Mentor: "Great. Your plan needs to address all of the requirements that the PM gave you, not those that he gave to his contractor unless they were also included or associated with those in your requirements list."

I will now present the insight SEC derived from implementing REQM for products, services and skilled personnel.

# **REQM Plans for Products**

Consider an organization that develops software to meet customer requirements. Now, requirements are *whats*, not *hows*. Their REQM plan must specify how they are going to manage the *hows*, which are the *needs* that the software must meet. The organization must document how it plans to do the following:

- Obtain an understanding of the needs that the software must meet.
- Obtain a commitment from the project team to make software that meets all of these needs.
- Manage changes to these needs during the ongoing work.
- Maintain bidirectional traceability from each need to that which was produced to meet it.
- Identify and resolve inconsistencies between these needs and both project plans and work products.

Although plans for *how* the organization is going to develop the software are also very important, they may belong elsewhere, such as in the project plan, not in the REQM plan. For example, assume the supplying organization is going to use a particular programming language and environment to implement the needs, like dot-net. Also assume that the organization has a guidebook for coding in this language. The book talks about conventions and standards. For example, it provides a standard template for documenting the heading of each code module. Does this guidebook belong in the REQM plan or does it belong elsewhere?

At first glance, the book does not belong in the REQM plan because it is a *how*. That is, it talks about how to write software to meet customer requirements. Many customers refrain from expressing preferences for how their suppliers code as long as the resulting software works to meet their needs, both upon delivery and throughout its lifetime. the design is a transformation of user requirements into the realm of software. It is the *what* of customer requirements that was morphed into a *what* for implementers. Therefore, one needs bidirectional traceability from user requirements to the design to ensure the integrity of this transformation. That is, we need traceability from the customer requirements to the design and from the design back to the requirements.

One can also view test cases and results as another transformation, as they are user requirements that are transformed into a test suite. They also need to be traced bidirectionally. Actually, we can speak of two types of transformations. One is from customer requirements into other forms such as de-

However, some customers tell their suppliers *how* to do their jobs, not just what they should produce. This turns some *hows* into *whats*. So the guidebook would indeed belong in an REQM plan if the customer made it into a requirement by identifying the book and asking the supplier to follow it.



sign documents and test plans. Another transformation is from a compound requirement into a set of requirements that are its parts. The latter is called a decomposition. Let's take a second look at our requirement: "The software shall change the screen background color from green to red when the system's mode of operation changes from

'routine' to 'emergency.'" We can decompose this requirement into the following:

- The system shall have the following modes of operation: routine and emergency.
- The system shall manage screen background colors.
- The system shall change the screen background color from green to red when the system's mode of operation changes from routine to emergency.

Decompositions also need bidirectional traceability. Interactions also need traceability. Using the above example, when the monitor module calls or sends a certain message to the screen control module, the module must set the background color to red. The need to set colors is a *what* for the screen control module. We call this interface a requirement, and the trace needs to be documented.

There is one more very important point to make about managing requirements for a product. A customer wants a product. However, many times the customer is not

Now, let's take a look at a requirement: "The software shall change the screen background color from green to red when the system's mode of operation changes from 'routine' to 'emergency." Let's say that there is some software module that monitors the system's mode of operation. Maybe it is in a higher-level control module that toggles the mode between routine and emergency. Say that the monitoring module has software routines that communicate with other modules, such as the screen control module that changes screen colors. These modules are described in a high-level design document and are subsequently implemented in source code. Design documents connect user requirements to software code. They are not typically specified by the customer.

Understandably, when they are specified by the customer the *hows* then become *whats* to the developer. When they are not specified, it would seem that they should be viewed as *hows*, because they provide guidance and constraints on how the requirements should be implemented in software. However, design is a *what* for the software coders. In actuality,

concerned with whether their supplier makes it or whether the supplier gets someone else to make it. That is, one is sometimes in the mode of a value-added reseller (VAR). A VAR also manages customer requirements for the product. However, the VAR may or may not be directly involved with transforming the requirements in every stage of product development. A VAR needs bidirectional traceability for every transformation and decomposition of customer requirements that occurs within and is in direct control of its organization. It is typical not to impose a specific REQM process within the supplying organization. Neither would a VAR document the supplier's REQM process within its own REQM plan. The VAR's REQM plan may, therefore, only call for bidirectional traceability between the customer requirements and acceptance testing of what the supplier provides.

In this article, I discussed how CMMI — combined with LSS — has helped CELCMC's SEC provide better products faster and cheaper. Likewise, I introduced you to REQM plans that provide products for customers and the importance of clarifying customer requirements early in the process. In my follow-on article next issue, I will discuss REQM planning for projects that provide customers with services and skilled personnel.

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# Contracting Community Highlights





his issue's feature article highlights the concerted effort made by the Health Care Acquisition Activity to optimize the quality of life for our injured Soldiers. The article offers a behind-the-scenes view of their support to the Walter Reed Army Medical Center Amputee Center, Washington, DC.

In addition to the feature article and the regular *DAR* Council Corner, we pass on news from the contracting career management office and a number of our contracting organizations including news from the Army Contracting Agency-Pacific Region about short-term housing for Soldiers redeploying from the global war on terrorism. We also highlight the Surface Deployment and Distribution Command's critical role in shipping Soldier's privately owned vehicles.

We appreciate support from the field in providing material for publication, and we hope you are finding the submissions informative and interesting. For more information, contact Emily Clarke at (703) 604-7102/DSN 664 or emily.clarke@hqda.army.mil.

> **Ms. Tina Ballard** Deputy Assistant Secretary of the Army (Policy and Procurement)

Health Care Acquisition Activity (HCAA) Supports Amputee Center

#### Business Operations Branch

Led by COL Earle Smith II, Commander/Principal Assistant Responsible for Contracting (PARC), the HCAA supports the Army's worldwide medical mission. Assigned to the U.S Army Medical Command (MEDCOM) at Fort Sam Houston, TX, the dedicated acquisition staff has healthcare acquisition experience and is well versed in the unique requirements of medical professional services such as credentialing,



privileging, licensure, certification and incentives. The HCAA staff is also familiar with the regulatory agencies that define requirements for medical professionals and healthcare

support activities at the medical treatment facilities (MTF). Execution of responsibilities is based on priorities established by policies and directives from the Office of the Surgeon General, Falls Church, VA, and MEDCOM.

HCAA has seven offices, the Center for Health Care Contracting (CHCC), Fort Sam Houston, and six regional contracting offices (RCOs):

- Europe RCO Landstuhl Regional Medical Center, Germany.
- Great Plains RCO Brooke Army Medical Center (AMC), Fort Sam Houston.
- North Atlantic RCO (NARCO) Walter Reed Army Medical Center (WRAMC), Washington, DC.
- Pacific RCO Tripler AMC, Honolulu, HI.
- Southeast RCO Fort Gordon, GA.
- Western RCO Madigan AMC, Fort Lewis, WA.

#### **Contracting Services**

CHCC awards and administers master contracts on a variety of medical professional services including physicians, nurses, transcription services, reference laboratory services, imaging maintenance services, dentists, pharmacists and numerous ancillary services. In addition, HCAA contracts for other services in support of the healthcare mission, including hospital housekeeping, laundry and linen distribution and regulated/hazardous medical waste disposal. The RCOs support the MTFs in their regional command by writing task orders against master contracts or award-

ing contracts. Using innovative procurement techniques, HCAA awarded \$1.1 billion in healthcare professional and support services for FY05.

Of exemplary note is NARCO's support of the WRAMC Amputee Center. NARCO has worked



NARCO contracted for the services of three full-time prosthetists who design, fabricate, fit and train individuals in the use of the prosthetic devices. Here, Dennis Clark, a prosthetist at WRAMC uses a heater to melt and reshape a socket for a better fit. (U.S. Army photo by SPC Lorie Jewell.)

extensively with WRAMC by providing \$26 million in contract support for its Amputee Center. The Amputee Center is dedicated to providing state-of-the-art prosthetic technol-

> ogy and the highest quality of comprehensive care for Soldiers, Sailors, Airmen and Marines returning from *Operations Enduring* and *Iraqi Freedom* with upper- and lowerextremity amputations.

# Helping Wounded Soldiers Recover

NARCO leverages multiple contracting vehicles to fulfill a wide variety of requirements to optimize the injured warfighter in achieving the highest levels of physical, psychological and emotional function and, ultimately, returning to active duty. NARCO contracted for the services of three full-time prosthetists who design, fabricate, fit and train individuals in the use of the prosthetic devices. Because of the high volume of amputees and the possibility of

each amputee receiving as many as 9 or 10 specialty or activity devices, the services of a prosthetic lab were contracted to increase the variety and availability of prosthetic devices.

Multiple blanket purchase agreements (BPAs) with 8 specialty vendors were negotiated to supply the necessary prosthetic supplies and/or devices at a 10-percent cost reduction. In addition, a 70-percent cost reduction was negotiated

> when BPAs were used in conjunction with the upperextremity vendor contract for terminal end devices. This resulted in a cost avoidance of \$288,452 off the Medicare bill rate. The use of BPAs was determined most advantageous as these contractual vehicles

> > The WRAMC Amputee Center has provided 490 Soldiers suffering traumatic amputations with the ability to return to an active functional lifestyle. Here, Barri Miller, WRAMC Orthopedic Amputee Center, raises a patient's prosthetic leg to ensure motionsensing digital cameras can see reflectors placed on it. (U.S. Army photo by Michael E. Dukes.)

maximized discounts from multiple suppliers and provided for immediate ordering and receipt of highly detailed and specific prosthetics supplies and specialty medical services that are not otherwise provided. NARCO's contracting expertise has allowed the Amputee Center to accomplish this important medical mission. They have been able to provide 490 Soldiers who suffered traumatic amputations with the ability to return to an active functional lifestyle. In many cases, Soldiers are fitted with the appropriate socket and prosthetic devices within two days of being released from surgical care.

A second Amputee Center was opened at Brooke AMC and the process for contracting for the necessary supplies and services improved significantly as a result of the lessons learned from the NARCO and WRAMC experiences.

The Business Operations Branch provides direct administrative support to the Commander/PARC and RCOs, HCAA and MEDCOM.

# U.S. Army Contracting Command, Europe (USACCE) Completes Unique Birthing Center

The USACCE Regional Contracting Office-Italy (RCO-I) has completed the Dr. Frank V. Benincaso Mother and Infant Pavilion at Caserma Ederle in Vicenza — the only stand-alone birthing center in DOD. Thanks in part to RCO-I efforts, Army families now have something they lacked — continuity of U.S. standard quality healthcare before, during and after childbirth.

#### **Cost Savings**

This \$3.2 million contract, nearly \$1.2 million under the independent government estimate, was awarded in just 38 days, with a performance period of only 150 days to design and construct a state-of-the-art medical facility. It added a critical capability to the medical staff at a crucial time of record births. The rapid award and construction of the birthing center was critical to the Southern European Task Force (Airborne) (SETAF) families and essential to their morale.

#### **Morale Builder**

The long-term positive impact of the birthing center on the morale of young military families is immeasurable. The local Italian hospital, with the language barrier and differences in care, can be intimidating to young families away from home for the first time. "The facility means a great deal to the Soldiers of the twice-deployed SETAF and 173rd Infantry Brigade," said LTC John Alvarez, Deputy Commander of the Vicenza Health Clinic. "Now the Soldiers can do their mission, in part, because they know we are taking good care of their loved ones."

# A Team Effort

According to Bill Delozier, the Contracting Officer's Representative and Project Manager, in October 2004, the Vicenza Deputy Director of Public Works (DPW) requested USACCE to contract for this project and team with the U.S. Army Corps of Engineers (USACE) Vicenza Resident Office to provide inspection and quality assurance during construction.

This was a design-build contract with the European Region Medical Command reviewing and approving the design. DPW and the Naval Regional Office in Charge of Construction provided technical review and approval for those areas involving the Italian building codes. USACCE's Engineering Branch provided design review support in the mechanical and electrical disciplines.

USACCE's supplies and services contracting team partnered with the construction team to procure the medical equipment. Medical equipment vendors joined the team and enhanced overall success by identifying essential medical equipment that had been overlooked during design. Construction was completed in May 2005 with the grand opening the following month.

#### **One Stop** – No Traveling

The pavilion, named for retired Army Medical Corps COL Frank V. Benincaso, a pediatrician who worked for 13 years in the installation's health clinic, provides full services for mothers expecting normal deliveries and can manage the



The head nurse prepares the birthing room for another delivery at the Dr. Frank V. Benincaso Mother and Infant Pavilion at Caserma Ederle in Vicenza, Italy. The rapid contract award and construction of the pavilion was critical to the mission support of SETAF families and essential to their morale. (USACE photo by John Rice.)

birth and care of up to four babies daily. High-risk pregnancies are still referred to more advanced medical facilities. Alvarez recalled that before the facility was built, expectant mothers would receive care here for the first seven to eight months, and then go elsewhere for the actual delivery and follow-up care. "They would have to go back to the states or up to Landstuhl Regional Medical Center in Germany. They'd have to go to Aviano [Italy] or they'd go to a hostnation hospital." Now, a woman is treated by the same physician, obstetrician and gynecologist in the same location throughout her pregnancy and after. The new birthing facility is designed to handle it all.

"Delozier understood the complexity of building a medical facility," said Alvarez. "His experience in Europe also helped him understand the complexity of having an Italian firm design a U.S.-specification medical facility and all the challenges that involved. The USACE was critical in making that building," he concluded.

*Editor's Note: Lou Fiota, USACE North Atlantic Division, contributed to this article.* 

#### Army Contracting Agency-Pacific Region (ACA-PR) Supports Soldier Housing

#### Kurtis Kikkawa

#### **Housing for Redeploying Soldiers**

MAJ Lynda Royse, Regional Contracting Office-Hawaii (RCO-H), was instrumental in awarding two significant command contracts for short- and long-term off-post housing for assigned and single Soldiers redeploying from the global war on terrorism. The U.S. Army Garrison-Hawaii (USAG-HI) was tasked to provide short-term off-post housing for 200 redeploying Soldiers returning from Operation Iraqi Freedom during the Christmas holidays. Royse had to think outside the box, explore new avenues and consider innovative approaches to meet this formidable requirement. She faced a tight and expensive rental/lease market on the Island of Oahu, HI, with the occupancy rates for hotels at more than 80 percent and rental property close to 90 percent. Additionally, Soldiers were required to live within the same area for ease of battle command and transportation. Royse quickly and efficiently solicited and awarded a \$450,000 contract in 35 days. In a second instance, Royse quickly obtained long-term housing for 450 Soldiers

transferring to Hawaii to support Army transformation and the Stryker Brigade Combat Team (SBCT). She developed and issued the solicitation package, reviewed proposals and awarded the \$7.5 million contract within 45 days. Because of excellent negotiating skills and an innovative approach to share costs, Royse saved USAG-HI approximately \$4.5 million.

#### Support for New SBCT

Tina Johnston and Donna Campbell of RCO-H worked on a cost-plus award fee (CPAF) contract with a base period and four 1-year options worth approximately \$65 million. The follow-on requirement is estimated between \$150 million to \$175 million including a substantial increase in future logistics support for a new SBCT, an upgraded Modular Brigade Combat Team and a deployable operational major command with ancillary units. The new mission reflecting an Army in transformation, required a different contract approach with close coordination and collaboration with the customer, command group, Small Business Administration, small business specialist, legal and ACA-PR. After much deliberation, the team decided to keep the CPAF feature to provide short-term incentives for the contractor while giving the commander greater flexibility in responding to a dynamic mission environment and to use three 1-year awardterm options for long-term contractor motivation and stability to the command. The key marketing document for approval of this innovative contracting concept was the Acquisition Strategy Plan (ASP). Because of the estimated dollar value, it required the Director, Army Contracting Agency approval — a first for ACA-PR. The team worked diligently in planning, developing, coordinating and completing the ASP following ACA procedures.

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Kurtis Kikkawa is an ACA-PR Procurement Analyst.



### Determining Best Value – A Contract Pricing Perspective

#### Chris Burchstead



Unlike other aspects of Army acquisition, *pricing*, conceptually at least, is something we have all experienced since buying our first automobile. Although we don't customarily concern ourselves with justification and approval or formal source selection plans, by the time we enter the acquisi-

tion workforce, we have been exposed to practically every cost and pricing technique used in the trade. However, when it comes to government contracting, many contract specialists tend to think of pricing as some bizarre ritual with numbers. Although I have had a successful career by perpetuating this illusion, it's time to shed some light on the subject.

I would like to suggest that contract pricing is little more than home economics with flashier catch phrases. "Window shopping at the mall" becomes "market research," your paycheck is euphemistically referred to as "cost as an independent variable" and "I'm not paying for undercoating" is basically a trade-off analysis. The key to understanding the concept of "fair and reasonable" is *value*, not price.

To begin with, money has no intrinsic value — it is only worth what you can buy with it. I realize that sounds trite, but bear with me. Contract specialists are forever running into my office with a single page from a cost proposal exclaiming, "They want a million dollars! Is that okay?" When I ask what they are buying, they look at me funny, as if to say, "What difference does that make? We're talking about a million bucks here."

I think of value not in terms of what I'm spending, but rather what I'm getting. You need to concentrate on what you are buying rather than how much you are paying for it. And it's not just what you are buying but also how you are buying it. The circumstances surrounding the acquisition are crucial to value analysis.

There are only two ways to determine price: what a product sells for on the open market (price analysis) and what it costs to make it (cost analysis). And because cost rates are determined by market conditions, *cost analysis* should always be supplemented by some form of *price analysis*. The value of what we are purchasing is going to fit somewhere in this scenario. The job of the price analyst is to ensure that the value of the government's purchase adequately reflects the price. As *Federal Acquisition Regulation (FAR) 15.402* states: "Purchase supplies and services from responsible sources at fair and reasonable prices."

Notice the policy does not say purchase at the lowest price; negotiation comes later. At this stage we need to establish and document relative value. There is subjectivity in determining value and, as individuals, we have very different views of how this should play out. I know people who would drive to northern Maine [from Natick, MA] to save a few cents on a gallon of gas. I'm not advocating waste, but I have other things to do. Of course it's one thing for me as an individual to entertain a subjective view of value, but what about the public's best interests? To contain subjectivity on a more or less even playing field, we have regulations. One of the things that intrigues me most about pricing is the fact that contract specialists have shelves of regulations, but almost everything we need to know about pricing is captured on a couple of pages. Okay, this is a little bit of a stretch, but taken in conjunction, FAR 15.403 defines adequate price competition and FAR 15.404 defines price analysis. This is all you need to get the job done correctly. Check it out.

As much as I'm tempted to deride regulations, I have to marvel at the conciseness and clarity of this one. The concept of "best value" was substituted for "low bidder" at the time of the *FAR Part 15* rewrite when the acquisition reform initiatives were introduced. Notice the definition of *adequate price competition* specifically avoids mentioning how close the comparative prices should be. This is another concession to the importance of value in making these determinations. My favorite analogy is a 2-liter bottle of soda costs twice as much in a convenience store as it does in the supermarket. Why is that? Because you're not buying the same thing. At the supermarket, you're buying soda, whereas at the convenience store, you're buying convenience. By the way, supermarkets go out of business every day, but there's a convenience store on every block. What does that suggest about value?

Another interesting nuance about competition is that you don't necessarily need signed official offers for validation.  $FAR \ 15.403-1(c)(ii)$  alludes to a "constructive" competition that is inherent in the open market. A store really only needs to be open and in business to qualify as competitive. I realize that the contracting officer requires the formality of proposals, but that the price analyst should make full use of

the implied competitive nature of the market — with appropriate rationale, of course.

Notice too, the policy focuses on requiring the least amount of data necessary to determine a fair and reasonable price. *FAR 15.402* states: "In establishing the reasonableness of the offered prices, the contracting officer must not obtain more information than is necessary." It's the lawmakers way of saying, "use your own judgment."

Sometimes you just can't get everything you want, and this brings us to *trade-off analysis* or, as I call it, reintroducing subjectivity into the public discourse. You already know how it works — if you want high quality fast, it's going to cost a bundle. If you can wait long enough, you can probably get quality at a decent price. And of course, if you want it fast and cheap, the quality will suffer. So what will it be?

I suggest establishing a few critical performance criteria upfront by asking the offerors to define the cost drivers for each. If you can get a price tag on your salient features, you will be ready to discuss trade-off at the outset. Both you and your contractor will know what value you're looking for. Don't wait until after the proposals are received to bring up the prospect of trade-offs. Yes, that's obvious, but I'll bet it happens more often than not.

As a price analyst, I have to admit that I introduce my own subjectivity into the process. For example, I won't hold up an award for a 2-month audit of a contractor's overhead rate. With deference to the outstanding Defense Acquisition University pricing courses, I don't need to do a regression analysis to anticipate the contractor's business profile. Besides, I can always get an audit later and resolve issues during one of the ubiquitous changes. The learning curve analysis may shave big bucks off a Detroit automotive assembly line operation, but a National Industries for the Severely Handicapped workshop manufacturing Army equipment is more likely to experience a "teaching" curve. A detailed future value of money analysis looks great on a spreadsheet, but it only works if interest rates are consistently rising. (By 13 percent, if you believe the economic model. Check it out. If you know where this utopia is, we need to talk.) Time is of the essence. After all, time is value. A contract delay at this stage of the game translates into months of depriving the warfighter of the latest technology and equipment — that's not value.

Finally, a word about where the home economics approach to contract pricing does not work. I'm advocating a broad,

all-encompassing approach to pricing using inherent market conditions. And even though I'm theorizing that contract pricing emulates home economics to a large extent, I'm in no way alleviated from the responsibility of documenting my conclusions. This is where the similarity ends. I've given up asking my wife for her justification for buying the two hundred pounds of bird seed (apparently it was on sale), but when it comes to contract pricing, I can't afford such lapses in judgment. Your best and most innovative efforts are for naught if the Government Accountability Office shows up one day asking for a copy of your price analysis and you don't have one.

Chris Burchstead is a Procurement Analyst at the U.S. Army Research, Development and Engineering Command Acquisition Center, Natick, MA. He can be reached at DSN 256-4622 or chris.burchstead@us.army.mil.

# Surface Deployment and Distribution Command (SDDC) — Making a Difference for Our Soldiers

## Rosemary Kemp

SDDC is responsible for global surface deployment command and control and distribution operations to meet national security objectives in peace and war. The SDDC Acquisition Center, Alexandria, VA, awards and administers global distribution services contracts for DOD, including worldwide movement of military and civilian privately owned vehicles (POVs) and personal property storage.

Principal Assistant Responsible for Contracting Frank Giordano oversaw the recent award by William Mills, Contracting Officer (KO), and Craig Robinson, Chief, SDDC Contracting Center, for 22 performance-based contracts under the \$1.2 billion Universal Services Contract 05 program.



#### ARMY AL&T

This commercial liner service is the primary source of cargo movements for *Operations Enduring* and *Iraqi Freedom*, Hurricane Katrina and the Pakistan earthquake humanitarian relief aid, and other military exercises and unit moves including specialized transportation requirements for Afghanistan, Iraq and Qatar.

Loading and unloading vessels safely and timely is a key role in preparing Soldiers for worldwide combat. Seven contracts and numerous basic ordering agreements provide these stevedoring and related terminal services (S&RTS) to SDDC transportation terminals at Sunny Point, NC; Charleston, SC; Beaumont, TX; Concord, CA; Seattle, WA; and Jacksonville and Cape Canaveral, FL. S&RTS KOs Kathleen Jones, Cathy Keith, Robin Thomas, Joyce Koon, Connie Finnegan, Ron Shepard and Bryan Stroud ensure that millions of tons of unit equipment and supplies reach their destinations on time.

Kathleen Jones awarded the 10-year award term Global POV Contract (GPC), a \$1.9 billion program, for the worldwide logistics management, transportation and storage of POVs belonging to service members and DOD civilian employees. Considering POVs as major possessions, the shipment of POVs on time and damage-free is seen as a significant quality-of-life issue. This award term contract has proven very successful in keeping the contractor highly motivated in providing outstanding service for the U.S. service member, even going beyond the basic contract requirements. As an example, despite making every effort to safeguard POVs from Florida and Gulf Coast hurricanes, unavoidable damages occurred. Though the contract did not hold the contractor liable for damages caused by acts of nature, the contractor compensated members for POV damage. This act of goodwill minimized the financial burden on the service members, many of whom had suffered significant loss and damage to their homes, other property or both. In addition, GPC successfully managed two major Army unit moves, the 1st and 2nd Infantry Divisions from Hawaii and Schweinfurt, Germany, respectively. This resulted in a surge of 13,500 POV shipments over the summer peak season, while continuing to achieve customer satisfaction and ontime delivery rates that exceeded 96 percent.

KO Ray Jones awarded SDDC's primary *Federal Acquisition Regulation (FAR)*-based contract, meeting DOD's surface transportation needs for movement of DOD freight traffic and U.S. government shipments of foreign military sales material throughout CONUS. The Tailored Transportation Contract for Freight of All Kinds (TTC/FAK) provides reliable, cost-effective CONUS movement of DOD freight by



Contractors unload a Chinook helicopter from a U.S. Navy ship at a commercial port so it can undergo needed repairs. (Photo courtesy of SDDC.)

truck. The TTC/FAK contracts represent the first successful transition from guaranteed traffic tendered rates to *FAR*-based contracts for all long-term or recurring DOD surface freight transportation requirements. The TTC has 70 contracts and incorporates provisions that will transition 19 Defense Logistics Agency depots from TTC/FAK to the Defense Transportation Coordination Initiative, once implemented by the U.S. Transportation Command.

For more information, contact Rosemary Kemp at (703) 428-2036/DSN 328-2036 or kempr@sddc.army.mil.

Rosemary Kemp is an SDDC Business Support Division Procurement Analyst.

## Contracting and Acquisition Career Program Roadmap

#### Kimberly Buehler

In 2005, Deputy Assistant Secretary of the Army for Policy and Procurement Tina Ballard commissioned a group of strategically selected senior leaders to provide direction and insight into several issues facing the Army contracting and acquisition community, and workforce development was one of the key issues. The goal was to provide clear and concise career development guides for the community. The result of these efforts is the *Contracting and Acquisition Career Program Roadmap*, published in June 2006. The *Roadmap* offers careerists an understanding of education, certification, leadership competency skills and career advancement criteria for each career field series:

- 1102 Contracting
- 1105 Purchasing

- 1150 Production, Quality and Manufacturing
- 1103 Industrial/Contract Property Management

The *Roadmap's* overarching objective is to develop career guides for the contracting and acquisition workforce and to ensure that the Army has well-trained and highly skilled professionals empowered to carry out its mission. It also helps careerists make informed decisions about their career at each level — from intern to senior executive service.

The *Roadmap* supplements the Contracting and Acquisition Army Civilian Training, Education and Development System (ACTEDS) and the individual development plan (IDP). Careerists should use the *Roadmap*, ACTEDS and IDP to shape their near- and long-term career developmental goals. The *Roadmap* helps careerists, supervisors and Army contracting senior leaders share an understanding of an individual's career expectations and goals. The *Contracting and Acquisition Career Program Roadmap* is available now to help careerists make critical career choices.

To review the *Contracting and Acquisition Career Program Roadmap*, please visit the Contracting Career Program (CP-14) Office Web site at http://asc.army.mil/docs/briefings /2006\_pcots/060713\_panel/creagh\_Roadmap\_final.ppt#277 ,1,Slide 1. To review a *Roadmap* briefing from the July 2006 Procuring Contracting Officer Training Symposium, go to http://asc.army.mil/events/conferences/2006/pco/briefs.cfm.

#### **Competitive Professional Development (CPD)**

CPD offers career development and training opportunities for CP-14 personnel including university training, executive education, short-term training and developmental assignments. The target audience is CP-14 professionals serving in the 1102, 1103, 1105 and 1150 series who can benefit from advanced education in business-related subjects or experiential assignments to broaden perspectives. Selection for CPD opportunities is competitive. CPD covers all training costs including tuition, books and required travel.

For information about CPD and training, education and development opportunities, visit the CP-14 Web site at http://asc.army.mil/programs/cp/default.cfm.

# Frequently Asked Questions About Defense Acquisition University (DAU) Contracting (CON) Level II Curriculum

**Q:** Why did DAU change the CON Level II curriculum? **A:** DAU revised the CON Level II core curriculum in response to the *Defense Procurement and Acquisition Policy*  *Memorandum*, dated Dec. 23, 2005. The new curriculum incorporates the new competencies necessary to further develop a motivated and agile workforce of contract business strategists.

Q: What is the new curriculum?

A: The Level II Contracting curriculum, which consisted of CON 202 — Intermediate Contracting; CON 204 — Intermediate Contract Pricing; and CON 210 — Government Contract Law, is replaced by five new core courses:

- CON 214 Business Decisions for Contracting (distance learning, 24 hours).
- CON 215 Intermediate Contracting for Mission Support (classroom, 8 days).
- CON 216 Legal Considerations in Contracting (distance learning, 30 hours).
- CON 217 Cost Analysis and Negotiation Techniques (distance learning, 40 hours).
- CON 218 Advanced Contracting for Mission Support (classroom, 9.5 days).

CON 214 is a prerequisite for CON 215 and CON 214-217 are prerequisites for CON 218.

Q: I did not complete all CON Level II courses under the old CON curriculum. Do I have to retake all DAU CON Level II training under the new curriculum? A: No. DAU maintains a listing of predecessor courses. Students who have completed predecessor courses may use them to meet prerequisite requirements and/or receive credit for them toward *Defense Acquisition Workforce Improvement Act* certification. The following is the course list with predecessors for the new CON Level II curriculum:

- CON 214 and 215 (CON 202)
- CON 216 (CON 210)
- CON 217 (CON 204)

DAU also developed the CON Level II conversion matrix by matching the former curriculum objectives to the new curriculum's competencies and learning objectives. Since the new curriculum continues the conversion from stovepiped to integrated training, there is not a one-for-one course conversion.

Q: What do I need to complete for CON Level II certification? A: A complete list of certification requirements can be found on the DAU Web site at http://www.dau.mil/ catalog/default aspx. For information, contact Kimberly Buehler at (703) 805-1254/DSN 655-1254 or kimberly.buehler@us.army.mil.

Kimberly Buehler is the Civilian Recruitment Manager for the Contracting and Acquisitions Career Program.

#### Former Acquisition Leader Wins Presidential Award



Daniel G. Mehney, former Director and Principal Assistant Responsible for Contracting of the U.S. Army TACOM Life Cycle Management Command (LCMC) Acquisition Center, capped off a brilliant career after receiving the prestigious Presidential Rank Award at a Pentagon ceremony

on Jan. 20, 2006. Mehney was cited for his "exceptional long-term accomplishments."

The Presidential Rank Award recognizes strong leaders, professionals and scientists who achieve results and consistently demonstrate strength, integrity and relentless commitment to excellence in public service. It is considered the most prestigious recognition afforded to career professionals. Mehney previously received this award in 1999, and was also recognized for exceptional service in 2004 with a DOD Certificate of Appreciation signed by then Deputy Secretary of Defense Paul Wolfowitz, "For outstanding teamwork and exceptional contributions in contracting in support of the reconstruction of Iraq."

On June 2, 2006, after 40 years of government service, Mehney retired from the TACOM LCMC Acquisition Center. We honor his dedication to service, his commitment to excellence and his caring leadership. He will be missed.

#### **DAR** Council Corner

Barbara Binney

#### **Combating Human Trafficking**

The Trafficking Victims Protection Reauthorization Act of 2003, as amended by the Trafficking Victims Protection

*Reauthorization Act of 2005*, addresses the victimization of countless men, women and children in the United States and abroad. The U.S. government believes that its contractors can help combat human trafficking. 22 U.S.C. 7104(g) requires contracts to contain a clause allowing the agency to terminate if the contractor or subcontractor engages in severe forms of human trafficking, has procured a commercial sex act or used forced labor in the performance of the contract. For this purpose, "contractors" includes the contractor's employees.

To implement the law, the Civilian Agency Acquisition Council and the DAR Council have added Federal Acquisition Regulation (FAR) Subpart 22.17 with an associated clause at 52.222-50, which address combating human trafficking. The interim rule applies to contractors awarded service contracts (other than commercial service contracts under FAR Part 12). Such contractors must develop policies to combat human trafficking. The clause lists remedies, including termination, which may be imposed on contractors that support, promote or fail to monitor the conduct of their employees and subcontractors. Federal Acquisition Circular (FAC) 05-09, which contains the interim rule on combating human trafficking, can be found at http:// acquistion.gov/far/fac/fac2005-09.pdf. A recorded webcast on the subject is available at http://view.dau.mil/dauvideo/ view/eventlisting.jhtml?eventid=1053.

#### Submission of Cost or Pricing Data on Noncommercial Modifications of Commercial Items – *FAR* Case 2004-035

This final rule amends the interim rule issued in FAC 2005-004 and implements an amendment to 10 U.S.C. 2306a. The policy requires that the exception from the requirement to obtain certified cost or pricing data for a commercial item does not apply to noncommercial modifications of a commercial item that are expected to cost, in the aggregate, more than \$500,000 or 5 percent of the total contract price, whichever is greater. Public Law 108-375 (Section 818), the Ronald W. Reagan National Defense Authorization Act of Fiscal Year 2005, applies to submitted offers, and to contract and subcontract modifications made on or after June 1, 2005. This new policy results from a statute that changed 10 U.S.C. 2306, applying only to contracts, task or delivery orders funded by DOD, NASA and the U.S. Coast Guard. However, the policy does apply to contracts awarded, tasked or delivery orders placed on their behalf by an official of the United States outside of those agencies because the statutory requirement of Section 818 applies to the funds provided by those organizations. The change to the interim rule clarifies the policy

to ensure that it is applied properly. The threshold in the rule applies to an instant contract action, not to the total value of all contract actions and, as applicable to subcontractors, the threshold applies to the value of the subcontract, not the value of the prime contract. This final rule was published in the *Federal Register June 28, 2006*, in the *FAC 2005–10*.

## Defense Acquisition University (DAU) Webcast Regulations

This is a joint Defense Procurement and Acquisition Policy/ DAU video magazine highlighting the latest in the *FAR* and the *Defense Federal Acquisition Regulation Supplement* (*DFARS*) regulations. It can keep you up-to-date on what's happening in the *FAR/DFARS* community. This 30-minute video, part of the DAU *Knowledge Sharing Channel*, debuted July 17, 2006, and is updated monthly. Consider counting this as part of your continuous learning points. To view the video, go to http://view.dau.mil/dauvideo/view/ eventlisting.jhtml?eventid=1054.

For more information, contact Barbara Binney at (703) 604-7113/DSN 664-7113 or barbara.binney@saalt.army.mil.

Barbara Binney works for the Office of the Deputy Assistant Secretary of the Army (Policy and Procurement) and is a DAR Council member.

# Correction

In *Army AL&T* Magazine's July-September 2006 Special Contracting Insert, we inadvertently misidentified one of the people in the photograph at the top of Page 16. The photograph and the correct names are shown below. We apologize for any inconvenience.

#### Army AL&T Magazine Staff



A. CELCMC PARC Edward Elgart tours a ground station relay facility at Fort Monmouth with CELCMC Command Sergeant Major Ray D. Lane, recently returned from Iraq, along with MAJ Lisa Carter and Contracting Officer John Onieal. (Photo by Russ Meseroll, Chenega Technology.)

# **ALTESS News**

## Ammunition Enterprise Portal (AEP) Brings Full Access

# Michael E. Pittman

In the past, the ammunition community developed various information technology (IT) applications for specific mission and organizational assignments. These were distinct functional and organizational computer programs covering numerous financial, technical and administrative applications. At the time, organizational boundaries, geography, technological limits and user relationships required unique user interfaces, data definitions, accessibility and database management systems.

Today there are stand-alone applications exchanging data at the application level, forming the initial enterprise architectures for the future. Attempts to link these and older systems led to complex issues such as data synchronization and integrity, nonstandard data definitions and data availability. These systems were so poorly interconnected that data had to be exported from one application, often manipulated and then imported into another application. If there was an electronic data exchange, it generally was so tightly coupled that changes were isolated to specific systems without considering the impact on the entire enterprise architecture.

The first step to a fully integrated infrastructure consistent with DOD operational architecture and security requirements is to standardize collecting, identifying, consolidating and assimilating applications into a data-centric environment. The data would then be controlled by the authoritative source and all users would access it through Web services.

AEP brings full enterprise access to the ammunition community's administrative, technical and financial data through a single logon, Web-based portal, while maintaining appropriate security, copyright, proprietary, ownership and distribution protection.

#### AEP

AEP was established by the Program Executive Office for Ammunition (PEO Ammo) to integrate people, processes and infrastructure from PEO Ammo, the Joint Munitions Command and the U.S. Army Armament Research, Development and Engineering Center to support the mission of developing, procuring and supplying ammunition to warfighters. PEO Ammo's intent is to transition the ammunition community to a fully integrated enterprise environment that manages ammunition information as a tangible critical resource. AEP's architecture was designed with a user's work patterns and workflow processes in mind, and is reliable, adaptable, scalable, and business and technology driven. AEP provides a single access for all DOD ammunition organizations, applications/databases and knowledge management tools.

#### Core Areas

AEP has two core areas: the Ammunition Enterprise Systems (AES) and the Communities of Participation (COP). AES provides the ammunition community's financial, technical and administrative systems and applications. AES applications can be fully integrated, interfaced or linked. Fully integrated applications share the same database structure and schema, data definitions, front-end and user interface functionality. Interfaced systems may have the same database application, structure and data definitions, but have a different user interface. AES contains the following modules:

- Web Ammo Models' (WAMs') managerial and analytical tools provide the development and justification for DOD ammunition procurement requirements. WAM hosts the only consolidated ammunition data source including asset postures for active ammunition items, projected assets, training and Army war reserve requirements.
- Engineering Support of Items in Production offers a budgeting, tracking and reporting tool.
- Program Management Information System brings an ammunition integrated business and production data management tool for planning, tracking and reporting on execution data. It also develops component level and end-item production schedules.
- Acquisition Planning Module (APM) manages contract solicitation artifacts and stores the various milestone data. APM assists in procurement package preparation, monitors contract preparation status, creates reports, helps procurement contracting officers and acquisition analysts with pre-procurement planning and ensuring required documentation is completed. APM is common access card (CAC) enabled, requiring only the CAC and pin for login.

COP is a collaborative knowledge management environment allowing geographically dispersed and organizationally diverse teams to communicate and fully use shared information; work in TeamRooms; perform document storage and configuration management, calendar/event scheduling and tasking. This portal section is built around a TeamRoom environment with five collaborative areas that include: messaging, document management, tasking, calendar/event scheduling and discussion forum.

Each area links to other areas, providing a virtual workspace. The TeamRoom's foundation is the document management area, which allows for storage, retrieval and configuration management of team documents. Individual profiles drive the security and accessibility down to the document level, while standard content management structure and data definitions provide a framework for data storage, access, sharing and maintenance.

Web Conferencing is available through the Virtual Insight implementation of Oracle<sup>®</sup> Collaboration Suite (OCS). Future plans call for a transitioning TeamRooms to an upgraded capability. OCS will provide tools that live within the DOD architecture and enable cross-department, crossfunctional, end-to-end interoperability of business systems and processes in government and industry. Some of the enhanced features include file sharing, content search, e-mail, calendar, voice mail, and wireless and voice.

AEP is the gateway to the enterprise environment providing Web-based accessibility to all ammunition community members, crossing organizations and service boundaries to access data — anytime and anywhere — through Team-Rooms and Web conferencing. AEP also offers access to applications supporting everyday business processes within our community through a single point of entry, regardless of host location. We are continually working to improve the functions and features available to our users.

AEP was designed, built and is maintained by the Project Officer Acquisition, Logistics and Technology Enterprise Systems and Services (PO ALTESS), Radford, VA. PO ALTESS champions efforts in the acquisition information management community and receives its guidance and direction from the PEO Enterprise Information Systems, Fort Belvoir, VA. For more information about AEP, contact Michael E. Pittman at (540) 731-3419/DSN 231-3419 or michael. e.pittman@us.army.mil.

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