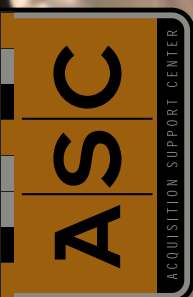


# ARMY AL&T

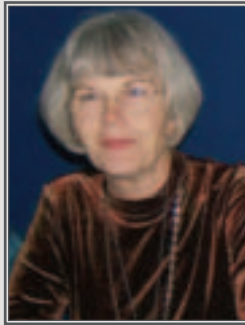
January - February 2005



## Rebuilding Infrastructure in Iraq



## From the Army Acquisition Executive In Memoriam



Ms. Barbara Heald



LCDR Keith E. Taylor, USNR

With this issue dedicated to the rebuilding of Iraq and the lessons we are learning, there is very sad news. On Saturday, Jan. 29, 2005, two valued and beloved members of the Project and Contracting Office in Baghdad were killed by a rocket attack on the U.S. Embassy in Iraq. We join their families in mourning their loss.

Both Barbara and Keith were top-notch professionals. They were dedicated, committed, respected and admired. Both believed in the mission of creating a free and democratic Iraq. They believed in the reconstruction of Iraq. They believed they could make a difference — and they did.

President Abraham Lincoln at Gettysburg, PA, November 1863, said, "It is rather for us to be here dedicated to the great task remaining before us — that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion — that we here highly resolve that these dead shall not have died in vain ... ."

To properly honor the lives of Barbara and Keith and acknowledge their sacrifices, we can offer no better tribute than to complete the rebuilding of a free Iraq. By completing this important work — their work — the spirit they demonstrated every day of their lives will be reflected in the lives of the Iraqi people for generations to come. That is their ultimate legacy. They exceeded the challenge of life and of work. It is now our responsibility to follow their lead and continue what they cannot.

May God bless Barbara and Keith. May He bless their families and provide them comfort always.

May He bless all who have been placed in harm's way. And, may God continue to bless our great Nation.

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



# ARMY AL&T

January - February 2005

# ACQUISITION, LOGISTICS & TECHNOLOGY

**PB 70-05-01**

**CLAUDE M. BOLTON JR.**

Assistant Secretary of the Army for Acquisition, Logistics and Technology and Army Acquisition Executive

**EDITORIAL BOARD**

**LTG JOSEPH L. YAKOVAC JR.**  
Director, Army Acquisition Corps

**LTG STEVEN W. BOUTELLE**  
Chief Information Officer, G-6

**LTG RICHARD A. HACK**  
Deputy Commanding General, AMC

**MARK LEWIS**  
Assistant DCS, G-1

**MG LESTER MARTINEZ-LOPEZ**  
Commanding General  
U.S. Army Medical Research and Materiel Command

**TINA BALLARD**  
Deputy Assistant Secretary for Policy and Procurement, Office of the ASAALT

**WIMPY PYBUS**  
Deputy Assistant Secretary for ILS Office of the ASAALT

**DR. THOMAS H. KILLION**  
Deputy Assistant Secretary for Research and Technology Office of the ASAALT

**DR. MICHAEL O'CONNOR**  
Director of R&D  
U.S. Army Corps of Engineers

**DONALD DAMSTETTER**  
Deputy Assistant Secretary for Plans, Programs and Resources Office of the ASAALT

**MICHAEL I. RODDIN**  
Executive Secretary, Editorial Board

**EDITORIAL STAFF**

**MICHAEL I. RODDIN**  
Editor-In-Chief

**MAJ DENNIS B. ELLISON**  
Operations Officer/Technical Editor

**CYNTHIA D. HERMES**  
Executive Editor

**ELIZABETH CONNELL**  
Managing Editor

**DEBBIE FISCHER-BELOUS**  
Departments Editor

**WHITNEY F. KOENINGER**  
Deputy Departments Editor

**MEG WILLIAMS**  
Web Editor

**NOJAE KIM**  
Layout and Graphic Design

**To contact the Editorial Office:**

Call (703) 805-1034/1035/1038/1007 or  
DSN 655-1034/1035/1038/1007

Articles should be submitted to:  
DEPARTMENT OF THE ARMY, ARMY ALT, 9900  
BELVOIR RD, SUITE 101, FORT BELVOIR, VA 22060-5567.

Our fax number is (703) 805-4218.

E-mail: [army.alt.magazine@asc.belvoir.army.mil](mailto:army.alt.magazine@asc.belvoir.army.mil).

*Army AL&T* (ISSN 0892-8657) is published bimonthly by the ASAALT. Articles reflect views of the authors and not necessarily official opinion of the Department of the Army. The purpose is to instruct members of the Army acquisition workforce relative to AL&T processes, procedures, techniques and management philosophy and to disseminate other information pertinent to their professional development. Private subscriptions and rates are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 or (202) 512-1800. Periodicals official postage paid at Fort Belvoir, VA, and additional post offices. POSTMASTER: Send address changes to DEPARTMENT OF THE ARMY, ARMY ALT, 9900 BELVOIR RD, SUITE 101, FORT BELVOIR, VA 22060-5567. Articles may be reprinted if credit is given to *Army AL&T* and the author. Unless specifically requested, photo credits are not given. Approved for public release; distribution is unlimited.

**Cover Story**



**Corps of Engineers Puts More Megawatts on the Grid**

Thomas A. O'Hara

**Page 2**

**Features**

**Page 40**

**Interview With U.S. Air Force MG Darryl A. Scott, DCMA**

Elizabeth Connell



<b>LEAD Repowers Deploying Soldiers</b> .....	<b>7</b>
Kim Russell and Mark Sheffield	
<b>Reconstruction of Water Resources in Iraq</b> .....	<b>11</b>
Thomas A. O'Hara	
<b>Restoring the Oil Infrastructure in Iraq</b> .....	<b>16</b>
Steven E. Wright	
<b>TeleEngineering — Providing Soldier Reachback Capability to USACE/ERDC Experts</b> .....	<b>22</b>
Rhonda Taylor	
<b>A Commander's Best Friend — Engineer Mine Detection Dogs on the Battlefield.</b> .....	<b>26</b>
James Pettit and CPT Ronald J. Hughes	
<b>Captured Enemy Ammunition Program to Destroy Enemy Munitions and Unexploded Battlefield Ordnance</b> .....	<b>30</b>
Betsy J. Weiner	
<b>TARDEC Helps to Keep EOD Soldiers Safe</b> .....	<b>33</b>
Monica Kapso and Paul Mehney	
<b>The Joint Common Missile Project — Program Management Lessons Learned.</b> .....	<b>36</b>
MAJ Robert F. Mortlock	
<b>Two Sherpa 1K Systems Fielded in Iraq</b> .....	<b>48</b>
MAJ John M. O'Regan and Benjamin Rooney	

**Departments**

<b>Career Development Update</b> .....	<b>54</b>
<b>News Briefs</b> .....	<b>56</b>
<b>ALTESS News</b> .....	<b>60</b>
<b>Worth Reading</b> .....	<b>63</b>
<b>Contracting Community Highlights</b> .....	<b>64</b>

For more news, information and articles, please visit the ASC Web site at <http://asc.army.mil>. Click on **Portal** and then click on the **AL&T Magazine** link under **Publications**.

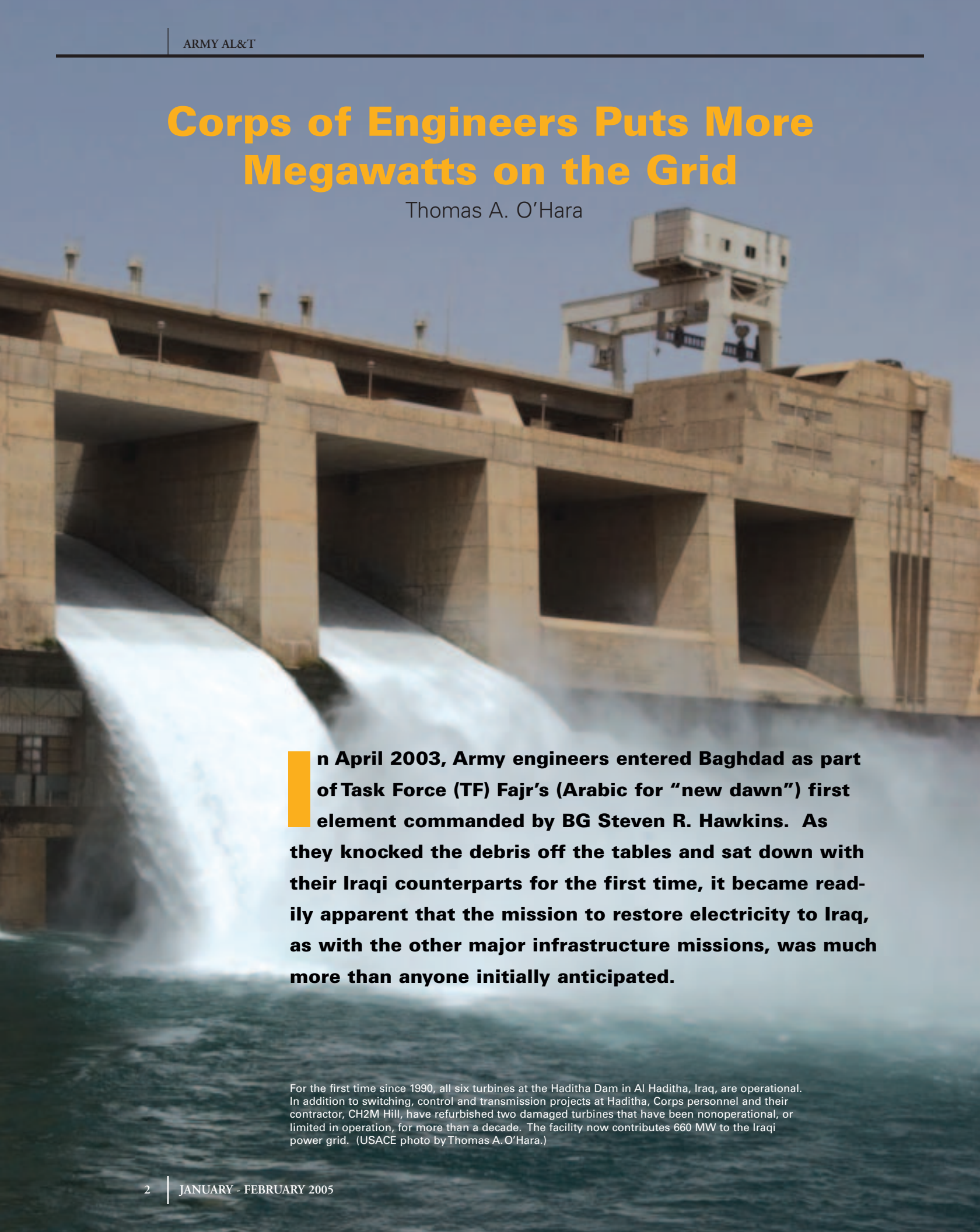
*This medium is approved for official dissemination of material designed to keep individuals within the Army knowledgeable of current and emerging developments within their areas of expertise for the purpose of enhancing their professional development.*

By order of the  
Secretary of the Army  
**PETER J. SCHOOMAKER**  
General  
United States Army  
Chief of Staff

Official:  
  
**SANDRA R. RILEY**  
Administrative Assistant to  
the Secretary of the Army  
0503207

# Corps of Engineers Puts More Megawatts on the Grid

Thomas A. O'Hara



**In April 2003, Army engineers entered Baghdad as part of Task Force (TF) Fajr's (Arabic for "new dawn") first element commanded by BG Steven R. Hawkins. As they knocked the debris off the tables and sat down with their Iraqi counterparts for the first time, it became readily apparent that the mission to restore electricity to Iraq, as with the other major infrastructure missions, was much more than anyone initially anticipated.**

For the first time since 1990, all six turbines at the Haditha Dam in Al Haditha, Iraq, are operational. In addition to switching, control and transmission projects at Haditha, Corps personnel and their contractor, CH2M Hill, have refurbished two damaged turbines that have been nonoperational, or limited in operation, for more than a decade. The facility now contributes 660 MW to the Iraqi power grid. (USACE photo by Thomas A. O'Hara.)

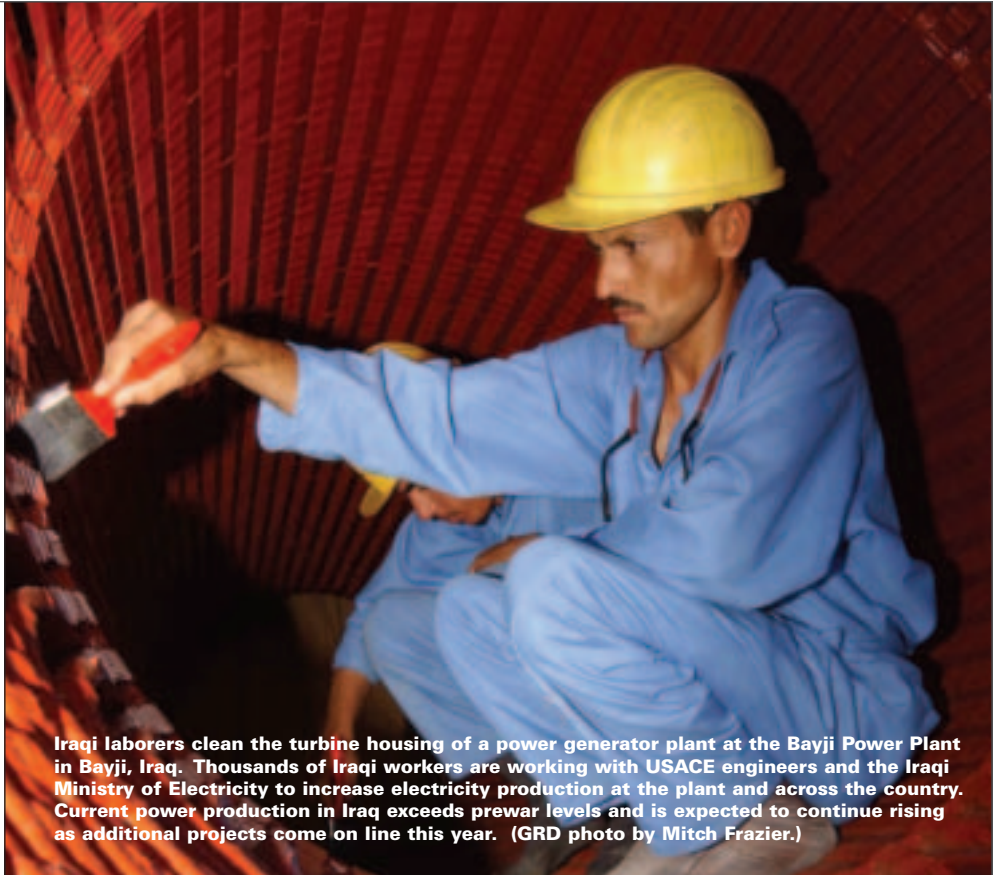
Prior to the hostilities associated with *Operation Iraqi Freedom*, Iraq's power infrastructure was already substandard because of deterioration and lack of investment under Saddam Hussein's regime.

Eighteen major power stations throughout Iraq had the potential to produce 10,000 megawatts (MW) of capacity. However, because of infrastructure degradation from neglect by the regime, the average prewar system production was only 4,400 MW. With the needs of Hussein's military facilities and Baghdad drawing priority from this system, peak demand was as high as 6,200 MW — 40 percent over capacity. This difference meant that most of Iraq was under limited power even before hostilities began. In addition, since Hussein often used the limited capacity to reward or punish, many outlying areas received electricity for only a few hours a day, while the capital and its Ba'ath Party members usually operated without interruption.

Complicating this initial effort was the National Distribution Center's



Iraqi employees stack rebar for the final phase of construction at the Basrah Water Treatment Plant in southern Iraq. Nearly 25 Iraqi laborers have worked on the \$1.3 million project to help restore basic service levels for the Iraqi infrastructure. (Gulf Region Division (GRD) photo by Bill Roberts.)



Iraqi laborers clean the turbine housing of a power generator plant at the Bayji Power Plant in Bayji, Iraq. Thousands of Iraqi workers are working with USACE engineers and the Iraqi Ministry of Electricity to increase electricity production at the plant and across the country. Current power production in Iraq exceeds prewar levels and is expected to continue rising as additional projects come on line this year. (GRD photo by Mitch Frazier.)

destruction. The loss, not from Coalition Forces bombing but from looters following the conflict, stripped the Iraq power grid's nerve center of computers, communications and other assets needed to control and monitor the system. Controllers were forced to coordinate with regional distributors by telephone — another service that was severely limited — and some regions failed to comply because of local resistance, threats or, in some cases, murder of commission employees by remaining Ba'ath loyalists.

**New Beginnings**

While the U.S. Army Corps of Engineers' (USACE) 249th Engineering Battalion (Primer Power) took on immediate and specific in-field power hurdles, their

USACE counterparts immediately began coordinating with existing Iraqi

power experts to develop the overall energy challenge solution.

As early as mid-July 2003, in combined efforts with the Ministry of Electricity and with initial projects coordinated through contracts with the U.S. Agency for International Development (USAID), USACE had restored national capacity to 3,200 MW on average, 70 percent of the prewar level. While this was still below the level prior to the conflict, most of Iraq's outer cities were already receiving more power than they were used to because of the more

equitable sharing of national assets. Baghdad, however, which now had to share limited resources with the rest of

Prior to the hostilities associated with *Operation Iraqi Freedom*, Iraq's power infrastructure was already substandard because of deterioration and lack of investment under Saddam Hussein's regime.

the country, had to adapt to a somewhat limited supply.

“In many accounts we’re actually at prewar levels, if not better, already,” said Peter Gibson, Coalition Provisional Authority (CPA) senior advisor for the Commission of Electricity, in July 2003.

In a summit meeting held July 16, 2003, at the Iraqi Forum conference center in Baghdad, coalition advisors and Commission of Electricity deputies met, for the first time, with power distribution representatives from 15 separate Iraqi regions, to present a plan for the system’s long-term recovery.

“Iraq is a wealthy country that is temporarily poor,” said Paul Bremer, CPA Administrator, as he addressed the group for the first time. “We have a big challenge that we will face together.”

The conference’s purpose was to introduce a new energy policy, to summarize activities to date and to direct power distribution, load-shedding plans and security measures to allow an equitable power utility for the Iraqi people.

The job to recover the country from this damage was a united effort led by Gibson and Karim Sahan, Interim



Iraqi Prime Minister Ayad Allawi thanks USACE and the United States’ efforts in rebuilding the nation’s electrical infrastructure as Minister of Electricity Dr. Aiham Alsammarae shakes hands with then GRD Commander MG Ronald Johnson. (USACE photo by Thomas A. O’Hara.)

Electricity Commission Director. After 2 months of patchworking the system back to current capacity, the next step was outlying operating provisions, and a long-term plan, to eventually restore the nation to full capacity as well as to educate its citizens about the need to cooperate to achieve their goals.

Acts of vandalism and sabotage to the system throughout the country hindered the coalition team’s effort.

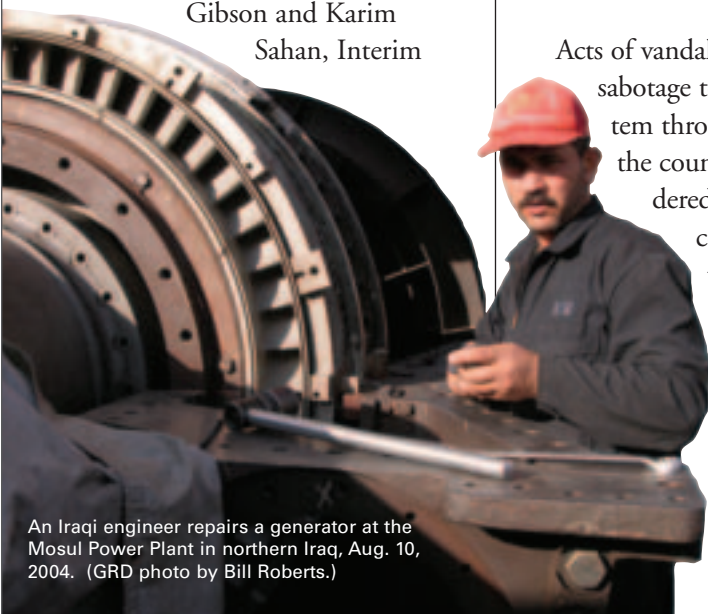
In many instances, several kilometers of high-power cabling were torn down by looters to recycle the copper inside. This effort, resulting in mere dollars

for the looters, caused thousands of dollars of damage to the infrastructure as well as unnecessary downtimes and limitations to the system that provided energy to the Iraqis.

Because of these attacks, power system security became a priority for the CPA team and was specifically addressed in the Statement of Policy presented by Gibson and Sahan. “Acts against the infrastructure are considered acts against the Iraqis,” said Gibson.

“Iraq is a wealthy country that is temporarily poor,” said Paul Bremer, CPA Administrator. “We have a big challenge that we will face together.”

The commission’s goal was to restore the national capacity to close to 4,000 MW by summer’s end 2003. One MW of electricity equates to enough electricity to support 3,000 Iraqi homes, compared to approximately 1,000 homes in the United States.



An Iraqi engineer repairs a generator at the Mosul Power Plant in northern Iraq, Aug. 10, 2004. (GRD photo by Bill Roberts.)

## Restoring Iraqi Electricity

In September 2003, as the grueling summer heat mounted, plagued by various shortages and blackouts, CPA officials and USAID decided a separate effort was necessary to expedite overall reconstruction efforts. Following the successful model demonstrated by USACE under TF Restore Iraqi Oil, the USACE tasked Hawkins to form the new TF Restore Iraqi Electricity (RIE).

The group of 80 USACE engineers and specialists hit the ground running to pursue more than 40 separate new and rehabilitated generation, transmission, distribution and control system projects — a program valued at more than \$1.5 billion. In short time, an additional 1,000 MW was added to the Iraqi energy grid.

That effort meant that the entire Iraqi population was getting roughly 18 hours of electricity a day — 50 percent more than what they were accustomed to. But TF RIE didn't stop there.

Since fall 2003, TF RIE efforts resulted in new projects as additional funds became available. It has also orchestrated controlled operations and maintenance of currently operating systems during the off-peak winter season to prepare for the higher load that comes with the typical summer demand.

As the TF has matured, so has the USACE command and control presence in Iraq. On Jan. 25, 2004, the new USACE Gulf Region Division (GRD) (Provisional) was activated, which brought division-level assets onboard, as a resource multiplier, and grouped TF RIE and other operating engineering teams under one command.

## Tough Summer

The combined TF RIE, USAID and Ministry of Electricity effort was on

pace to meet their new 6,000-MW capacity goal by July 2004 when insurgent efforts peaked in April 2004. Sporadic terrorist attacks on infrastructure, kidnappings and murder of contractor personnel deterred the overall effort but did not diminish the coalition's determination.

In early June 2004, combined efforts in restoring turbines and additional transmission systems brought the Haditha Dam in western Iraq to full capacity for the first time since 1990, adding a potential of 660 MW to the Iraqi power grid.

Across the country, more than 5,300 miles of conductor has been replaced or restored, representing the equivalent of enough conductors to cross the United States twice. This improvement provided added reliability and redundancy to the Iraqi power grid and minimized the

impacts of further terrorist attacks against the infrastructure.

Days before the official transfer of Iraq sovereignty from CPA to the interim government, Prime Minister Ayad Allawi stood at the newly improved Qudas power plant in northern Baghdad and thanked USACE for its determination to improve the quality of life for all Iraqis.

The project, executed by the "Engineering Corps of the U.S. military" represented one of many "presents, for the people of Iraq from the United States," said Allawi.

The capacity-generating effort was challenged by another factor of a free Iraq — emerging markets and the renewed buying power of the average Iraqi. "The demand line began to rise," said LTC Jeffrey Ogden, TF RIE Director. "People are buying and using more goods and

Across the country, more than 5,300 miles of conductor has been replaced or restored. ... This improvement provided added reliability and redundancy to the Iraqi power grid and minimized the impacts of further terrorist attacks against the infrastructure.



Partnering for a Better Iraq. USACE and Ministry of Municipalities and Public Works (MMPW) leaders sign an Iraqi Internship Program Memorandum of Understanding to promote capacity-building potential for Iraq. (From left to right) Mahmoud Ahmed, MMPW Director General for Water/Planning and Follow-up; Ayad Al-Safi, MMPW Deputy Minister for Technical Affairs; Her Excellency Minister Nesreen Berwari, MMPW Minister; MG Ronald L. Johnson, then USACE GRD Commander; and Zana Rawandoozi, MMPW Director General for Human Services, sign this important implementing document. (GRD photo by Maria Or.)



USACE personnel work with local Iraqi workers to construct new switching facilities to augment rehabilitated power generators to assist the coalition partnership in reaching its 6,000 MW power generation goal by June 2005. (GRD photo by Thomas A. O'Hara.)

services that require more electricity, putting even more demand on the grid, which we are working hard to fill," said Ogden.

In late September 2004, the final stage for many of RIE's projects began as the newly constructed facilities were inventoried and turned over, officially, to the Ministry of Electricity.

Additional projects continued to be brought on line and, by October 2004, national capacity hovered near 5,300 MW, a remarkable accomplishment, even by USACE standards.

**Still More to Do**

With the stand-up of the new Iraqi government, the USACE and multinational

presence is no longer seen as an occupier but as a valued partner in the combined effort to rebuild Iraq's infrastructure. Falling under the Iraq Project and Contracting Office, an annex of the U.S. Embassy in Iraq, USACE continues to coordinate its efforts with USAID and Iraqi Ministries.

The GRD RIE Directorate is moving ahead to "put megawatts on the grid." GRD's commitment is surpassed only by the determination of the Iraqi engineers — who still brave local hostilities — as they work to better their own country.

The focus for future projects has moved from capacity-generating priorities to local distribution and transmission

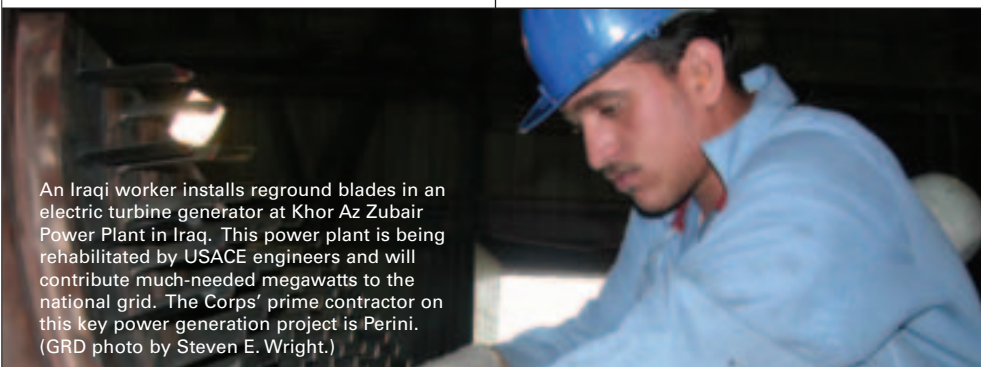
efforts. While insurgency attempts to undermine the effort continue, they are minimized by the ever-improving electrical infrastructure and the additional numbers of Iraqis involved in the rebuilding effort.

Several thousands of local tradesmen and engineers have worked on the more than three dozen TF RIE projects in the past year. If the multiagency team remains on schedule, the system should be able to achieve the 6,000 MW goal by the end of 2005, which will allow the entire country to operate at a higher industrial capacity and provide equitable electricity power levels throughout the country.

In the long term, the commission will upgrade existing facilities and provide added capacity, building a system fully capable of meeting Iraq's total residential and industrial power requirements by 2009.

---

**THOMAS A. O'HARA** is a Public Affairs Specialist for the USACE Omaha District. He served as Deputy Chief of Public Affairs for the GRD in Iraq during summer 2004. He has a B.S. in electrical engineering from the University of Nebraska-Lincoln and an M.B.A. from the University of Nebraska-Omaha. He is a two-time USACE Civilian Journalist of the Year and runner-up for 2004 DOA Civilian Journalist of the Year.



An Iraqi worker installs reground blades in an electric turbine generator at Khor Az Zubair Power Plant in Iraq. This power plant is being rehabilitated by USACE engineers and will contribute much-needed megawatts to the national grid. The Corps' prime contractor on this key power generation project is Perini. (GRD photo by Steven E. Wright.)





# LEAD Repowers Deploying Soldiers

Kim Russell and Mark Sheffield

**I**mages of the global war on terrorism are filled with pictures of Abrams M1 tanks, Bradley Fighting Vehicles, Apache helicopters and up-armored Humvees bristling with weapons. This equipment is undergoing extensive use in Southwest Asia. A common link among these systems is the multitude of supporting generator sets and the Soldiers who operate them.

Letterkenny Army Depot (LEAD) employee Robin Babcock (right) provides training to SGT T. Johnson from B Co., 50th Signal (Sig.) Battalion, 35th Sig. Brigade (Bde.) (Corps) (Airborne) during testing and inspection at Fort Bragg, NC. (U.S. Army photo by PFC Seth Laughter, 35th Sig. Bde. (ABN).)



LEAD employee Bennett Mills puts final touches on a 30-kW generator. (U.S. Army photo by Don Bitner, Depot Photographer.)

The importance of generator sets cannot be overstated for a war that is being fought half a world away in a country with numerous infrastructure challenges. Reliable electric power is the Armed Forces' lifeblood. Without it, all the technical wizardry of modern warfare — the weapons' systems; command, control, communications and intelligence; and logistics support systems — are less than useful.

Mobile electric power generators also power environmental control units necessary to keep running Soldier-essential systems such as tents, showers, medical and food service equipment needed to house, feed and care for Soldiers. Remote maintenance facilities, logistic centers and tactical equipment such as Biological Integrated Detection Systems, weather stations and field hospitals are also powered by mobile generators.

In the Army's current maintenance concept, generator sets are typically repaired and serviced at the unit level. However, the war's increased operations tempo and the sheer number of

assets needing RESET, have provided a very large challenge to many unit motor pools and maintenance support activities.

When the 11th Signal (Sig.) Brigade (Bde.), Fort Huachuca, AZ, returned from Iraq in early 2004, they identified more than 450 generator sets that needed RESET prior to their next deployment. The brigade contacted the U.S. Army Communications-Electronics Command (CECOM) for assistance. CECOM, in turn, contacted Letterkenny Army Depot (LEAD) for support. LEAD had anticipated this challenge and made a commitment to provide Soldiers the necessary support to restore their generators to full operational condition.

LEAD had a well-established generator overhaul capability to support the Patriot RECAP program and other air defense systems. LEAD had also worked with CECOM in developing generator overhaul criteria for Force Provider Systems and had been tasked by CECOM to write national maintenance work

requirements for 13 different generator set engines. Working with CECOM and the 11th Sig. Bde., LEAD developed a statement of work that provided a triage concept to test and inspect generator sets and identify depot-level overhaul candidates.

LEAD initially dispatched a field repair team (FRT) for 4 weeks to complete the technical inspection RESET phase. More than 100 generators were identified as overhaul candidates. Approximately half of these were incrementally evacuated to Letterkenny for remanufacturing, i.e., "0" hours. This large surge of generators provided some interesting challenges to the depot, not the least of which was sufficient floor space to overhaul and repair them. LEAD relied on its experience with Lean manufacturing to overcome these challenges. The 11th Sig. Bde. identified additional requirements, and another team was dispatched to Fort Huachuca to assist the brigade.

The LEAD team worked hand in hand with Soldiers who had deployed with

the generator sets. This provided Soldiers an opportunity to receive depot-level training and gain firsthand knowledge of the repairs accomplished on their equipment. This experience will enable them to perform their skills more adeptly in subsequent unit deployments. The success of the 11th Sig. Bde. was soon followed by an FRT dispatch to the B Co., 50th Sig. Battalion, 35th Sig. Bde. (Corps) (Airborne), Fort Bragg, NC.

Almost 400 generators needed to be evaluated and returned to full mission-capable status. More than 300 generators were triaged onsite, and almost 100 were returned to the depot for overhaul. SSG Todd Robinson led the Letterkenny FRT that traveled to Fort Bragg. Robinson worked together with the 35th Sig. Bde. Soldiers to repair the generators, which support units when they have no power source other than what they move with into a combat area. According to Robinson, some of the old generators were from the Vietnam era.

Robinson and the other depot employees at Fort Bragg are not only repairing generators, they

are also training Soldiers how to maintain and repair generators in the field. “These things do break,” explained Robinson. “We are providing their generator mechanics with a lot of valuable knowledge. No one likes being without electrical power,” Robinson commented. “Everything that requires power is run from these generators.”

Several Soldiers receiving this training while at Fort Bragg were attached to 35th Sig. Bde. SPC J. McLean and SGT T. Johnson, of B Co., thought it was a great idea to work together. Johnson said, “Working side by side with LEAD generator mechanics has better prepared us for going to the field. We work alongside them in performing technical inspections, and now we know better how to check the electrical load and keep these generators operational.”

After visits to the 2nd Armored Cavalry Regiment, Fort Polk, LA, and the 10th Mountain Division (Light Infantry), Fort Drum, NY, LEAD decided to increase its generator remanufacturing capability. Although able to produce nearly 100 generator sets per month, the LEAD team decided to add another 45,000 square feet of floor space to their generator capabilities. This recently added floor space will provide LEAD with the ability to remanufacture almost 200 generators per month.

Changing priorities also presented the LEAD team with some challenges. “Letterkenny came through where no one else could,” remarked COL Bryan W. Ellis, 35th Sig. Bde. Commander.

“As we assessed the condition of our tactical power generation equipment after *Operations*

Although able to produce nearly 100 generator sets per month, the LEAD team decided to add another 45,000 square feet of floor space to their generator capabilities. This recently added floor space will provide LEAD with the ability to remanufacture almost 200 generators per month.



Pool of generators awaiting technical inspection at Fort Bragg. (U.S. Army photo by PFC Seth Laughter, 35th Sig. Bde. (ABN).)



LEAD employees CW3 Randy Schriver (left) and SSG Todd Robinson troubleshoot a generator while on location at Fort Bragg. (U.S. Army photo by PFC Seth Laughter, 35th Sig. Bde. (ABN).)

*Enduring Freedom* and *Iraqi Freedom* rotations, we realized it was in poor shape due to the harsh operating environment. We soon realized the Army has no formal, centralized RESET program for tactical generators.”

“Initial contact with Letterkenny was positive,” Ellis added. “We entered into an agreement and they delivered. Initial response was so positive that we’ve sent them the remainder of our brigade generators for RESET. Tactical power is our lifeblood — no power, no communications. Letterkenny has performed a ‘power transfusion’ in this brigade and has reinstilled a level of confidence in Soldiers that ensures they will have reliable power to support their efforts in upcoming rotations.”

Tactical power is our lifeblood — no power, no communications. Letterkenny has performed a “power transfusion” in this brigade and has reinstilled a level of confidence in Soldiers that ensures they will have reliable power to support their efforts in upcoming rotations.

CW3 Randy Schriver, LEAD Mobile Electric Power Generation Supervisor commented, “I couldn’t be more proud of the Soldier and civilian workforce and their total team effort in support of our deploying troops.”

Next up for Robinson and his LEAD team were the generators from the 82nd Airborne Division, also at Fort Bragg. Approximately 470 generator sets were evaluated and the first of more than 200 generators were evacuated to the depot for remanufacturing. This program will be completed later in FY05.

The organic depots have once again proven their ability to be flexible, innovative and responsive to an Army at war. When the 35th Sig. Bde. needed immediate assistance, LEAD stepped up to the plate and delivered generator sets in time and

provided valuable depot-level training to brigade Soldiers. COL William Guinn, LEAD Commander, pointed out that “this is just one more example of how the Army’s organic depots can be combat multipliers in supporting the global war on terror. Hooah!”

**KIM RUSSELL** is a Public Affairs Specialist for LEAD. She earned a B.A. in business and economics from Wilson College. She has more than 27 years’ public affairs experience.

**MARK SHEFFIELD** is Chief, Transformation Office at LEAD. He earned a B.A. in business and economics with a concentration in management from Wilson College. Sheffield served in the U.S. Air Force and Air National Guard.



A construction worker wearing a red hard hat and safety glasses is kneeling on a concrete surface, using a tool to cut rebar. The background shows a clear blue sky and some construction equipment.

## Reconstruction of Water Resources in Iraq

Thomas A. O'Hara

**Iraqi leaders feared the Tigris River was going to top its banks. Southern Iraqi farmers wondered if there would be any water for the crops in the summer. Hydropower dams were spilling needed water through their gates. Ancient Mesopotamian marshlands in the south had been destroyed, killing or displacing nearly 300,000 residents under the brutal thumb of Saddam Hussein.**

An Iraqi laborer cuts rebar on a concrete barrier Sept. 4, 2004, at a base camp near Basrah, Iraq. More than 500 construction projects are slated to start in Iraq's southern region. Each project is aimed at improving the aging infrastructure and adding thousands of jobs across the region for Iraqi citizens. (Gulf Region Division (GRD) photo by Bill Roberts.)

How do you match environmental needs with agricultural demand and hydropower requirements for a country the size of California with 25 million people in record time? Sounds like a job for the U.S. Army Corps of Engineers (USACE).

## Early Days

In the immediate days following Iraq's liberation, teams from the USACE's initial Task Force Fajr sought out and located key Iraqi advisors who had formerly served as members of the Ministry of Irrigation (MOI). MAJ Regan McDonald, Deputy Detroit District Engineer, met with two MOI representatives April 19, 2003, to begin standing up the ministry. This was part of the overall coalition effort under the Office of Reconstruction and Humanitarian Assistance, led by GEN Jay Garner, which was later reorganized into the Coalition Provisional Authority (CPA) under Paul Bremer.

"When we got here, the Tigris River in Baghdad was 6 feet higher than normal," said McDonald. "We had immediate questions to answer: What's going on? Why is the river so high? Is anybody in charge? Where is all of this water coming from? Are the dams being emptied?"

"A lot of the citizens thought the situation was completely out of control and all of this year's water, and next year's water, was pouring out to the Persian Gulf," said McDonald.

Although capable engineers, the Iraqis had been deprived of the technology used worldwide for the past 20 years. Geospatial information systems were limited to military use, and access to the Internet just to obtain meteorological data was monitored.



An Iraqi laborer works on a pump at a water treatment plant in Najaf, Iraq, Sept. 12, 2004. More than 650 projects are underway across the country to rebuild the nation's water treatment facilities, sewage plants, schools, health centers and electricity generators. (GRD photo by Michael Rainey.)

Sitting down and sketching out the rough framework of the nation's waterway system, representatives planted a new partnership in the rubble of Hussein's former regime.

At first, USACE personnel and their Iraqi counterparts worked in the burned-out hulk of what was once the MOI. The existing MOI office had been looted and destroyed following Iraq's liberation. "The looting began after intelligence officials within the ministry burned their records. There was a prison in the basement and a block of houses in back with bars on their windows. Prisoners were detained and tortured in those buildings," said Dr. Eugene Stakhiv, USACE Senior Advisor, Institute for Water Resources, during the initial efforts in summer 2003.

"It was difficult for all the ministries," Stakhiv continued. "The looting was astronomical. We estimated that the

MOI alone lost more than \$100 million of assets. No communications, maps, reports, files or records were left. We were starting from ground zero while trying to ensure that the Mosul Dam did not fail, the electric power grid was repaired, the water for the irrigation season flowed through proper gates and channels and the 275 pumping stations lifted water onto the fields, farms and municipal water intakes. The Baghdad Zoo and Park had no pumps and no water. Everything was stripped, and we pitched in to fix it."

## Rebuilding Begins

The MOI had 12,000 regular government employees and maintained about 6,000 contract employees, all divided into 5 separate commissions and 11 state-owned companies. As with other utility systems under the regime, the MOI was very stovepiped. Little lateral communication existed among regional directors. Therefore, developing cooperation and simple communication within the ministry was one hurdle the USACE team faced.

"You've got so many incredibly talented Iraqi engineers who have spent 20-30 years completely stifled in their

scientific and technical input,” said McDonald. “Practically every decision made in this country was a political decision — whether it was to build a project or not, or how to operate these systems. So there’s never been a comprehensive, global look at economics or the environment.”

Although capable engineers, the Iraqis had been deprived of the technology used worldwide for the past 20 years. Geospatial information systems were limited to military use, and access to the Internet just to obtain meteorological data was monitored.

USACE teams, working with the CPA, had to reestablish the MOI and its communication with the outlying areas. “For 20 days following the incursion, there was no communication,” said McDonald. “Engineers didn’t know who was releasing water

upstream. They didn’t know what damage had been done to the water system due to war, sabotage or looting.”

McDonald and his team issued satellite phones to seven key locations the first day. In addition, CPA teams hit the road to see firsthand the water systems’ condition.

The USACE Dam Safety Assessment Team arrived in May 2003 and visited 20 separate sites throughout northern Iraq providing assessments. “They provided MOI a valuable report that was needed for the budget justification for immediate dam safety repairs,” said Stakhiv.

It turned out that most regions kept operating using their best judgment. In some cases, Iraqis lived at the water control facilities to prevent looting and damage, according to McDonald. With minimal communications in

place, the USACE/Iraqi team began to piece together a database for the country’s waterways.

“For the first few weeks, the daily reports were ‘back-of-envelope’ stuff,” said McDonald. “Every couple of days we’d get handwritten reports saying, ‘This is what’s going on along the Euphrates,’ and adjust accordingly.”

In June, a Marsh Assessment Team from the U.S. Agency for International Development (USAID) traveled all over southern Iraq. “That effort gave the ministry the impetus to get started with its Environmental Analysis Center and begin studying potential restoration sites,” said Stakhiv.

In July, McDonald and SSG Todd Finley, 489th Engineer Battalion, trained 350 new guards for the MOI security force. They were part of the



An Iraqi laborer grinds a plate on a metal support structure at a military training base in Eastern Iraq. The structure will hold a water storage tank that will soon supply the base with clean water. (GRD photo by Mitch Frazier.)

ministry rejuvenation that was moving forward rapidly, spurred by the success of a \$20 million, 100,000-person job program to manually clean 17,000 kilometers (km) (about 10,563 miles) of irrigation and drainage ditches in southern Iraq.

Four marsh-restoration projects were initiated as part of the FY03 budget, which included \$5 million for dam safety repairs and \$13 million for completion of 13 ongoing construction projects. There was nearly \$20 million in additional assistance from two key organizations — the U.N. Food and Agricultural Organization and USAID — for training, modeling, pumping station repairs and equipment for a hydrometeorological network.

### Capacity Building

Using reachback technology, the Baghdad-based team gathered weather reports from the Mobile District and provided that information to the Iraqi teams. In addition, the team coordinated with the Hydrologic Engineering Center, part of the Institute for Water Resources in Davis, CA, to develop a computer model for the Iraqi system.

McDonald sent Iraqi engineers to California to learn to operate computer-modeling technology, then return to train their colleagues in the technology.

On Aug. 11, Interim Minister Mohammad Dhari Al-Shibli changed the ministry's name to the Ministry of Water Resources (MOWR) as a reflection of its larger role in water management. Of all of Iraq's ministries, the MOWR is most like a USACE civil district. For this reason, Stakhiv, McDonald and the rest of the Corps team were able to apply years of USACE expertise and show the MOWR how to expand its operations for a more comprehensive program.

With USACE assistance, the MOWR has moved beyond simple irrigation into a comprehensive water-management role. The expanded role includes an environmental analysis center, a hydrologic analysis center and a modern water-control operations center.

### Standing Up and Moving Forward

On May 10, 2004, less than 13 months after USACE teams first met with representatives from the damaged MOI, Bremer transferred MOWR sovereignty to Iraq. "We accept the responsibility of this institution with pride and respect because we believe in the new Iraq, a democratic Iraq, a free Iraq, an Iraq against terrorism, an Iraq active as a member of the international community which can contribute to the benefit of mankind," said Dr. Abdul Latif Jamal Rashid, Minister of Water Resources.

By summer 2004, the MOWR had overseen clearing 17,000 km of waterways with an additional 20,000 km planned that would employ approximately 100,000 of Iraq's unskilled workforce. Under the relationship with USAID, 30-40 percent of the marshlands have been restored. In addition, thousands of internally and externally displaced Marsh Arabs have returned to resume their indigenous way of life. Economic activities such as fishing, mat weaving, herding and farming are redeveloping in the region. Environmental improvements have led to the return of migratory birds, moderated temperatures and improved air quality. Iraqi

reservoirs are now being operated more efficiently, providing the balance between agricultural needs and a hydropower supply that contributes 20 percent of the nation's electrical needs.

Additional investment in water management system modernization, real-time reporting, computer modeling and information technology will lead to improved coordination throughout the entire MOWR.

By summer 2004, the MOWR had overseen clearing 17,000 km of waterways with an additional 20,000 km planned that would employ approximately 100,000 of Iraq's unskilled workforce. Under the relationship with USAID, 30-40 percent of the marshlands have been restored.

The MOWR, which once operated under a limiting \$1 million budget prior to liberation, is now fueled with an annual budget of \$150 million. An additional \$100 million is committed toward the water resources sector through money donated from the World Bank and the U.N. development group, and \$775 million under the program management office in the water resource sector as part of the supplemental request by President George W. Bush. In all, close to \$1 billion in financial support has been received.

"One of the big challenges will be absorbing that

much help," said McDonald. For an organization accustomed to \$1 million in projects a year, "they have essentially 1,000 years worth of work they are going to accomplish in the next 4 or 5 years. This is an enormous undertaking."

New construction in waterworks control structure and rehabilitation of large dams are part of \$100 million dedicated to solve critical projects. In addition, through the Project and Contracting Office under the U.S.





BG Thomas Bostick, USACE GRD Commander, inspects a water treatment facility in Fallujah, Iraq, an important utility needing electrical power to operate. (GRD photo.)

Embassy in Iraq, the ministry will procure a \$30 million generator for pump stations throughout the country. Reclamation projects to return less-than-desirable land to cultivatable areas will occur. Hundreds of small dams, barrages and waddis in the west will be used to collect spring rains to benefit nomadic herdsman.

**Partnership Continues**

While some wondered if the civil works mission belonged under the Army guidon, its importance has shined no brighter than the immediate impact that expertise has had in restoring the water infrastructure in Iraq.

The MOWR has already expressed a desire to continue its relationship with

USACE. Discussions of a memorandum of agreement between the two nations may need to be developed, but nonetheless, the impact of the Corps' capabilities has been a welcome addition to the Iraq MOWR infrastructure rebuilding efforts.

Through coordination with the Corps, Iraqi engineering teams continue to visit the United States to learn new technologies, improve their skills and foster a mutual understanding from opposite sides of the globe.

Through coordination with the Corps, Iraqi engineering teams continue to visit the United States to learn new technologies, improve their skills and foster a mutual understanding from opposite sides of the globe.

"It's a significant impact," said McDonald, referring to the Corps' ability to provide this expertise. "I don't know how else we could accomplish what we have. To have people in uniform who can bring this expertise in an emergency role, and then immediately

have deployable DA civilians who can show up with years of expertise, is something few organizations can do."

Funded directly through Congress, the Corps' Civil Works Program provides a no-cost resource multiplier for the expertise DOD needs in its efforts to rebuild Iraq's water management system.

Since the initial efforts began more than a year ago, MOWR is now sovereign and operating toward a better Iraq. With the continued help of advisors from water management agencies in the United States, those who oversee the Tigris and Euphrates can now tackle water infrastructure challenges with more expertise and efficiency than ever before.

*Editor's Note: Portions of the article "Iraqi Ministry of Water Resources is Similar to Corps," Engineering Update online, November 2003, by Thomas A. O'Hara and Dr. Gene Stakhiv, and CPA news releases, were used for background information for this article.*

**THOMAS A. O'HARA** is a Public Affairs Specialist for the USACE Omaha District. He served as Deputy Chief of Public Affairs for the GRD in Iraq during summer 2004. He has a B.S. in electrical engineering from the University of Nebraska-Lincoln and an M.B.A. from the University of Nebraska-Omaha. He is a two-time USACE Civilian Journalist of the Year and runner-up for 2004 DOA Civilian Journalist of the Year.



# Restoring the Oil Infrastructure in Iraq

Steven E. Wright

**I**raq's financial future is tied to oil. Iraq's known reserves are estimated to be 115 billion barrels, exceeded only by those of Saudi Arabia and Canada. Yet, little of Iraq has been seismologically explored, and Iraq's real oil reserves may double with adequate exploration.

The weak link to Iraq's future is an outdated, poorly maintained oil infrastructure. In terms of available equipment, Iraqis have been separated from the latest and best technical knowledge since Saddam Hussein gained power in 1980.

Fixing maintenance and technology shortcomings will take capital, technical knowledge and a willing workforce. There is no question that Iraqi oil workers are willing. They are exceptional at making their outdated and marginal system work. However, bringing up Iraq's level of capital and technical know-how is a big undertaking.

The task of assisting Iraq with capital and technical know-how was assigned to the U.S. Army Corps of Engineers (USACE) by the Army and DOD. USACE's direct role in Iraq's oil production recovery began

USACE Fort Worth District employee Richard Bingham assesses a pipeline fire near Baiji, Iraq. (U.S. Army photo by Nola Conway.)



when Coalition Forces crossed into Iraq March 22, 2003.

The organization formed by USACE's Task Force Restore Iraqi Oil (TF RIO) was later assigned to the Gulf Regional Division (GRD). This article examines how TF RIO met the mission entrusted to it by DOD and the challenges that the mission encountered along the way.

## Oil Fires

Coalition Forces expected as many as 1,000 oil well fires. USACE engineers had pre-positioned equipment and contractors in theater prior to the incursion of Iraq to respond to this major environmental and economic catastrophe. However, because the oil fields were rapidly secured, instead of 1,000 oil well fires, there were only 9. And, instead of months of fighting fires at an anticipated cost of \$7-13 billion, the Corps extinguished fires in less than a month and limited damages to \$400 million. Further, instead of an environmental disaster, TF RIO quickly cleaned up oil spills and centrally stored the spilled oil in holding ponds for follow-on treatment and disposal.

## Unexpected Looting

If military planners, including those working for TF RIO, had the right solution to prevent major damage to the oil fields, their planning did not include protecting the infrastructure from looting. Looters severely damaged the oil infrastructure, causing more than \$1 billion in damages. These oil infrastructure damages would require a year for Iraq to return to prewar oil-production levels. Later, TF RIO members learned that Hussein prevented looting and protected the oil field infrastructure with eight Iraqi Divisions before the Gulf War.

Further, the looting of key production facilities such as oil refineries and liquid

petroleum gas (LPG) facilities would lead to an inability to meet Iraq's domestic fuel requirements. TF RIO met this need by operating a multibillion-dollar petroleum import program.

## Quick Solution — Rehiring Oil Workers

Rehiring the Iraqi oil workers was key to returning Iraq's prewar production capability. Initially, USACE contractor Kellogg, Brown and Root (KBR) sponsored job fairs at oil facilities to rehire the oil workers.

Former workers showed up at the job fairs wanting to return to work, but questioned if KBR had received approval for them to go back to work with "Mr. Jabbar." At this point, USACE and KBR officials did not know who Jabbar was. But, after questioning the workers, BG Robert Crear, Southwestern Division Commanding General and TF RIO Commanding General, arranged through intermediaries to meet Jabbar Ali Al-Lueibi in Basrah, a former senior executive of South Oil Co.

Crear's meeting with Jabbar was an important turning point in USACE's mission to restore Iraqi oil production. The leaders agreed to return South Oil Co. employees to their prewar jobs, and Crear appointed Jabbar as Director General of South Oil Co.

This became the template to return 60,000 Iraqi oil workers to their jobs throughout Iraq. There were 14 oil-related Iraqi companies prior to the war, and each survived the war intact.

These workers became the first Iraqis to return to their jobs, and they successfully helped restore the oil infrastructure and production for their country.

The task of assisting Iraq with capital and technical know-how was assigned to the U.S. Army Corps of Engineers by the Army and DOD. USACE's direct role in Iraq's oil production recovery began when Coalition Forces crossed into Iraq March 22, 2003.

## Oil Sanctions Eliminated

A roadblock to domestic production was the U.N.'s sanctions on Iraq's ability to export oil. Removing the sanctions was necessary to produce income to help rebuild Iraq. The U.N. lifted sanctions in May 2003, and the first new oil produced in Iraq was uploaded on the 2-million-barrel super tanker Abqaiq on June 28, 2003, at Mina Al-Bakr export terminal in the Persian Gulf.

Oil exports for the remainder of 2003 reached \$5 billion. Beginning in 2004, oil exports peaked

at a level of 2 million barrels per day, but because of terrorist/insurgent sabotage, have fallen to an average of 1.5 million barrels per day. Even so, the high-priced oil-per-barrel market is adding substantial value to these exports. These funds are an important part of the Iraqi government's ability to continue future infrastructure restoration and development.

## Domestic Fuel Crisis Leads to Imports

Damaged oil refineries and LPG plant production facilities precipitated a domestic crisis. To return to normal, Iraqis needed LPG to cook food, boil water and heat homes, and gasoline to fuel vehicles. DOD tasked TF RIO to respond to this urgent problem by importing oil from Kuwait and Turkey.

Stan Reese, one of TF RIO's planners from the USACE's Huntsville, AL, Center, said that this task was completely unexpected. "It's interesting that before the war, we looked at protecting Iraq's export capability and didn't consider that domestic requirements would be a problem in this oil-rich nation. Suddenly, domestic requirements became one of our most important responsibilities," Reese said.

### Refining Issues Contribute to Domestic Shortage

In the best of times, it was difficult for Iraqis to refine enough oil for domestic production. Three of Iraq's refineries produce 90 percent of its domestic refined products. Located in Basrah, in southern Iraq; in Doura, near Baghdad; and

in Baiji, 250 kilometers north of Baghdad, these refineries, built by Russians in the 1970s, were poorly maintained and are outdated. The Iraqis damaged the Basrah Refinery during the Iran-Iraq War. The refinery, never fixed, operated at half capacity for 20 years.

In prewar Iraq, the number of cars and trucks were limited, as was the

average person's ability to travel domestically. In postwar Iraq, travel increased and Iraqis imported vehicles in large numbers, causing increased fuel consumption, according to Larry Rogers, TF RIO's senior civilian from August to December 2003. "Regarding Iraq's ability to meet domestic needs, we were getting reports by November 2003 that as many as 200,000 vehicles had entered postwar Iraq. This fact, coupled with a visible increase in consumption rates and fluctuating crude oil supplies because of attacks against pipelines, created a situation where the refining capacity could not meet the domestic need for gasoline," Rogers explained.



Iraqi laborers finish construction on a gas pipeline at the Baiji Power Plant in Baiji, Iraq. USACE engineers, KBR contractors, South Oil Co. employees and Oil Ministry officials have joined forces to restore prewar oil production levels of roughly 2.5 million barrels of oil per day to "fuel" Iraq's sputtering economy.

Once crude oil was produced in the oil fields, there was a high demand for the refineries' products. However, half the crude oil input to the Iraq's technologically challenged refineries produced a low-grade tar-like residual that did not have an immediate market following the invasion. Storage was needed for the residuals, but Iraq never replaced the storage capacity it lost in the southern oil fields during the Iran-Iraq War.

Inability to dispose of residuals limited the refineries' ability to return to production. Today, in southern Iraq, several power generation plants have been converted from using diesel fuel to using residual fuel, with varying levels of success. In addition, residuals are being injected into the export pipelines in small quantities and being exported by truck.

### Oil Production Ties to Reliable Power

Interruptions to refineries' electrical supply were a major problem in postwar Iraq. The refineries used electricity from the national grid before the war. Postwar, the grid is a constant target for looters and saboteurs. Refineries stopped operating every time the grid went down. Once power was lost, even for only a few minutes, it took several days to bring the refinery back to production.

To address this challenge, TF RIO worked to install stand-alone permanent generators at the refineries. Lori Thomas, a USACE Galveston District engineer, worked for TF RIO to provide a generation system for the Basrah refinery. "We installed two generators to provide reliable power to the Basrah

Refinery, which had been running on power provided from two old, run-down generators the Iraqis had kept going. The new generators belonged to the Iraqis, and had been purchased from the Oil-for-Food program 5 years ago, but never installed," Thomas remarked.

"Electrical power is critical to other oil production processes as well," Thomas continued. "Without power, it's impossible to produce, de-gas and pump oil. Most of the 18-megawatt

(MW) generators were for water injection, which is the future of oil production. Without injecting water into the oil fields, they would be ruined," Thomas stated.

A side benefit to the power grid system was taking the electricity-consuming oil infrastructure off the grid, thereby leaving more power for the rest of Iraq's commercial, industrial and residential sectors.

The Iranians damaged the Basrah Refinery during the Iran-Iraq War. The refinery, never fixed, operated at half capacity for 20 years.

### Water Used to Produce Oil

Water is injected to replace oil taken from the oil reservoirs in the Rumaylah Oil Fields in southern Iraq. Before the war, this water came from Qarmat Ali Water Plant located near Basrah. However, looters and/or saboteurs almost succeeded in destroying this plant as well. By partnering, USACE, KBR and the Iraqi South Oil Co. returned Qarmat Ali Water Plant to better-than-prewar production.

Water is used in the oil production process in several ways. The Qarmat Ali plant treats water from the Basrah River and pipes it to the oil fields to be injected under pressure to a depth of 2 miles underground. The pressure is provided by newly installed injection pumps powered by new 18-MW generators.

This injected water fills the void left when oil is removed from the reservoir and helps to maintain oil reservoir pressure, an important element of maintaining Iraq's oil reservoirs. Unlike the United States, where oil is pumped to the surface by wells, natural geostatic pressure forces oil to the surface



A USACE employee inspects a war-damaged pipeline valve at Ham Dam Junction near Basrah, Iraq. This pipeline is used to export 90 percent of Iraqi oil to the Persian Gulf oil terminal loading facility 9 miles offshore. (U.S. Army photo by Steven E. Wright.)



Iraqi workers place concrete by hand at the Basrah Refinery in southern Iraq. This concrete pad is one of several for generators to power the oil facility. (U.S. Army photo by Alan Dooley.)

through the drilled wells in Iraq. As oil is removed, the pressure drops unless replaced with a fluid — in this case, water.

Water is also used to remove salt from the crude oil in an oil-washing process, a requirement before the oil enters the pipelines. Salt in the oil would cause major corrosion problems for the oil infrastructure unless removed in the field.

### **Oil Injection in Northern Fields**

In the Kirkuk Oil Fields in northern Iraq, crude oil is injected back into the oil reservoir. This is done for two reasons, according to COL Emmett Du Bose, former GRD Director, Oil Directorate. “One purpose of producing crude oil is to obtain the natural gases

Oil infrastructure destruction may have been another element of Hussein’s plan to keep Coalition Forces or future Iraqi governments from benefiting from Iraq’s oil.

needed to produce LPG. Under normal circumstances, all the crude oil would be exported through the Iraq-to-Turkey (IT) Pipeline, refined at the Doura and Bayji Refineries or used in power production plants,” Du Bose explained. “However, we need to fix pipelines in several areas, including a major river crossing, to allow northern oil to reach normal production levels and eliminate the injection

of excess produced oil that isn’t being used for domestic production by power plants or refineries.”

### **Sabotage**

Oil infrastructure destruction may have been another element of Hussein’s plan to keep Coalition Forces or future Iraqi governments from benefiting from Iraq’s oil. At facilities such as the Qarmat Ali

Water Plant, refineries and LPG plants, it appears that there was purpose to the destruction. Unfortunately, his flawed plan has seriously harmed the Iraqi people and their economy.

Sabotage, expected immediately after the war, continues almost daily against Iraq’s pipelines. Iraq has 4,350 miles of pipeline, most of which is aboveground and extremely vulnerable to attack.

An attack against the oil infrastructure occurred at the Basrah Terminal in the Persian Gulf last spring when three explosive-laden suicide boats attacked the platform. These boats exploded, but there was little damage to the terminal because of Coalition Forces’ actions. Had this attack been successful, Iraq would have lost its ability to export oil as well.

### **Production Subsidies**

Oil production peaked in late February 2004 at 2.5 million barrels per day.

Since then, continued sabotage has caused oil production to slide. Eighty percent of current production is from the southern oil fields.

The pipeline delivery system is the primary obstacle to the Kirkuk Oil Field reaching its potential production level. Pipeline projects at the Al-Fathah Tigris River Crossing and a 50-kilometer pipeline project from Al-Fathah to Kirkuk have not been completed but will be needed before the IT pipeline is filled with oil produced in the northern fields. Without the ability to export, there is little reason to increase oil production in the north.

The IT pipeline terminus at the Turkish port of Ceyhan provides the ability to export northern oil from the Mediterranean. In the south, the Al Faw Peninsula pipeline transports crude oil from the Rumaylah Oil

Fields past Basrah and down to the tip of the peninsula. It is then transported under the Persian Gulf 9 miles to the Basrah Terminal, where super-tankers are uploaded for destinations worldwide. Almost all of Iraq's oil now enters the export market from the Basrah Terminal.

### USACE Civilian Volunteers

The Corps' civilian volunteers have put themselves in harm's way to accomplish the oil-restoration mission. In doing so, they proved to their military colleagues that they meet many Soldier's Creed elements. They were team members, serving the United States and living Army values. They placed their mission first, did not accept defeat, never quit, were expert and professional and stood ready to deploy alongside their uniformed counterparts.

Never in the Corps' 229-year history have USACE civilians been asked to

stand as tall and risk as much in a theater of operations. They do this willingly, shoulder-to-shoulder with their Soldier colleagues. They wear the Army uniform and willingly shoulder their load to accomplish a mission that is essential to American foreign policy and rebuilding the Iraqi infrastructure. In doing so, they have found a greater respect for Soldiers. And, Soldiers have found greater respect for what Army civilians can and will do.

---


**STEVEN E. WRIGHT** is a Public Affairs Officer (PAO) assigned to the USACE Huntington District, Huntington, WV. He has a B.S. in political science from the University of Utah and an M.A. in management from Webster University. Wright has completed tours in Iraq serving as PAO TF RIO and, most recently, as GRD PAO.



Iraqi contract workers collect pooled crude oil spilled from a war-damaged pipeline near Basrah. Environmental protection was a TF RIO mission requirement. After cleaning up the oil spills, the contractor transported the crude to holding ponds. (U.S. Army photo by Jonas Jordan.)

# TeleEngineering – Providing Soldier Reachback Capability to USACE/ERDC Experts

Rhonda Taylor



**C**an this bridge carry my armor vehicles? What's the best option to protect my Soldiers from mortar attacks on our base camp? How can I control this +%@&\*#\$ dust!? These are the types of serious questions that are being asked in Iraq, Afghanistan and Kuwait. Field commanders want and need the answers in situations that, at times, are life and death or impact operational capabilities and critical decision making.

SGT Bryan S. Galloway, Marine Wing Support Squadron (MWSS) 472, Heavy Equipment, Engineer Co., unloads sand with a TRAM 664E Loader into a Hesco Barrier that will protect vulnerable places from indirect mortar attacks in Al Asad, Iraq. ERDC is conducting aggressive research programs to develop new materials and techniques for base-camp protection, standoff perimeter structures and blast-resistant materials. (U.S. Marine Corps photo by LCPL William L. Dubose III.)



For many of these engineering questions, the world's best experts are sitting at desks scattered around the United States. Thanks to the secure communications links offered by TeleEngineering, stateside subject matter experts (SMEs) are seeing and hearing directly from deployed Soldiers about the field problems they encounter. Once you can see and talk about a problem, it's easier to understand it and, more importantly, it's easier to propose a rapid, workable field solution using input from SMEs.

### Reach Out – Reach Back

The TeleEngineering concept and system was developed by the U.S. Army Engineer Research and Development Center (ERDC) in Vicksburg, MS. ERDC, the consolidated research organization for the U.S. Army Corps of Engineers (USACE), designs and builds the TeleEngineering communications packages, and also operates the TeleEngineering Operations Center that manages overall system operations.

TeleEngineering encompasses several major aspects. The basic hardware sounds simple: a satellite-based communications system that allows deployed personnel to send and receive data and to conduct secure or nonsecure video teleconferences. Numerous communication avenues that meet users' requirements, such as telephones, facsimile machines, computer networks (e-mail) and videoconferencing systems, can be used to support global operations.

The latest system combines a suitcase-sized satellite terminal with a laptop computer, camcorder and secure videoconferencing unit that is compact, mobile and capable of sending and receiving computer files, voice communications, video or still photo images and two-way interactive video-

A TeleEngineering kit being used in western Iraq to "reach back" to experts in the United States for assistance with road analysis.



conferencing. This third-generation system consists of three suitcase-sized containers. The next iteration, to be fielded in 2005, will consist of two cases and will be 40 percent smaller.

The communications system evolution highlights the aim for compact, robust, easy-to-use and easy-to-troubleshoot equipment that has taken several years to develop and optimize using input from users, in-house electronics and design team members and the latest commercial-off-the-shelf technologies.

ERDC also fields and services all of its TeleEngineering communications packages. There are currently 70 fixed systems for use at major installations and more than 100 deployable packages for field use.

Another key TeleEngineering component is the use of SMEs. These include engineers and scientists from ERDC and other USACE organizations, research organizations, DOD and other government agencies, consultants and private industry, academia and other sources. If there is a problem, the appropriate SME will be contacted.

### TeleEngineering and Operations Enduring and Iraqi Freedom (OEF/OIF)

TeleEngineering capabilities were used in the initial planning stages for OEF/OIF, during major military operations and during security operations and infrastructure rebuilding efforts.

There are now almost 100 TeleEngineering kits deployed in Iraq and Afghanistan. So far, more than 1,900 separate requests for assistance from Iraq have been received and addressed via TeleEngineering. Afghanistan requests number more than 1,700.

Some issues encountered before and during military operations that used TeleEngineering capabilities included the following:

- *Dam Breach and Military Hydrology Analysis.* USACE military hydrology SMEs looked at 120 hydraulic structures, 40 dams and 20 river crossings in Iraq to see how water could impact maneuverability and military operations.
- *Bridge Analyses (Military Load Class, damage assessments, repair guidance).*



A Soldier with the 54th Engineer Battalion examines structural damage to a bridge spanning the Euphrates River. USACE engineers stateside provided a TeleEngineering bridge assessment to determine what repairs needed to be made to the support columns and how much load the damaged bridge could safely bear. (U.S. Army photo courtesy of USACE/GRD.)

- *Rainfall/climate information.* This includes area-specific weather information, impacts and climate extremes, especially in mountainous regions.

### TeleEngineering in Action

One example of TeleEngineering support includes a call from a Soldier with the 54th Engineer Battalion stating that a bridge on the Euphrates River was damaged and the combat engineers needed help. The engineers' efforts to

provide data requested by the TeleEngineering-linked experts were delayed for 15 minutes while they dealt with Iraqi snipers. Once the bridge data and photos were transmitted, the SMEs provided the solution in 2 hours. It was not some "gee-whiz" solution, but one that combat engineers could readily complete using their organic field assets.

established with the unit at the Baghdad Airport, the headquarters unit in the rear, the lead infrastructure assessment team at the Corps' Mobile District, the 249th Prime Power Engineer Battalion, the TransAtlantic Programs Center and ERDC. Within 45 minutes, pictures and blueprints were streaming in from Iraq, and discussions were initiated that quickly provided answers that U.S. forces on the ground needed.

### Water as a Weapon

TeleEngineering hooked up hydraulic engineers in Vicksburg with Soldiers in Iraq to address military hydrology issues. An important analysis involved the Haditha Dam on the Euphrates River. Hydraulics experts in Vicksburg predicted major flooding and disruption of American forces' capabilities in moving on Baghdad if Haditha Dam was intentionally destroyed or the dam's gates were opened for maximum flow.

In late March 2003, as American units were rolling toward Baghdad, ERDC engineers briefed senior U.S. military planners about the Haditha threat. Because of this briefing, a special operation was conducted April 1, 2003,

when Army Rangers took Haditha Dam. A potential military operational threat had been averted, but a new problem arose.

Because Soldiers don't know anything about hydroelectric dam operations, TeleEngineering again provided a link to the experts. Under their direction, Soldiers were able to undo damage caused by Iraqi sabotage efforts. They repaired and started the dam's

New technologies, including passive rocket, artillery and mortar protection designs for base camps, are being rapidly disseminated to forces via TeleEngineering.

Bridges in numerous locations were analyzed to determine the types of military traffic they could sustain, assess damage (coalition and enemy action) and repair or upgrade to sustain traffic.

- *Structural and Bomb Damage Assessments.* Various structures were analyzed to determine the effectiveness of coalition or enemy attacks and to evaluate the structural strength and integrity of buildings.
- *Force Protection (facilities, base camps, new technologies, new computer analysis software).* New technologies, including passive rocket, artillery and mortar protection designs for base camps, are being rapidly disseminated to forces via TeleEngineering.
- *Mobility and trafficability (on-/off-road, road networks, Automated Route Reconnaissance Kits).* Analyses are being conducted concerning cross-country movements, aided military operations and planning, supply throughput and road reconstruction.
- *Geological information.* This includes everything from dust control, to road and pavement subgrade information, to localized building material issues.

Another TeleEngineering support request came when our Soldiers took Baghdad International Airport. Engineers in the TeleEngineering Operations Center got the call at 10:30 p.m. local time, asking for assistance in getting basic services operational at the airport. Communication links were



An Iraqi laborer applies sealant to a concrete structure at the Basrah Sewage Treatment Plant in southern Iraq, another facility damaged by coalition bombing during OIF. The project, which is scheduled for completion in early 2005, will provide sewage treatment for Iraq's Basrah International Airport. (GRD photo by Bill Roberts.)

Iraqi laborers, under USACE/GRD supervision, prepare materiel to be used to reinforce concrete blocks for reconstruction efforts. TeleEngineering assets were used extensively to evaluate the structural strength and integrity of buildings and other facilities throughout Iraq and Afghanistan following *OIF* and *OEF*. (U.S. Army photo courtesy of GRD.)



dewatering pumps just hours before the dam would have been threatened with collapse. Additional Soldier repairs — also under TeleEngineering-provided guidance — stabilized the hydroelectric turbines, which significantly helped the dam's repairs later. Haditha is now a major contributor to the Iraqi national power grid.

### Force Protection Concerns

One of the Army's biggest current concerns is protective measures for base camps and bed-down areas. These areas include "soft" targets such as tents, trailers and other expedient structures. Many of these are located in and around urban areas, limiting the ability to control an adequate stand-off area beyond their perimeter. These vulnerabilities and increased density of personnel make the areas lucrative targets for insurgent attacks with fragmenting rocket and mortar munitions.

ERDC, a DOD science and technology leader in force protection and survivability, is conducting an aggressive research program to develop new materials and techniques for base-camp protection.

ERDC, a DOD science and technology leader in force protection and survivability, is conducting an aggressive research program to develop new materials and techniques for base-camp protection. These include expedient protective designs, new lightweight, blast-resistant materials and pre-detonation screens based on weapon fuzing and assessments of roof structure response to blast loads. For overhead protection, a combination of techniques for effective pre-detonation of incoming rounds, coupled with fragment shielding layer(s), is one of the latest and most promising technologies. These emerging technologies are being transitioned as quickly as possible to our deployed Soldiers. The most expedient vehicle for applying these new technologies to deployed forces is through TeleEngineering.

### Other TeleEngineering Aspects

TeleEngineering has also become the de facto video teleconference apparatus for *OEF/OIF*. There have been more than 2,000 video teleconferences facilitated by TeleEngineering, including testimony by deployed commanders to the House Armed Services Committee. Other users include the Office of the Secretary of Defense, Secretary of the Army, Army Chief of Staff, numerous flag officers, congressmen and personnel conducting daily and weekly conferences involving Iraq or Afghanistan command elements.

Outside military requirements, family morale calls were set up using TeleEngineering for deployed units as an added benefit, which significantly aided Army family morale. (A TeleEngineering marriage was even facilitated between a Soldier in Afghanistan and his fiancée back home, and a USACE employee was sworn in as a lawyer in the Iowa state bar from Baghdad via TeleEngineering.)

From facilitating daily video teleconferences that allow military leaders to communicate with each other from worldwide locations, to providing the latest protective technologies and subject matter expertise to keep our Soldiers safe in the field, TeleEngineering continues to provide support and solutions — from thousands of miles away — for our deployed forces.

**RHONDA TAYLOR** is the TeleEngineering Operations Center Director at ERDC. She holds a B.S. in geology from the University of Southern Mississippi.



**US Army Corps of Engineers**

# A Commander's Best Friend — Engineer Mine Detection Dogs on the Battlefield

James Pettit and CPT Ronald J. Hughes



Two combat engineer Soldiers look on as a mine detection dog takes a break from clearance operations to get a drink of water. (U.S. Army photo by a 67th Engineer Detachment Soldier.)

**T**here is a significant mine threat in numerous countries where U.S. forces may deploy for operations in support of national strategy. Because current mine-contamination levels are unconfirmed, the threat to U.S. troop movement can be significant. Proven safe routes can change overnight, requiring the use of combat engineer resources to clear and proof these routes and accesses to critical locations. Somalia, Bosnia, Kosovo, Afghanistan and Iraq are a few of the high-profile places where the U.S. Army has deployed in high-risk mined areas, or areas containing the new threat of improvised explosive devices (IEDs). This article addresses how mine detection dogs (MDDs) enhance the U.S. mine clearance capability and why they are a necessary tool for our deployed forces.

For 6 decades, U.S. law enforcement and military working dog (MWD) training has been continuously refined to produce a highly sophisticated and versatile extension of Soldier and law enforcement agent senses. Even the most complex and sensitive machines are unable to duplicate the operational effectiveness of a properly trained MDD or MWD. The Army first used dogs for mine detection in World War II, when the 228th Engineer Mine Detection Co. deployed about 100 dogs in Algeria and Italy. During the Vietnam War, the Army and the U.S. Marine Corps used dogs for mine detection, tunnel detection and tracking.

During the 1970s and 1980s, several Army laboratories conducted technical studies to test dogs' abilities to perform

mine detection under various conditions. A 1977 study by Nolan and Gravite, *Mine Detecting Canines*, concluded that mine/booby-trap detecting canines represent highly adaptable, sensitive and specific detection systems. The report also conceded that MDDs are reasonably durable and readily reproducible. In 2002, the Army contracted for MDDs to work in Afghanistan, where the dogs cleared areas, proofed the work by mine-clearing armor-protected (MCAP) D7 bulldozers and cleared mined soil berms created by MCAP clearance operations. In 2003, the Army began to establish its own MDD detachment within the Engineer Regiment.

Dogs are used for mine detection because they provide a fast and efficient

detection capability that can save lives. They also can reduce the risk involved with mine clearance during combat or peacekeeping operations. They have excellent mobility and utility over ground that is not accessible to vehicles and other mechanical clearance/detection equipment. MDDs provide a detection capability without touching the device itself, and MDDs will not initiate magnetically influenced fuzes.

MDDs must not be seen as a fail-safe panacea. However, it is accepted that they have a high-detection rate and that they offer rapid mine/explosive vapor detection. Additionally, MDDs provide a faster mine-detection capability than current magnetic-anomaly detection equipment and manual probing techniques. MDDs are an

additional tool to enhance mine-clearance operation productivity and to help ensure Soldier safety. MDDs are not a stand-alone system for conducting mine-clearance operations.

Specific tasks that MDD teams — each consisting of an MDD and its handler — are capable of performing include assisting units with locating minefields in area surveys and performing field and road surveys and casualty evacuation. MDDs can recognize mines by the explosive's distinct odor or other explosive device components, including the metal and plastic casings surrounding the explosive. MDDs will sit when they discover a scent that they have been trained to locate. They are operationally suitable when used to supplement other preventive measures that are taken to locate and/or avoid mines, IEDs and surprise firing devices.

Engineers conducting traditional mine-detection tasks benefit from the use of MDDs, which reduce the time spent on a search and can be used to search for mines in open areas, fields, woods and along embankments. MDDs are also an excellent tool to “route-proof” along roads and railways. An MDD team can be used in a minefield extraction role to search a path to a given location, such as a crashed vehicle or aircraft, or in support of area searches and route-proofing.

MDD teams can be employed in different ways. Engineer and explosive ordnance disposal assets can be tasked to dispose of unexploded ordnance when contamination exists on main supply routes. Using MDDs to determine whether a mine threat exists can significantly reduce the closure time and any delays that may be imposed. Examples include:



Two 67th Engineer Detachment Soldiers and MDD Adam conduct a reconnaissance with a humanitarian deminer on Bagram Airbase in Afghanistan. (U.S. Army photo by a 67th Engineer Detachment Soldier.)

- *Vehicle accidents.* When a vehicle or aircraft has left the roadway during an accident, there is the potential that it has entered a mined area. Current tools are slow and may impose delays in situations involving casualties that require immediate evacuation. MDDs provide a fast detection capability, allowing any mines between a known clear area and the vehicle/casualty to be marked and avoided.
- *Route-proofing.* Current route-proofing procedures use mechanical means, such as rollers and detectors. MDDs provide a significantly faster detection capability, allowing routes to be proofed in a faster, more efficient manner and with greater accuracy.
- *Building and roadblock clearance.* MDDs can reduce the time required

An MDD handler sends Adam out to search for landmines and unexploded ordnance on Bagram Airbase in Afghanistan. The dog's superior olfactory senses will help it ferret out an explosive device's distinct odor, including the metallic and plastic casings surrounding the explosive that mechanical sensors may miss. (U.S. Army photo by a 67th Engineer Detachment Soldier.)

for formal proofing and clearance when it is necessary to obtain access to buildings or get through roadblocks that may contain mined rubble.

- *Area identification.* MDDs lend speed to identifying areas with and without mines and allow commanders flexibility in mobility.
- *Quality assurance/proofing.* MDDs perform this role away from enemy contact and in relatively secure environments.

In these circumstances, the detection/proofing capability is conducted using MDDs in a low-risk environment. Because MDD assets are limited in the Army, they should be protected from direct/indirect fire. Where casualties result from vehicle accidents or mine strikes, MDD operations can be conducted under fire or during a high threat to aid the quick removal of casualties.

To obtain the maximum value from the services of trained MDD teams, it is essential to have a sound understanding of their capabilities, limitations and conditions for employment. MDDs must be considered as additional, specialized detection tools and should only be used after a careful analysis of the situation, the climatic conditions and the terrain.





Two MDDs conduct mine clearance operations in Afghanistan. Working multiple dogs simultaneously is an effective technique for clearing large tracts of land during combat and peacekeeping operations. (U.S. Army photo by a 67th Engineer Detachment Soldier.)

MDD detection and warning capabilities stem from the combination of their training and superior scenting abilities. MDDs realize their fullest potential when conditions permit them to use their superior olfactory senses.

The actual continuous working time and number of tasks that MDDs can perform depends on the ability and character of each dog. MDDs work on a short lead or a long line under the handler's direct control. MDDs will search for, and indicate to their handlers, the presence of all mines on which they have been trained. MDDs are mobile and easily transported, are able to work in various conditions and terrain and increase task completion speed and efficiency.

Commanders are encouraged to request MDD teams before entering areas where the probability of encountering minefields or booby traps is high. Once MDD teams are assigned to support a mission and the handlers are briefed, commanders should obtain the handlers' recommendations for the

MDD teams' most effective employment and best working positions and route selections, consistent with the factors that influence the dogs' detection capabilities.

Commanders should integrate MDD teams fully into the mission and include them in preparatory inspections and rehearsals. This will help ensure that the handlers understand the mission's breadth and scope. Commanders must designate security elements, if required, to overwatch MDD teams as they perform their duties.

MDDs must be considered as additional, specialized detection tools and should only be used after a careful analysis of the situation, the climatic conditions and the terrain.

MDDs are normally attached on a mission basis. Before assignment to any operation, the dog handler leader (a specified handler who is in charge of multiple MDD teams) is carefully briefed on the planned mission as far in advance as possible.

Once an MDD team deploys to a theater, the MDD must be given time to acclimatize. The time period required will

largely depend on the degree of climatic change. MDDs should not be used on a live operation until 4 weeks after arrival in theater. Additionally, transferring a dog suddenly from one climate to another, such as from an air-conditioned room or vehicle to a

hot environment, is detrimental to its capability. The MDD handler has the definitive say on whether his MDD is capable of working in particular climatic conditions.

An MDD takes 6 months to train and is already fully trained before deployment. At the end of an MDD's training period, the handler is fully acquainted with the dog's aptitudes, moods and behaviors under various conditions. However, to prevent skill fade, MDD teams should undergo regular refresher training while in theater. MDDs will maintain their value as detecting tools only if they receive constant proficiency training.

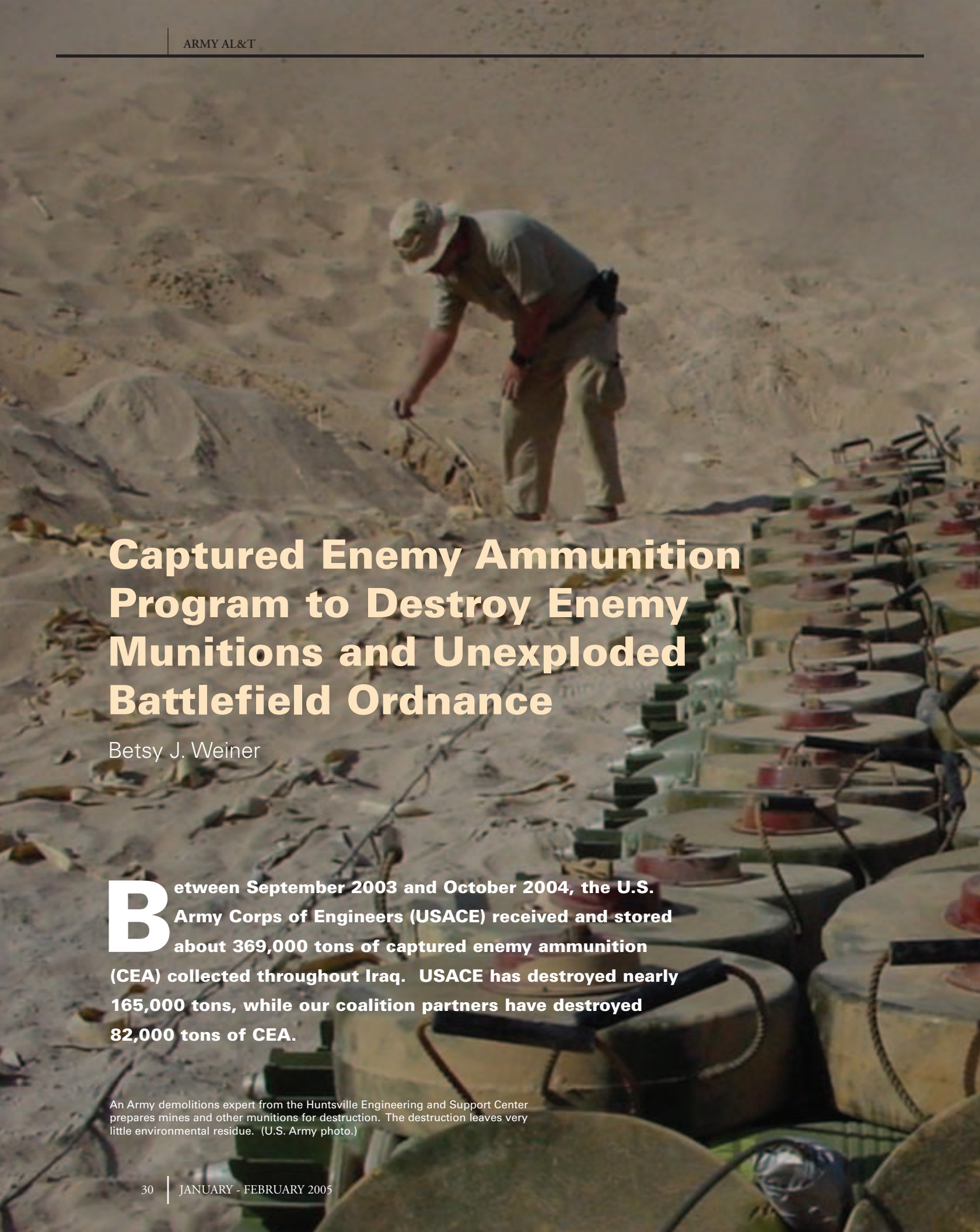
*Editor's Note: This article is excerpted from a similar article in Engineer Magazine, July-September 2004.*

**JAMES PETTIT** is the Program Manager for Engineer MDDs at the U.S. Army Engineering School at Fort Leonard Wood, MO. He developed the initial concept and supervised the development and implementation of the 67th Engineer Detachment (MDD).

**CPT RONALD J. HUGHES** is the first Commander of the 67th Engineer Detachment and was instrumental in proving the Soldier-handled MDD concept in Afghanistan. He was the primary author of *Special Text 20-23-8, Use of Demining Dogs in Military Operations* and was responsible for training area development and training planning at Fort Leonard Wood for the dog detachment. Hughes graduated from the U.S. Military Academy with a B.S. in environmental engineering.



**US Army Corps  
of Engineers®**

A soldier in a desert environment, wearing a white uniform and a wide-brimmed hat, is working with captured enemy ammunition. The soldier is bent over, handling a large cylindrical munition. In the foreground, there are many more of these cylindrical munitions, some with red caps, arranged in rows. The background shows a sandy, desert landscape with some sparse vegetation.

# Captured Enemy Ammunition Program to Destroy Enemy Munitions and Unexploded Battlefield Ordnance

Betsy J. Weiner

**B**etween September 2003 and October 2004, the U.S. Army Corps of Engineers (USACE) received and stored about 369,000 tons of captured enemy ammunition (CEA) collected throughout Iraq. USACE has destroyed nearly 165,000 tons, while our coalition partners have destroyed 82,000 tons of CEA.

An Army demolitions expert from the Huntsville Engineering and Support Center prepares mines and other munitions for destruction. The destruction leaves very little environmental residue. (U.S. Army photo.)



Combined Joint Task Force-7, now the Multinational Corps Iraq, selected the U.S. Army Engineering and Support Center, Huntsville, AL, on July 28, 2003, to conduct the mission. Six weeks later, the first ton of CEA was destroyed. The program also blasted through its biggest challenge — transitioning from military control to a civilian-managed working environment, said Glenn Earhart, the Huntsville Center Chief of International Operations. The transition freed military resources to return to their warfighting and security duties.

Earhart stated that when the program first began, personnel faced challenges such as quality-of-life issues, security difficulties and how to best use the local national workforce. “Now,” he said, “all that has changed. We have installed base camps at each of our six sites and employ more than 1,000 Iraqi citizens as laborers and security forces. Contractors now employ professional security companies from the



Airmen from the U.S. Air Force's 455th Explosive Ordnance Group/Explosive Ordnance Disposal set C-4 charges on a weapons cache to be destroyed at the East River Range, Bagram Airfield, Afghanistan, Dec. 2, 2004. Each of the service's explosive ordnance disposal units are assisting the removal and destruction of CEA from captured weapons and munitions caches across Iraq. (DOD photo by SGT J. Antonio Francis, U.S. Army.)

United States and our team controls site security. The only responsibility the military still has is providing convoy security.”

Another mission goal is to ensure a quality local national workforce and to keep pace with the

USACE received and stored about 369,000 tons of captured enemy ammunition collected throughout Iraq. USACE has destroyed nearly 165,000 tons, while our coalition partners have destroyed 82,000 tons of CEA.

demands of an improving economy in Iraq. “As the people working for us become more skilled,” Earhart continued, “we will have to keep up with the demands for more competitive wages in accordance with the local economy. Our goal is to



USACE demolitions experts have set CEA destruction goals at 100 tons per day for each site. (U.S. Army photo.)



Huntsville Engineering and Support Center employees observe CEA demolition in Iraq. To date, more than 247,000 tons of captured munitions are slated for final destruction in early 2005. (U.S. Army photo.)

In October 2004, although the CEA mission was not complete, the program's name was changed to Coalition Munitions Clearance and unexploded ordnance clearance was added to the mission.

eventually return a safer Iraq to its people.”

Although the CEA program has been funded through FY05, Earhart said he hopes to complete the CEA portion of the mission in early 2005.

In October 2004, although the CEA mission was not complete, the program's name was changed to Coalition Munitions Clearance and unexploded ordnance clearance was added to the mission.

The Huntsville Engineering and Support Center recently received \$525 million to perform worldwide munitions response and other munitions-related services under the DOD Military Munitions Response (MMR) Program.

Ten contractors will share capacity in this contract. Another \$250 million for fixed-price response and insurance contracts was awarded for other MMR services.

“About 75 percent of the work awarded under the \$525 million contract is expected to be performed as part of the U.S. Army's CEA mission in Iraq and possibly in other areas outside the United States,” said Dan Coberly, the Huntsville Center Public Affairs Officer.

COL John Rivenburgh, Huntsville Engineering and Support Center Commander, said that Huntsville Center employees are committed to providing quality services and products in the most cost-efficient manner possible


and that the mission in Iraq is no different. “Our Soldiers, contracting employees and DA civilians serving in Iraq are magnificent,” Rivenburgh remarked. “They are diligent in their execution and professional in all they do. Their sacrifice is no less than it is for our Soldiers, and we should never lose touch with that,” he concluded.

**BETSY J. WEINER** is a Public Affairs Specialist assigned to the Huntsville Engineering and Support Center. She has an M.A. in communications from the University of Northern Colorado and a J.D. from Western New England College in Springfield, MA. She is licensed to practice law in Colorado and has inactive status. She holds memberships in the Colorado Bar Association and Society for American Military Engineers.

# TARDEC Helps to Keep EOD Soldiers Safe

Monica Kapso and Paul Mehney

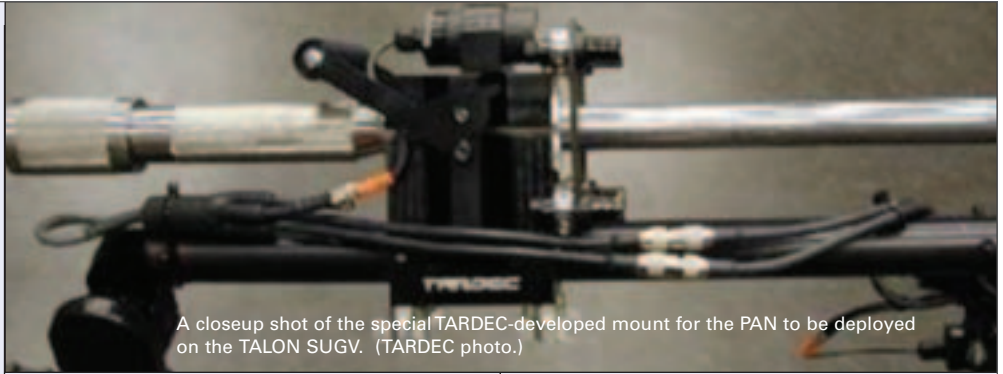
**A**rmy guidance is clear: “unexploded ordnance is a threat of which every soldier should be aware,” but for Explosive Ordnance Disposal (EOD) units, coming in contact with this deadly foe is just another day in the office. Researchers at the U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC) are striving to make EOD technicians safer and less stressed by giving them a system to defuse munitions from a safe standoff location. TARDEC, working with industry partner Foster-Miller Inc., of Waltham, MA, has developed a revolutionary mounting system that will allow EOD technicians to use the TALON™ Small Unmanned Ground Vehicle to defuse explosive ordnance.



The TALON Small Unmanned Ground Vehicle (SUGV) is being used by EOD units to defuse explosive ordnance. Equipped with special mounting brackets, the SUGV hosts the Percussion Actuated Nonelectric (PAN) disruptor allowing Soldiers to defuse bombs and unexploded munitions from a safe standoff distance. (U.S. Army photo by Mike Roddin.)

Currently, TARDEC has a Small Business Innovation Research contract in place with Foster-Miller to develop mission payloads for Small Unmanned Ground Vehicles (SUGVs). According to TARDEC project lead David Kowacheck, “Seeing that most EOD Soldiers are familiar with and use the TALON platform in a variety of dangerous circumstances, it was natural for our team to take a look at how the TALON could make these Soldiers’ jobs a bit safer. We soon found out that units did not have a way to mount their most common tool — the Percussion Actuated Nonelectric (PAN) disruptor to the TALON.”

Current procedures call for the EOD Soldier to wear a heavy, hot bomb suit and then physically approach the device to deactivate it with a tripod-mounted PAN disruptor. Developed by Sandia National Laboratories, the



A closeup shot of the special TARDEC-developed mount for the PAN to be deployed on the TALON SUGV. (TARDEC photo.)

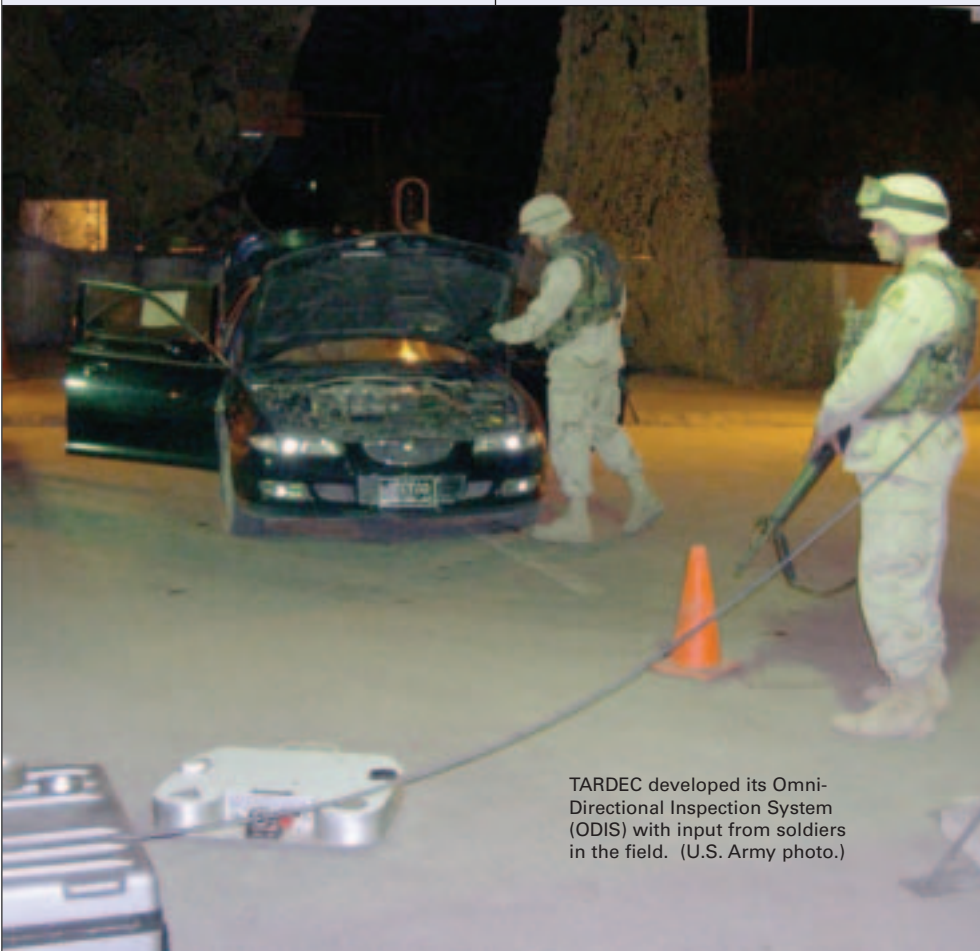
PAN disruptor is possibly the most common EOD tool used to render explosive devices safe. The PAN precisely interrupts a bomb’s internal gadgetry (fuse) before the bomb can detonate. However, in combat operations, the device is often booby-trapped, remotely controlled or watched by an enemy sniper. Kowacheck states, “One of the chief reasons that the PAN could not be deployed on an unmanned ground platform to keep Soldiers at a remote distance was the fact that no mount bracket existed that would withstand

the disruptor’s powerful recoil. The TARDEC/Foster-Miller team took on that challenge.”

Within a matter of months, the team developed a prototype system that allowed the PAN to be employed on the TALON. The improved method features an inexpensive recoil-mitigating mount for the PAN disruptor that allows the EOD technician to use the robot to evaluate the explosive device and orient the PAN while remaining at a safe distance for the entire procedure. The shock-reducing mount mitigates the recoil from the disruptor, preventing undue robot life-cycle damage.

Currently, this system has successfully undergone limited safety testing at the Naval Systems Warfare Center — Indian Head Division and more than 15 mounts have been sent to our EOD Soldiers in theater for testing and evaluation. Benefits will include increased Soldier survivability, quicker opening of threatened roadways and less threat to civilian bystanders. It also offers a low-cost solution, at under \$3,000 per mount.

Soldiers are enthusiastic about employing this potentially life-saving technology. A note from one of our EOD commanders affirms their appreciation for these systems, “I thank you for the great assistance you guys are lending us. Losing one of our own drives home the necessity of using that TALON



TARDEC developed its Omni-Directional Inspection System (ODIS) with input from soldiers in the field. (U.S. Army photo.)



TARDEC's ODIS allows Soldiers to inspect vehicles from a standoff location. (U.S. Army photo.)

first. That little guy saved our butts on many occasions.”

Kowachek agrees, “Once Soldiers bring their TALONs in for routine maintenance by in-theater Foster-Miller technicians, they will be given a PAN mount to use when returning to the field. So, we end up with EOD Soldiers able to control an SUGV from a safe location during the entire EOD process. Being able to quickly deploy these life-saving

mounts has been a true industry-government partnership for the Soldier.”

**MONICA KAPSO** serves as the Editor of U.S. Army Research, Development and Engineering Command/TARDEC's *TARDEC Quality Report*.

**PAUL MEHNEY** is a Marketing Specialist with TARDEC's Operations Business Group.



# The Joint Common Missile Project – Program Management Lessons Learned

MAJ Robert F. Mortlock



**T**he Joint Common Missile (JCM) Project offers a shining example of acquisition reform for acquisition development programs preparing for entry into system development and demonstration (SDD). The program is an Acquisition Category ID Joint, cooperative development program between the U.S. Army, Navy, Marine Corps and United Kingdom. The JCM Project Management Office's (PMO) mission is to develop a lethal, precision-guided, air-to-surface weapon with extended range.

The JCM, designed for the Navy's F/A-18E Super Hornet strike fighter (above), the Marine Corps' AH-1Z and the Army's AH-64D Apache Longbow attack helicopters, will streamline logistics and supply chain procedures by offering a common weapon for all platforms and services. (U.S. Navy photo by Photographer's Mate Airman Kathleen Gorby.)

JCM provides improved performance over the systems it will replace by using a tri-mode seeker incorporating imaging infrared, millimeter wave radar and semiactive laser sensors. The JCM seeker enables longer ranges, increased lethality, improved performance in adverse weather and significant hardening against countermeasures. Initial operational capability dates on the Apache AH-64D, Super Cobra AH-1Z, Super Hornet F/A-18E/F and Seahawk MH-60R range from FY09 to FY10 to fill the gap left by declining inventories of HELLFIRE, Maverick and aviation-launched TOW [Tube-launched, Optically tracked, Wire-guided] missile systems. The JCM PMO will achieve full Increment I requirements through a 4-year SDD program beginning with a 12-14 month risk mitigation phase followed by a 36-month system integration and demonstration phase.

### Long-Term Strategic Planning

The critical underpinning support for any future development program occurs during concept refinement when strategic plans to address future warfighting capability gaps are developed. Prior to PMO formation, Program Executive Office (PEO) Tactical Missiles initiated and developed a long-term Strategic Business Plan that users and the science and technology (S&T) community accepted. The JCM user community identified the need to replace current aviation-launched tactical missile systems. The S&T community from the U.S. Army Aviation and Missile Research, Development and Engineering Command (AMRDEC) provided technical expertise on development timelines required for the high technical-risk areas of seeker, warhead and propulsion components. With the strategic plan in place, both the requirements generation process and S&T objective (STO) efforts to mature

critical technologies began, and an early acquisition strategy was formulated, as depicted in Figure 1. The agreement for a long-term strategy and common path forward by the user, S&T and acquisition communities solidified program support from all major stakeholders, and greatly eased transition difficulties between PEO Tactical Missiles and AMRDEC.

### Technology Transfer

The seamless transition of technology from the S&T community to a PMO for system development activities is central to acquisition transformation. A Technology Transfer Agreement between AMRDEC and PEO Tactical Missiles enabled the successful transition of critical component technologies to JCM PMO and provided a focused objective to develop a common missile. In October 1999, 4-year STO efforts for developing a tri-mode seeker — a single warhead to defeat both armor and military operations on urbanized terrain (MOUT) targets and a single boost/sustain rocket motor

for extended range — commenced, as illustrated in Figure 2.

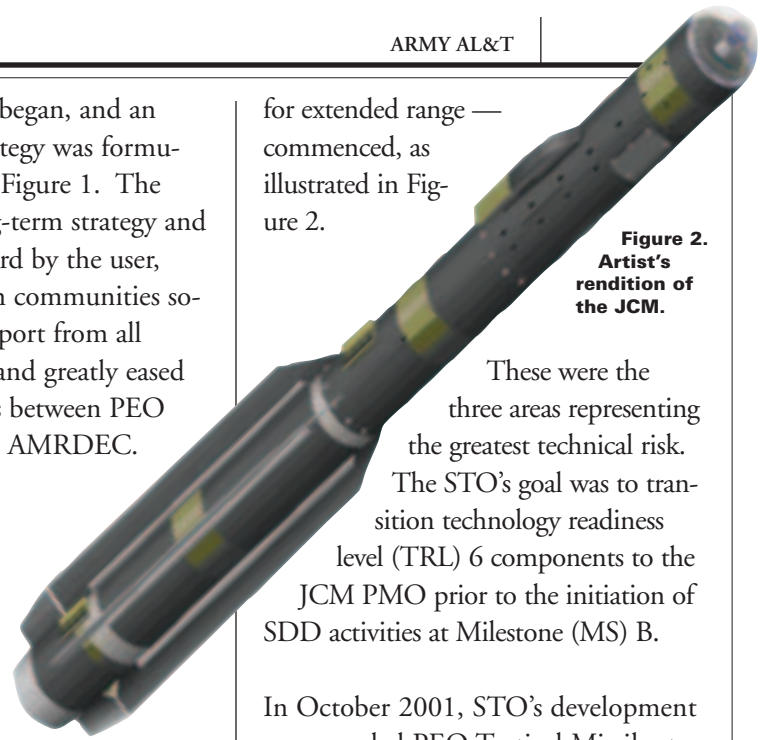


Figure 2. Artist's rendition of the JCM.

These were the three areas representing the greatest technical risk. The STO's goal was to transition technology readiness level (TRL) 6 components to the JCM PMO prior to the initiation of SDD activities at Milestone (MS) B.

In October 2001, STO's development successes led PEO Tactical Missiles to establish the JCM PMO to oversee technology development (TD). The JCM PMO began the JCM program with a TD phase focused on technology maturation, and oversaw the STO efforts and initiation of system definition and risk reduction (SDRR) efforts. After the TD phase, the JCM critical subsystems were deemed TRL 6, the recommended maturity level for system integration activities. The smooth technology transition to the JCM PMO at the appropriate TRL for

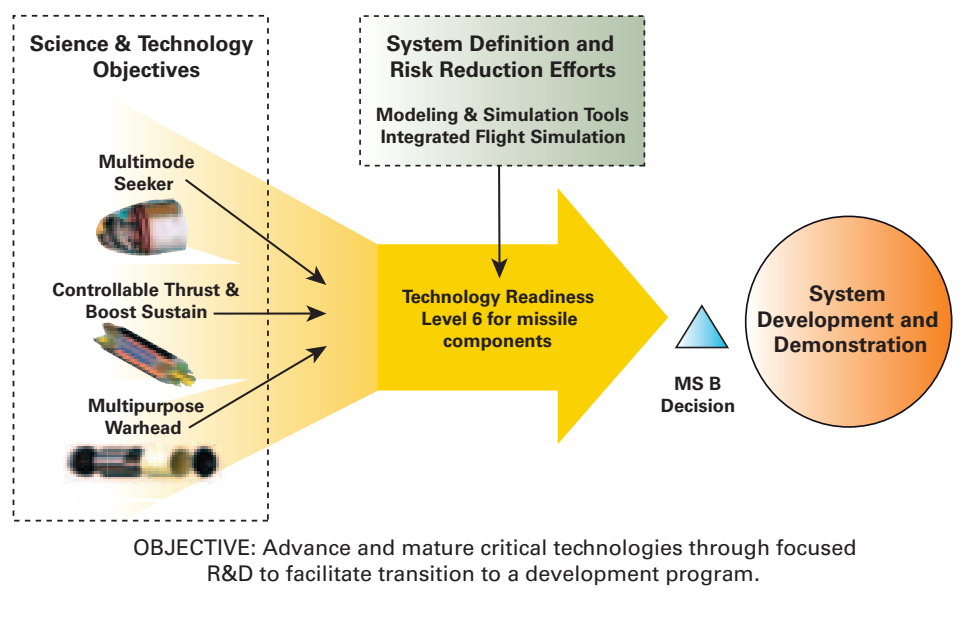


Figure 1. Early Acquisition Strategy

JCM specifications require a range of 16 km for rotary-wing aircraft and 28 km for fixed-wing. JCM's tri-mode seeker system provides improved performance in bad weather and is designed to block jamming efforts. (U.S. Marine Corps photo.)



JCM provides improved performance ... by using a tri-mode seeker incorporating imaging infrared, millimeter wave radar and semi-active laser sensors.

system integration and demonstration lowered risk and shortened the SDD schedule.

### Simulation-Based Acquisition (SBA)

JCM PMO developed an acquisition strategy that relied heavily on a simulation-based development approach. With the SBA approach, the PMO realized the early need for an all-digital integrated flight simulation (IFS) tool to facilitate development and performance assessment. SDRR efforts focused on developing a high-fidelity IFS. The PMO used the IFS, verified by extensive laboratory and captive-flight testing, to evaluate contractor seeker performance and assess missile performance capabilities.

The TD phase integrated the STO efforts and IFS development work, allowing a request for proposal to be

released in August 2003. All bidding contractors delivered mature IFS modeling and simulation (M&S) tools as part of their proposals. The source selection board then used the contractor's own IFS for performance evaluation of the missile

development plan. The winning prime contractor, Lockheed Martin, delivered the latest version of its IFS upon contract award. This level of maturity in the M&S tools at this stage in the program is unprecedented for a missile development program. The JCM M&S tools will impact the design and supportability of the missile early in the program before design changes become economically unaffordable.

### PMO Formation

Although the acquisition development model states that systems acquisition begins at MS B, forming and

staffing the PMO well before MS B is vital to program success. The JCM PMO — formed in October 2001, 2 years prior to the planned MS B — provided TD phase oversight and facilitated the smooth acquisition community integration into the requirements generation process. Forming the PMO early ensured adequate time to develop and obtain approval for MS B documentation. Despite acquisition transformation initiatives, MS B documentation remains extensive. The approval and consistency of every JCM MS B document prior to MS B provided the Defense Acquisition Board (DAB) a clear indication of program support across the entire defense community and emphasized that the program was ready to enter SDD.

### Requirements Generation

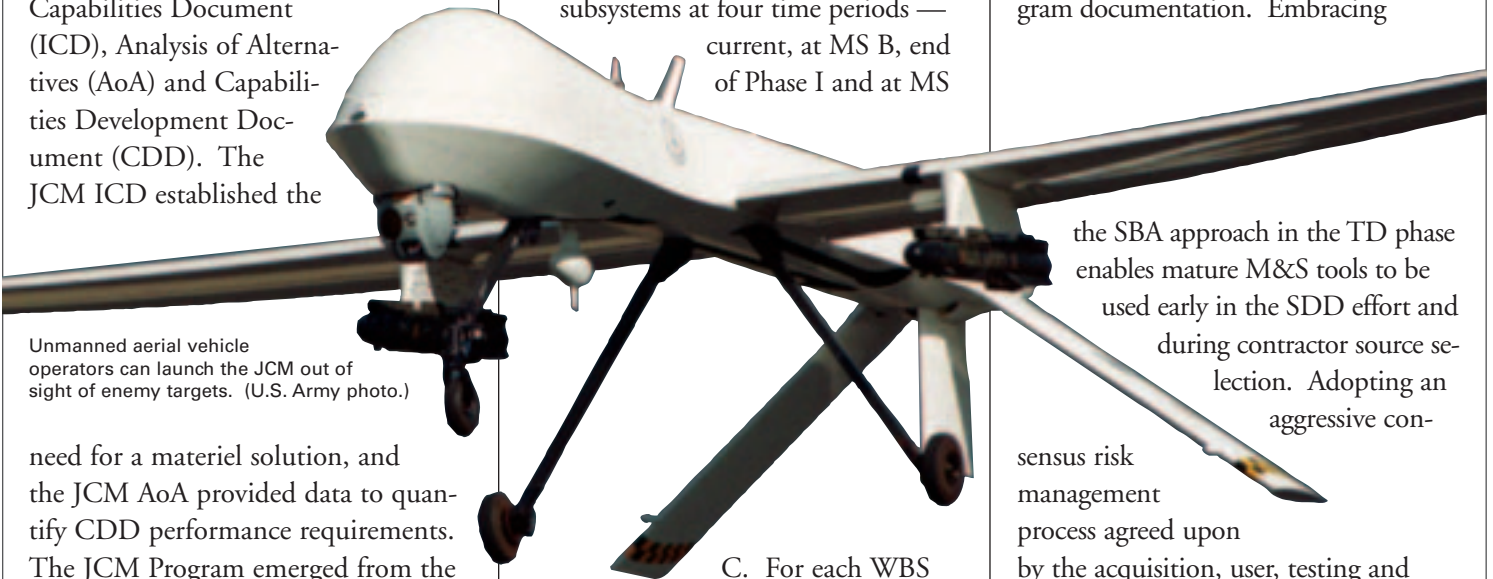
In early 2003, the JCM Program was chosen as the first program to enter the new Joint Capabilities and



Integration Development System (JCIDS) process. The JCIDS process seeks to enhance the methodology to identify and prioritize capability gaps and improve coordination between the services. Likewise, JCIDS helps develop program support from the Joint staff, strengthening the services' commitment to the program — the single biggest factor in program approval to enter SDD. JCM PMO personnel played key roles in the integrated concept team that developed the Initial Capabilities Document (ICD), Analysis of Alternatives (AoA) and Capabilities Development Document (CDD). The JCM ICD established the

and representatives from the PMO, S&T development community, and service/ Office of the Secretary of Defense staffs — gathered to develop the RA. ATEC and the PMO ensured the ultimate success of the “lockdown” meeting by agreeing on a common assessment methodology and missile work breakdown structure (WBS) identifying critical missile components. The RA produced a high, medium-high, medium, medium-low and low assessment of program risks for critical JCM subsystems at four time periods — current, at MS B, end of Phase I and at MS

streamlining and transformation. The program management lessons learned can guide any program entering SDD. Long-term strategic plans with warfighter input provide guidance for technology maturation efforts in the S&T program, and facilitate the transfer of technologies to the PMO for system integration and demonstration efforts. Pre-MS B PMO formation allows acquisition S&T development oversight, early integration into the JCIDS process and enough time to prepare MS B program documentation. Embracing



Unmanned aerial vehicle operators can launch the JCM out of sight of enemy targets. (U.S. Army photo.)

need for a materiel solution, and the JCM AoA provided data to quantify CDD performance requirements. The JCM Program emerged from the JCIDS process with a Joint Requirements Oversight Council (JROC)-approved ICD, an approved AoA and a JROC-approved CDD.

## Risk Management

Developing a consensus risk assessment (RA) prior to MS B provided a common focus for developing the JCM by identifying program risks and associated risk mitigation efforts throughout the program. In early 2003, JCM Program stakeholders recognized the need for a consolidated program RA. The PMO and the Army Test and Evaluation Command (ATEC) jointly chaired the RA development process. The PMO and ATEC held a “lockdown” meeting where participants — including Army, Navy and Marine Corps users; Army and Navy testers;

C. For each WBS component, a waterfall or risk burn-down chart was developed that specifically identified tests and M&S activities required to support risk assessments at MS B, the end of Phase I and at MS C. Additionally, quantitative MS exit criteria were derived from those activities. The RA affected the program acquisition strategy, which ultimately included a risk mitigation phase prior to the system integration and demonstration phase. The RA also provided focus for the pre-SDD development activities leading to the DAB review, and served as the MS B System Evaluation Report.

The JCM Program has embraced an innovative acquisition management approach that serves as an example for acquisition reform, technology transfer,


the SBA approach in the TD phase enables mature M&S tools to be used early in the SDD effort and during contractor source selection. Adopting an aggressive con-

sensus risk management process agreed upon by the acquisition, user, testing and S&T communities provides a focus for TD and SDD activities and a common understanding of program risks and risk mitigation efforts.

MAJ ROBERT F. MORTLOCK is an APM, JCM Project Office, PEO Tactical Missiles, Redstone Arsenal, AL. He holds a B.S. degree in chemical engineering from Lehigh University, an M.B.A from Webster University, a Ph.D. in chemical engineering from the University of California-Berkeley and a Professional Engineering license in New York. Mortlock is an Army Acquisition Corps and Uniformed Army Scientist and Engineer Program member.

# Interview With U.S. Air Force MG Darryl A. Scott, DCMA

Elizabeth Connell



**O**n Dec. 3, 2004, MG Darryl A. Scott, Defence Contract Management Agency (DCMA) Director, generously took time out of his busy schedule to discuss with *Army AL&T* Magazine how DCMA helps the Army acquisition community.

In summer 2004, then BG Darryl A. Scott visited DCMA personnel providing contingency contracting support to coalition services in Iraq, Kuwait and Afghanistan. He met with Air Force COL Steve Zamperilli, then DCMA Iraq Commander, and Air Force LTC Russ Blaine, then DCMA Northern Iraq Commander, at a site near Baghdad. (Department of Defense photo.)

**Army AL&T:** As Director, what are your personal goals for DCMA [Defense Contract Management Agency]?

**Scott:** My first goal is to transform the Agency into a customer-focused organization. About 3 years ago, DCMA surveyed all the program executive offices, more than 60 program managers [PMs] and many of our major customers. The big response was that DCMA was too internally focused, that we tended to evaluate our performance by criteria we set rather than criteria the customer set. So we have been working hard to change through an effort started under my predecessor, U.S. Army BG Edward M. Harrington. The objective is to measure our success by the customer's success measure — if the customer is not successful, we can't claim success.

My second goal goes along with that. It's not enough to say that I am measuring myself by the customer's success criteria — I must have a plan and metrics to indicate how I'm doing against those expectations. I call that performance-based management. That's been DCMA's major thrust for the year I've been here — developing concrete objective measures so that when I tell a customer "here are the outcomes that I'm managing for you," he has a clear idea what I'm going to do, how many resources I have committed and what the success criteria are. Then we don't argue about whether we're doing what we're supposed to be doing — the metrics tell the story.

Each major Army ACAT program has a program support network or, as we call it, a program support team assigned to it. The lead person serves as the program integrator and coordinates all activities across the network and across all the CMOs, to support the program office.

My third goal is to revitalize the DCMA workforce. My first tour with DCMA was in the early 1990s when we had about 26,000 people. Now we're down to 11,000. We shed about 1,000 people a year for 12 years straight, which we did for good reasons. Now we've leveled out and it's

time to start looking at the future. The average age of my workforce is almost 52. The advantage of that is my staff is very experienced. But, although I want every 52-year-old to stay as long as possible, at some point they're going to retire. I'm bringing in about 200 interns and young college graduates a year, so I now have about 600 people in their 20s. But in between those two demographic mileposts, I'm really thin. I have very few people in their early 30s to early 40s. I've got to do something to keep my workforce vibrant, to prepare for the kinds of things customers expect us to do and to make sure we're doing those things for the future.

A supporting goal of mine is to examine our organization — enterprise management. I have two large U.S. districts, with about half my people in each, and one international district. I have 44 major brigade-level field commands in CONUS and 6 overseas. Each of these organizations has traditionally acted like a frontier outpost, managing the contracts in their region. They didn't much care about or support what the other CMOs [contract management offices] were doing.

When I look at major acquisition programs — particularly something like Future Combat Systems (FCS) for the Army, 35 of my 50 brigade-level commands are involved in FCS. The challenge is how to bring the capabilities of multiple DCMA units together in an enterprise fashion that adds value for our customers. We're doing that really well with FCS. In fact, FCS is kind of our pilot for how we would operate across the enterprise, rather than in separate contract management activities. We're trying to take the things we're learning from that to understand how we can manage at the enterprise level for the majority of our major-system customers.

Our international district takes care of the unique aspects of doing contract management overseas. In some cases we have host-nation support agreements where host-country nationals actually provide contract management services and DCMA employees oversee what they're doing, which allows me to operate with a smaller footprint. My international district employees understand things like managing an international supply chain, getting country clearances to move materiel from a subcontractor in New Zealand, for example, back to a prime contractor in the U.S.

**Army AL&T:** Do you try to get out to as many posts as you can?

**Scott:** I do try to get out to as many as I can. I have visited 27 of our brigade-level commands. I've visited five of our six OCONUS commands. The only one I haven't visited is in Ottawa, Canada — the closest one! But I'm on my way.

**Army AL&T:** How is DCMA helping the Army meet its near- and long-term transformation goals?

**Scott:** We're very much part of the



MG Scott and DCMA Boeing Long Beach C-17 Production Chief Joe Esquivel, at the Boeing plant in Long Beach, CA, discuss DCMA's critical role in ensuring that aircraft are delivered to customers "mission ready." (DOD photo.)

Army transformation team. Our involvement ranges from a tactical level — the kinds of things we're doing day-to-day in my CMOs to support the Army transformation programs, and the legacy programs as well — to looking long into the future. To give a couple of examples, we are heavily engaged with FCS. I've got 200 full-time equivalents (FTEs) working FCS programs. At the tactical level, the FTEs provide insight on what's happening on the factory floor back to the PM and they provide schedule and cost oversight through the earned value management system. At the strategic level, we're supporting the Army Materiel Command (AMC) with a look over the next hill at things like industrial base capability to support Army transformation.

In 2003, GEN Paul J. Kern [then AMC Commanding General] asked us to take a look at the defense industrial base and its ability to support the

legacy systems while the Army transformed into the Future Force. We conducted a very successful study for him, pointing out risk areas, areas where the Army needed to pay attention and opportunities where the Army might be able to leverage things to shift program priorities around to reduce transformation risk.

We did that so well that in FY04, GEN Kern asked us to go back and look at future capabilities. The study was more technology focused and asked, 'Were the key technologies available and are they likely to be mature enough?' It's one thing to test technology in a laboratory environment, but it's another thing to have the technology base available to field equipment in quantity to support Soldiers. We looked at 10 key technology areas and assessed the industrial base's technological maturity. We recommended several areas that the Army might want to make more investments in. If the

Army wants to be totally mission capable by 2014, then it needs to start concerning itself with the industrial base and technology readiness now. We're continuing to build the relationship between my Industrial Analysis Center (IAC) and the industrial base folks over at AMC now.

**Army AL&T:** How does DCMA work with Army acquisition professionals?

**Scott:** We regard ourselves as being in partnership with Army acquisition professionals. Indeed, many are part of DCMA now, they've come to work for us and will go back to the Army. Roughly one-third of my commanders are Active Duty Army officers. We regard ourselves as very much part of the Army team for the large programs, particularly the ACAT [acquisition category] I programs we manage. Each major Army ACAT program has a program support network or, as we call it, a program support team assigned to it. The lead person serves as the program integrator and coordinates all activities across the network and across all the CMOs, to support the program office. This person is the early warning system for the PM, ensuring that information flows up in time for the PM to make sound business decisions. Likewise, when the PM has made a decision that needs to be implemented in the plant, the program integrator flows information down through the organization. Our program integrators usually participate in all key meetings

and information exchanges that the PMs conduct so we know what the PM's concerns are and we're out there working on them.

Additionally, we have excellent resource management systems in DCMA including risk management systems that identify key moderate- and high-risk activities and an activity-based management system that lets me tell the Army — pay period by pay period — in what activities and for how many hours DCMA supports specific Army programs.

**Army AL&T:** You have said previously that there is more funding for defense acquisition projects since Ronald Reagan's presidency but fewer acquisition workforce members to work on projects. How does DCMA help the Army acquisition workforce accomplish its goals?

**Scott:** There are two ways we assist the acquisition workforce — direct and indirect support. In our direct support role, we do things for Army acquisition that they can no longer do for themselves because of resource constraints. Given these constraints, it's too difficult and expensive to maintain the skill base that we do. For example, we provide engineering surveillance so the Army doesn't have to put its own engineers on the factory floor to look over contractor design activities or determine how

the contractor is transitioning from design to production readiness. DCMA can provide those resources.

The second way we help is through indirect support. We have put a lot of emphasis on becoming more efficient while providing capability for the Army with a smaller footprint. A key performance goal we set for ourselves is to move 3 percent of the Agency overhead, per year, into direct customer

support. In FY04, we exceeded that goal with a result of nearly 5 percent. One way we did this was by consolidating all information technology operations into a single organization, where previously they were distributed throughout the three districts, which allowed me to move 100 positions from an overhead function into direct support. We redeployed those FTEs as industrial specialists, quality assurance folks, contract administrators, engineers and program administrators.

Additionally, we have excellent resource management systems in DCMA including risk management systems that identify key moderate- and high-risk activities and an activity-based management system that lets me tell the Army — pay period by pay period — in what activities and for how many hours DCMA supports specific Army programs. We examine that data so we can shift resources around to ensure that I have put DCMA resources where the moderate and high risks are. In fact, 98 percent of my resources go to activities that customers have identified as moderate to high risk.



**Army AL&T:** Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology LTG Joseph L. Yakovac Jr., espouses the need for Army acquisition professionals to work more interdependently with the other services. How will DCMA help the services form interdependent partnerships with a Joint and expeditionary focus?

**Scott:** DCMA is inherently Joint. We have Army officers, but we also have Navy, Marine Corps and Air Force officers as well. Typically, when an Army officer comes into an assignment in DCMA, he's going to be working shoulder-to-shoulder with Air Force, Navy and Marine Corps personnel. I'll give you an excellent example. My lead CMO for FCS is Boeing, St. Louis. The commander there is a Marine Corps colonel and an aviator. I have this colonel there because the other big activity in that plant is F/A-18 Super Hornet production for the Navy and Marine Corps. So when you look at the CMO staff, you see Marine, Navy and Army uniforms all interacting.

Conversely, my Southeast aircraft operation is a large organization that has all the aircraft operations east of the Mississippi, fixed and rotary wing. There I've got a Navy captain as the commander. He has a subordinate commander in the Ozark, AL, location who is an Army O-5 [lieutenant colonel] aviator, who is also dual qualified in the Acquisition Corps. Below him are Army acquisition officers, aviators and maintenance technicians, but also Air Force aviation maintenance managers. So folks get to rub shoulders and elbows with their counterparts from the different services. They get a tremendous cross-flow of ideas, and we bleed those experiences and capabilities over to all of them.

Further, LTG Yakovac really has been superb in bringing DCMA into his career management and career development initiatives for the Army acquisition workforce. He is trying to establish sectors where Acquisition Corps folks can rotate around and see a variety of life-cycle acquisition processes such as front-end technology efforts; systems design and development efforts; and production and post-award performance management. We're looking for opportunities where officers can rotate around through Army and DCMA jobs to pick up greater professional exposure and expertise.

Back in 2003, as part of the Army Transformation Industrial Base Study, GEN Kern asked us to look at the Army's organic industrial capabilities and the contractor industrial base to identify potential future capability gaps and shortfalls and investment opportunities that made sense.

In the spirit of full disclosure, this rotation is difficult for us because when officers come to us, we're

going to deploy them. We're trying to figure out how we can manage this rotation and have officers serve a year in a logistics support assignment, a year in an acquisition program office and a year in DCMA. While officers are with us, they're probably going to be in Afghanistan, Iraq, Djibouti or Kuwait for 6 months out of that year. If we can work out these rotational assignments, we'll really appreciate this opportunity to work with the Army to develop full-spectrum acquisition professionals.

**Army AL&T:** Given the fact that you have staff from all the services working together while they are with you or involved in your programs, have you seen evidence that they are taking the lessons they have learned under DCMA's guidance and brought them back to enhance Joint operations?



DCMA Commander MG Scott discusses the direct and indirect support his organization provides to its DOD customers with Elizabeth Connell, *Army AL&T* Magazine Managing Editor. (U.S. Army photo by SGT Scott Meinhardt.)

**Scott:** Absolutely, what we are now getting to see are folks who are coming back to DCMA for their second tour. Those guys tell me their early experiences in DCMA were invaluable in their assignments back to the program offices. I have an Army lieutenant colonel who just finished his tour as my XO [executive officer], his second DCMA assignment. His first assignment was in our Central Pennsylvania office working on the Bradley program. When he leaves DCMA now, he is going to the U.S. Army Tank-automotive and Armaments Command, and he is definitely taking those lessons he learned as the Bradley program integrator with him.

**Army AL&T:** You have worked at many levels of defense acquisition. With your inside experience, what do you see as the major focus in DCMA's role as a combat multiplier?

**Scott:** We really have two roles as a combat multiplier. One, DCMA is a combat support agency. That role is a relatively small part of our resources, about 5 percent overall. But that's a role that virtually every deployed Soldier is touched by. We're over in Iraq, Afghanistan, the Horn of Africa. We are supporting special operations in the Philippines and the Balkans. Contractors run dining halls, set up and break down camps, grade roads and provide a portion of the long-haul ground transportation; and my personnel are over there — in theater — managing those contracts. My guys are sharing the same dangers as their Soldier brethren. In addition to my uniformed Soldiers, 45 percent of the folks I have deployed in Iraq are DOD civilians. I'm really proud of my civilians and the contributions they make every day. What's really special is that they're all volunteers. It isn't unusual to find civilians in my agency who have completed two or three deployments.

The second combat support role DCMA performs is in the plants. There is our normal program support role for THAAD [Theater High Altitude Area Defense], FCS and the family of medium tactical vehicles, among many others. But we do other things, such as managing surge activity. After Sept. 11, 2001, there was lots of surge activity going on, everything from ramping up production of personal protective gear to helping the Army develop new sources for small-arms ammunition, to accelerating the aircraft that were in contract depot repair and getting them back to the flight line faster. Closely tied to that mission is troubleshooting. We're the eyes and ears in plant, and the fact that we're learning to operate as an enterprise allows us to provide some visibility you can't get any other way.

**Army AL&T:** As a key player in FCS's One-Team concept, what type of support are you providing to PM Unit of Action (UA) (formerly PM FCS)?

**Scott:** We are fully integrated into PM UA's integrated product team (IPT) structure, with representatives on every one of PM UA's IPTs. This is where my ability to look across the agency as an enterprise really stands us in good stead. I provide a subject matter expert [SME] to each IPT to work the PM's issues. So I may provide somebody on an IPT out of Boeing St. Louis because that's where PM UA's office is. But, if it's an issue on the training systems IPT, I may provide SMEs out of the facility where the IPT is headquartered rather than out of St. Louis. We're supporting PM UA on its earned value management system and integrated master schedule. We're the ones going down, working with the contractors on the FCS team to ensure that we can integrate those many financial systems that all support earned value, that support the other

systems that are required to give PM UA an accurate and timely side picture on cost and schedule throughout the program network.

**Army AL&T:** DCMA has been tapped to play a lead role in support of the global war on terrorism (GWOT). OSD [the Office of the Secretary of Defense] recently tasked DCMA to oversee the daily management of the defense industrial base critical infrastructure protection program. What does this entail and what are your specific roles?

**Scott:** We are the lead agent on the defense industrial base portion of the critical infrastructure protection program. That means we do a number of things. One is we provide a key input into what is called a DISAP — Defense Infrastructure Sector Assurance Plan. To do that, we examine the defense industrial base and identify places where there are single points of failure — i.e., one single contractor who, if their facility was hit, would represent a significant blow to DOD. We then work with and advise the contractor on ways to mitigate risks and vulnerabilities in that environment. In one case, we recommended to the Army and a contractor that they establish a second source. It was a critical technology item and we looked at the facility's vulnerability given that the item is in such critical need, and advised the contractor to establish a second production line, both for capacity purposes and for hot back-up capability. We also provide input to OSD for overall vulnerability assessments, identifying industrial sectors that represent moderate or low risk and recommending ways to reduce vulnerability in those sectors. My IAC in Philadelphia has the lead on that mission function and we work very closely with the OSD staff, all the services and the Department of Homeland Security.



Then BG Scott and William V. Ennis, DCMA IAC Director, present IAC analyst John Furey with an award for 30 years' distinguished government service. (Photo courtesy of DCMA.)

**Army AL&T:** DCMA's IAC judges the capabilities of the United States' industrial base. What is your assessment of Army facilities (depots/arsenals or industrial partners) thus far?

**Scott:** Back in 2003, as part of the Army Transformation Industrial Base Study, GEN Kern asked us to look at the Army's organic industrial capabilities and the contractor industrial base to identify potential future capability gaps and shortfalls and investment opportunities that made sense. Additionally, my tremendously talented IAC guys provide a capability found nowhere else in DOD.

They are economists, engineers, statisticians and modelers. They provide vulnerability assessment models for the DISAP. We're also looking into supply chain modeling, not in the sense that logisticians look at supply chain modeling but for industrial-base supply-chain modeling. The industrial base really is a web of relationships, and modeling lets us show how business decisions may affect other programs. For example, failure to maintain adequate capability in one area probably won't hurt you on this program but downstream, on some other program, you may find that your industrial base is going to dry up

underneath you because there is not sufficient work to keep it vibrant.

**Army AL&T:** Does DCMA have contingency contracting members serving with the military in Afghanistan and Iraq? What principle roles are they performing?

**Scott:** We do, and I want to say these folks are doing outstanding work. Before GWOT, we probably deployed about 30 people a year. Now, counting all rotation cycles, I have about 100 people out at any one time. They go out on 179-day TDYs [temporary duty], so I'm really deploying about 200 people a year, and about 40 percent are civilians. DCMA provides quality assurance folks, administrative contracting officers and property management folks — almost the full spectrum of acquisition skills that I have in the Agency. Iraq is my largest operation, with nearly 50 people deployed, but I also have folks in Afghanistan, the Horn of Africa and the Philippines. In GWOT, Iraq makes the news every night but there are Soldiers, sailors, airmen and Marines in a lot of other places doing dangerous things and DCMA is right there, supporting them. Everywhere they are, we are.

We are actively recruiting folks who want a little excitement in their lives. With DCMA, they can go to Kuwait, Afghanistan, all those kinds of places. We realize those places are dangerous, so we've got quite an incentive package for folks to volunteer for those assignments. While they're deployed, they get a one-grade increase — if you're a GS-12, you deploy as a GS-13. Typically, these Emergency Essential (EE) programs are 3-year assignments. Within those 3 years, they can expect to deploy two or three times and, by the end of the assignment, they will have accumulated enough time in the higher grade to qualify for a noncompetitive reassignment in the higher grade. Of course while they're over there, if they are in a hot zone, they also get hazardous duty pay and tax and other financial incentives. None of the places have 40-hour workweeks. These folks are working 16-hour days, 7 days a week and we pay them overtime. We're recruiting outside the Agency as well — it's an excellent rotational opportunity for Army acquisition civilians who want a little more excitement. And we promise that when they finish their EE assignments, we'll give them back to the Army bolder, brighter and better than ever before.

---

**Elizabeth Connell** is the Managing Editor of *Army AL&T* Magazine. She has more than 10 years' of publishing experience. She has a Joint Honours degree in geography and East Asian studies from McGill University.





## DCMA's Industrial Analysis Center — Preparing for the Future

Since 1992, DCMA's Industrial Analysis Center (IAC) has been helping senior DOD decision makers plan for the future. The Philadelphia-based center employs industrial specialists, engineers, economists and computer programmers who research domestic and foreign companies, academic institutions and research and development centers to determine the industrial base's ability to support current and future defense and military operations.

IAC's analysts examine various industrial base aspects to identify weak points that might hinder current and future operational readiness. They assess the ability of an industry sector, commodity or specific industrial site — both domestic and foreign — to meet current and future acquisition requirements. IAC homeland defense industry analysts conduct vulnerability

assessments on critical infrastructure to ensure the safety and security of key manufacturing sites. Critical contractors, key subcontractors, production capacities, lead times and current and maximum production rates are all examined to predict industry's ability to handle surge demand. Emerging technologies are evaluated in light of industry's ability to fully develop and produce them.

Economists and policy experts examine the financial and policy aspects of industry. They examine the financial viability of a sector, company or product line to determine if a needed capability will be lost because of financial reasons. Through these financial viability assessments, they assign risk ratings to industry sectors, companies and product lines to aid DOD decision makers in planning. Economic analysis forecast studies examine economic, technology

and policy trends that affect industrial practices over 10 to 25 years. Changes such as corporate reorganization, vertical integration and globalization can all impact the industrial base's ability to respond to defense and military requirements, so IAC analysts closely watch these factors.

IAC has conducted several studies for the Army, including an Army Transformation Industrial Base Study for the Army Materiel Command Commanding General. IAC also provided risk assessments of and options to enhance eight industry sectors supporting current systems and assessed future force technologies, identifying industrial base risk.

Go to <http://home.dcmamil/cntr-dcmac-s/index.htm> to learn more about IAC.

## AAC and AMC to Host Annual Conference

The Army Acquisition Corps (AAC) and the Army Materiel Command (AMC) are joining forces to produce the *2005 Acquisition Senior Leaders and AMC Commanders Conference*. The 4-day event will be held Aug. 22-25 in the automobile capitol of the world — Detroit, MI.

Since 1990, the conference has served as a platform that enables the Army Acquisition Executive, Deputy Assistant Secretaries of the Army and other Army senior leaders a unique opportunity to communicate directly with program executive officers (PEOs), program/project/product managers (PMs) and acquisition and contracting commanders to discuss new direction, guidance and policies, as well as best business practices affecting the Army's diverse acquisition customers — Army combatant commanders and their Soldiers.

During this year's conference, AMC's senior leaders and commanders will join their AAC colleagues to discuss the challenges the respective communities face in implementing the Life Cycle Management Commands (LCMCs), a new organizational concept initiated in August 2004. In an effort to build a better logistics sustainment base through implementation of LCMCs, the Acquisition Workforce and AMC communities have a tremendous opportunity to orchestrate meaningful dialogue with their commercial industry partners. Boasting a rich industrial and manufacturing heritage for the automotive industry, Detroit offers excellent benchmarking opportunities for realizing the Army vision for the LCMCs. Additionally, the conference will examine the U.S. industrial base and globalization and how it impacts the Army, the DOD, homeland defense, commercial industry and prime contractors.

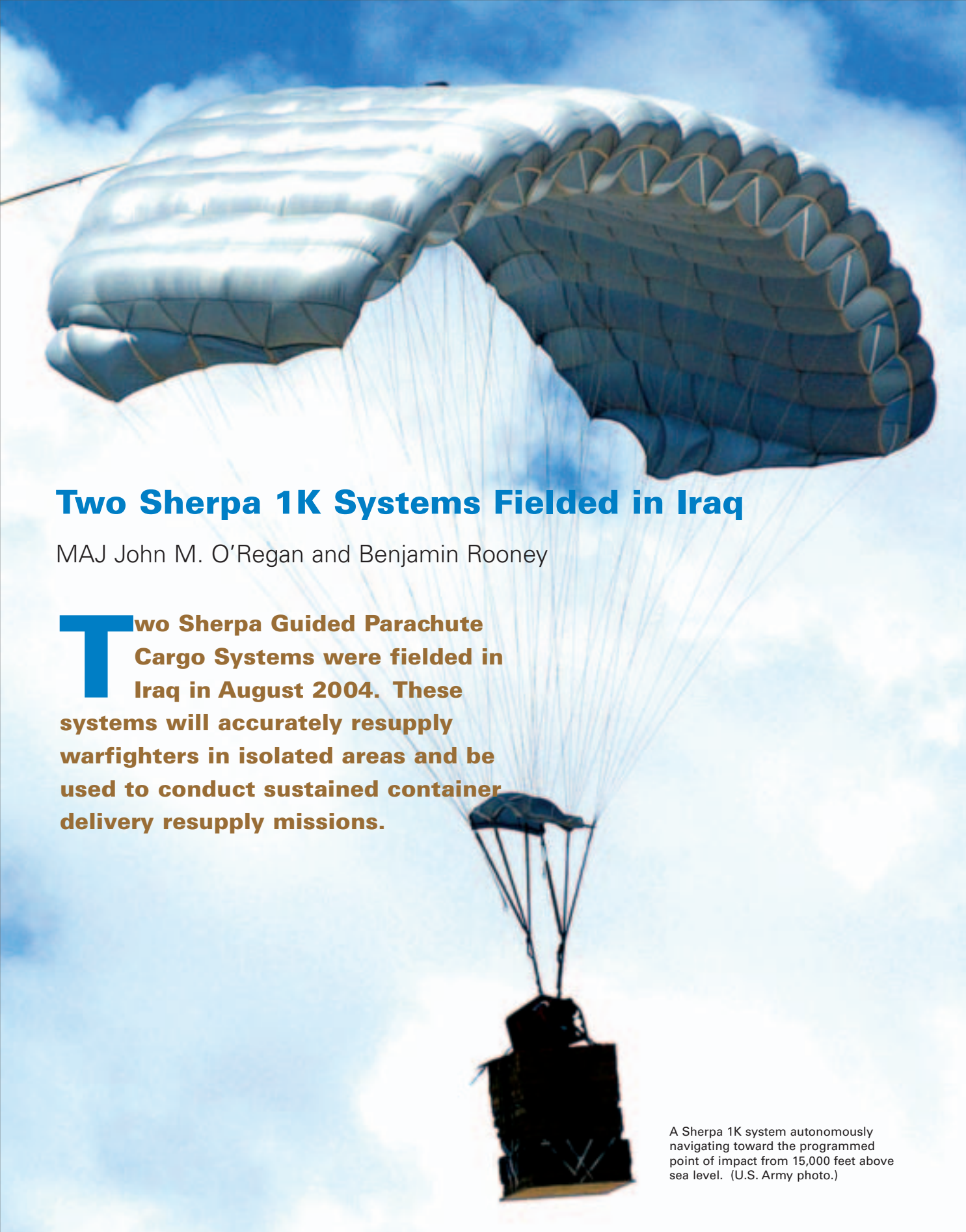
Offering more than 25 workshops, the *2005 Acquisition Senior Leaders and AMC Commanders Conference* will feature two panel discussions with the Army's industry partners and small and disadvantaged businesses, as well as a Hot Seat Panel composed of key Army and DOD staff elements. Conference highlights will include a tour through American technological history as conference attendees visit the Ford River Rouge Plant, Greenfield Village and the Henry Ford Museum. Conference attendance is expected to include nearly 500 invitation-only guests.

For more conference-specific information, visit our Web site at <http://asc.armymil>, or contact Betisa Brown, Conference Chairperson, at (703) 805-2441 or [betisa.brown@us.armymil](mailto:betisa.brown@us.armymil).

## Two Sherpa 1K Systems Fielded in Iraq

MAJ John M. O'Regan and Benjamin Rooney

**T**wo Sherpa Guided Parachute Cargo Systems were fielded in Iraq in August 2004. These systems will accurately resupply warfighters in isolated areas and be used to conduct sustained container delivery resupply missions.



A Sherpa 1K system autonomously navigating toward the programmed point of impact from 15,000 feet above sea level. (U.S. Army photo.)

The Sherpa 1K systems are part of the Joint Precision Airdrop System 2K (JPADS 2K) program managed by Product Manager Force Sustainment Systems (PM FSS) at the U.S. Army Soldier Systems Center in Natick, MA, under the command and control of Project Manager Force Projection and Program Executive Officer Combat Support and Combat Service Support (PEO CS & CSS). PM FSS executed a JPADS Operational Needs Statement (ONS) in less than 90 days after DA validated ONS to achieve the fielding.

The JPADS 2K Program's goals are to be able to release cargo systems from an altitude of up to 25,000 feet from C-130 or C-17 aircraft, land at a pre-determined impact point within 100 meters circular error probable (CEP) and attain a 2,200-pound capacity.

This is the first time that a program of this complexity has been undertaken to turn "dumb" airdrop systems into "smart" ones. Because Joint forces will be continuously in asymmetrical conditions, this capability is essential for resupply. Accuracy and reliability are paramount with the goal to attain 100 meters CEP.

To date, testing at Yuma Proving Ground (YPG), AZ, reached about 175 meters CEP. During operational missions in Iraq, the systems landed an average 69 meters from the impact point after eight airdrop missions. Those combat airdrop

missions with operational loads are a historic event and the first time a precision airdrop capability was demonstrated in the area of responsibility (AOR).

The 1,200-pound-capacity Sherpa 1K system used in Iraq consists of a commercial laptop, airborne guidance unit, 900-square-foot rapid air movement (RAM) air canopy, accessory box and shipping container. The accessory box holds the hand-held controller, batteries for the airborne guidance unit and hand-held controller, mission planner cable, Global Positioning System repeater, tool kit, antennas and battery recharger.

During operational missions in Iraq, the systems landed an average 69 meters from the impact point after eight airdrop missions. Those combat airdrop missions with operational loads are a historic event and the first time a precision airdrop capability was demonstrated in the area of responsibility.



Marines from the 1st Aerial Delivery Platoon of 1st Force Service Support Group surround the newly fielded Sherpa 1K systems. Product Manager Force Sustainment Systems fielded the systems in August 2004. The first precision resupply mission was conducted Aug. 9, 2004, to Marines operating at a forward operating base in western Iraq. (Photo by U.S. Marine Corps.)

The Sherpa 1K system is easy to plan, rig and operate. The mission planner formulates a flight path based on winds from impact point through dispatch levels, total rigged cargo weight and desired impact point.

If wind information at the impact point is unavailable, the mission planner can extract a forecast from the Joint Air Force and Army Weather Information Network Web site. Winds are essential as the mission planner programs a flight path dependent on all information programmed into the Sherpa laptop.

Once the mission planner determines the mission profile, he provides the pilot

or navigator and the loadmaster with an optimal, early or late dispatch point.

What this capability provides is a cone-shaped range in the sky to release the cargo as opposed to a single point. The canopy's RAM air design can penetrate 20-knot wind speeds.

The mission planner selects one of three modes: autonomous, beacon or manual. Autonomous mode is where the mission planner downloads the mission into the airborne guidance unit, and the system

executes that mission. Beacon mode allows the warfighter on the ground to change the

impact point while the Sherpa system is in flight. After the mission is changed, the Sherpa system navigates toward the beacon. Manual mode is where warfighters can navigate the system by conducting left and right turns and flaring the system for a softer landing.

This capability is not traditional airdrop, so a shift in the current paradigm must occur for this superior technology to support warfighters across various battle spectrums. Precision airdrop allows the release of 16 systems on a C-130 and 40 systems on a C-17 that all can be programmed to land at one or multiple locations. This

Marines await a high-altitude supply drop near the impact zone. The offset capability of the Sherpa system makes it difficult to spot from the ground until the system has nearly reached its target and makes its final descent. (U.S. Army photo by MAJ John M. O'Regan.)



benefit serves two purposes: one, it gets the warfighters the mission-essential supplies they need to maintain/sustain; two, it keeps essential cargo aircraft (C-130 and C-17) well outside/above enemy fire.

The Sherpa system was selected for deployment to the AOR because of its maturity and technical readiness level. It's a mature technology but not fully tested and evaluated by Army Test and Evaluation Command standards. Fielding this capability is a decision based on risk. The warfighter immediately receives a 60-percent solution, and system use allows the combat developer to refine the tactics, techniques and procedures. This is a more appropriate course of action than waiting until FY 08/09, when the final system is anticipated to reach a Milestone C decision. The DA G-3 Requirements Branch validated urgent ONS (UONS) on May 13, 2004. Through the integrated product team process, two Sherpa 1K systems and associated spares were field in August 2004. The fielding schedule is depicted in the accompanying chart.

Precision aerial delivery provides a high-altitude, airdrop resupply capability directly to forces on the ground. "The Sherpa 1K system is the first step toward achieving our objective to provide this capability to the Joint community," stated PM FSS LTC Lawrence Silas.

Fielding Schedule		
D-day is May 14, 2004		
Event	Timeline	Execution Date
Concept approval	D-1	13 MAY 04
Repair test items (systems)	D+35	18 JUN 04
Repaired items arrive at YPG	D+38	21 JUN 04
Training at YPG	D+53-62	6-15 JUL 04
Warfighters arrive at YPG	D+52	5 JUL 04
Sherpa overview/separation (riggers/mission planning)	D+53	6 JUL 04
Mission planning/rigging training	D+54-55	7-8 JUL 04
Conduct drops at 10,000/25,000 above ground level	D+56-58	9-11 JUL 04
Additional maintenance training/pack-up	D+59-61	12-14 JUL 04
System transportation to the AOR	D+62-68	15-21 JUL 04
Personnel deploy to/arrive at AOR	D+67-68	20-21 JUL 04
Linkup with PEO CS & CSS liaison officer (LNO)	D+69-70	22-23 JUL 04
Transport system to warfighter location	D+71-75	24-28 JUL 04
In-country coordination w/Army, Air Force, Marine units	D+74-87	27 JUL - 9 AUG 04
Move to Camp Arifjan, Kuwait	D+87	9 AUG 04
Linkup with PEO CS & CSS LNO	D+88	10 AUG 04
Redeployment from the AOR	D+90	12 AUG 04

"Successful execution of the JPADS 2K UONS depended on the Army, Air Force and the Marines. If not for the PM Force Projection and Combined Arms Support Command, the program would not have been accelerated," Silas explained. "The program was a Joint effort. More than 500 personnel had an impact on the effort's success and are to be commended for a job well done. Warfighters received a superior capability compared to what they had and became

proficient with the knowledge to operate, maintain and sustain systems for the indefinite future," he remarked.

MAJ JOHN M. O'REGAN is the Assistant PM at PM FSS, Natick. He has a B.A. in business administration from Campbell University and a master's degree in acquisition and contract management from Webster University. O'Regan is Level III certified in program management and is a Command and General Staff College graduate.

BENJAMIN ROONEY is the JPADS Lead Engineer, PM FSS, Natick. He has a B.S. in mechanical engineering from Northeastern University. Rooney is Level II certified in program management and Level I certified in systems planning, research, development and engineering.



**A Sherpa 1K load with 1,200 pounds of meals ready-to-eat is delivered autonomously to a drop zone in western Iraq. The cargo was released at 10,000 feet and 5 kilometers away from the preprogrammed point of impact; it landed 72 meters away from the impact point. (U.S. Army photo by MAJ John M. O'Regan.)**

# Did You Know?

## Training Support Center Develops Training Bomb Vests



TSC's Devices Branch Chief Lynn Skinner checks a simulated briefcase bomb that is made to look like the real bombs used by Iraqi insurgents who detonate the bombs using a cell phone. (U.S. Army photos courtesy of Fort Gordon, GA, Public Affairs Office.)



The Iraqi Mine Kit contains 27 simulated projectiles, antipersonnel mines, mortars and rocket-propelled grenades that look like the real weapons commonly found in Iraq.



Calvin Giles works with a mold to produce simulated M-16 rifles, one of the many training devices produced at Fort Gordon.

“We fabricate custom-designed EODs and training-aid items that meet our customers’ unique requirements,” Skinner explained. “For example, one of our antipersonnel mines may be made of plastic and used for recognition training. However, a Special Forces unit may want to use the same mine to train personnel on metal detection and mine sweeping techniques. Therefore, they want it made of metal and plastic so it will give a metal signature when buried.”

The training devices are made according to the characteristics of the actual device or the training purpose. Many of the metal bombs are made with plastic and metal fuse inserts and fins because they are lighter and easier to handle than an actual bomb, which may weigh 50 to 100 pounds. Production methods use Computer Assisted Design and computerized milling and routing. Some devices require poured, injected and rotational plastic production methods. The Training Support Center also

has a spray paint booth, cabinet and wood-working shops.

*WASHINGTON, Dec. 22, 2004 –A preliminary investigation indicates that the explosion at the U.S. Army dining facility at Forward Operating Base Marez in Mosul, Iraq, Dec. 21, 2004, was likely caused by a makeshift bomb worn by a suicide attacker.*

Those words, from an American Forces Press Service release, tell the chilling story of a bomb that instantly killed 22 people and wounded many more at an Army mess hall in Iraq late last year. Although investigations into the incident are ongoing, it’s assumed that the attacker was wearing the bomb under his clothing.

At the Training Support Center (TSC), Fort Gordon, GA, the Army is working hard to simulate bomb vests, explosive ordnance devices (EODs) and other training devices to teach Soldiers how to spot bombs worn by attackers, as well as improvised explosive devices (IEDs). Lynn Skinner, Chief of the Devices Branch at TSC, said his branch uses real weapon examples to manufacture fake versions of suitcase bombs, bomb vests and antipersonnel mines. Many imitation EODs were developed from actual ordnance brought in from the field.



A simulated briefcase bomb.

TSC has fabricated items for all DOD services, the U.S. Department of Homeland Security and other federal agencies. When the USS Cole was sabotaged, the center produced land-installed marine-powered energy transformer mine training devices for Navy SEAL [Sea, Air, Land] teams. The Iraqi Mine Kit was developed for a multinational force in Baghdad in January 2004. Since then, TSC has had numerous requests for that kit.



Machinist James Bates models the fake bomb vest produced by the Training Support Center, Fort Gordon.

## From the Acquisition Support Center Director

The U.S. Army Acquisition Support Center (ASC) continues to employ initiatives to further the workforce transformation. Three areas I'd like to highlight are the Acquisition Career Record Brief (ACRB), proposed changes to *DA Pamphlet (PAM) 600-3, Commissioned Officer Developmental Career Management*, and the combined Army Materiel Command (AMC)/Assistant Secretary of the Army for Acquisition, Logistics and Technology AL&T Concept of Support and Design. All three, along with several other initiatives, will be discussed at the 2005 Army Acquisition Workforce Conference (AAWC), "Transforming the Organizations, Leaders and Workforce of Tomorrow", March 1-3, in Orlando, FL. The first conference event will be a no-host social the evening of Feb. 28, 2005.



The AAWC will bring together more than 200 individuals, including senior leaders from the acquisition community and invited guests. This year's conference will provide a full day of Change Leadership Training, host the semiannual Change Leadership Team Azimuth Adjustment working session, include the second series of Army Acquisition Corps (AAC) Transformation Community Workshops and provide a substantial series of acquisition career management information workshops, including alternative certifications and major legislative changes to the *Defense Acquisition Workforce Improvement Act*. For more information about this invitation-only event, go to [http://asc.army.mil/events/conferences/2005/acm\\_conference/default.cfm](http://asc.army.mil/events/conferences/2005/acm_conference/default.cfm).

**ACRBs.** ASC is changing how it processes ACRBs. If you are not familiar with the ACRB, allow me to summarize. Each AL&T workforce member has an ACRB — an automated, authenticated record of your education, training and acquisition assignment history. It is your official acquisition career record, and it's your responsibility to update it. The ACRB contains your certifications, job qualifications, AAC membership, Corps Eligibility, best-qualified boards such as the Competitive Development Group, continuous learning accomplishments, position management and competitive and needs-based boards such as the Acquisition Tuition Assistance Program.

As you can see, the ACRB is an important career management tool. You can find your ACRB on the Career Acquisition Personnel & Position Management Information System (CAPPMIS) Web site at <https://rda.rdaisa.army.mil/cappmis/>.

We are converting CAPPMIS to a Web-based system with a new and improved user interface. The ACRB captures information from a number of information management systems, the primary source system soon to be the Modern Defense Civilian Personnel Data System. We expect to complete this transition by late November 2005.

Acquisition Career Manager Bob Sivalelli, Warren, MI, is spearheading ASC's effort to implement these new ACRB processes. He is directing a beta test this fall and will deliver briefings about the expected ACRB improvements at the AAWC. As we move through each phase in the ACRB change initiative, ASC will keep the AL&T workforce updated via this magazine and the ASC Web site at <http://asc.army.mil>.

**DA PAM 600-3.** The *DA PAM 600-3* is undergoing a complete revision. A copy of the current edition is available at [http://www.apd.army.mil/pdffiles/p600\\_3.pdf](http://www.apd.army.mil/pdffiles/p600_3.pdf). All officers are encouraged to review this pamphlet for information on the new career fields and officer development and educational requirements for each. If you have any questions about changes to Chapter 47, Army Acquisition Corps Functional Area, please contact MAJ Andrea Williams at (703) 805-1248 or via e-mail at [andrea.williams@us.army.mil](mailto:andrea.williams@us.army.mil).

**AL&T Concept of Support and Design.** The AL&T Concept of Support and Design began to take shape under a communitywide integrated product team (IPT) called the Future Force Acquisition Corps in May 2004. This team included AAC functional representatives and all of our strategic partners, including the Army Contracting Agency, program executive offices, program/project management offices, U.S. Army Test and Evaluation Command, Defense Contract Management Agency, AMC, Army G-1/G-4/G-6/G-8, U.S. Army Forces Command, the Army National Guard, National Guard Bureau and Army Reserves. In July 2004, we integrated the AAC modularity concepts and IPT with AMC modularity concepts and members in force and formed a new integrated IPT called the AL&T Enterprise Design Team. As a collective team, we successfully gained approval from the Army Acquisition Executive and AMC Commanding General for the new Concept of Support and Design and have moved out for Army approval. A more detailed feature article on this project will follow in the next



issue of *Army AL&T Magazine*. If you have any questions about the new AL&T Concept of Support and Design, contact MAJ Joy Kollhoff at (703) 805-1251 or via e-mail at [joy.kollhoff@us.army.mil](mailto:joy.kollhoff@us.army.mil).



**COL Genaro J. Dellarocco**  
Director, U.S. Army  
Acquisition Support Center

### Army CDG FY05 Selection and Slating Results

The highly competitive 3-year Competitive Development Group (CDG) program provides candidates with opportunities for essential and unique leadership training and developmental assignments. By providing CDG candidates to organizations with unfilled Critical Acquisition Position requirements, we can meet a mission-need gap that is being created by restructuring and retirement losses. In the long run, the program is designed to develop civilian leaders who are “relevant and ready” to compete with and assume acquisition roles traditionally filled by their military counterparts and apply what they have learned from the program. Rather than defining a leadership path, we’re developing a continuous process for an organized and comprehensive approach to leadership.

The CDG program complements the technical experience and educational strengths of candidates with what the majority of the acquisition workforce is missing at midcareer level. This includes executive-level education, DA intermediate professional career education, senior Army acquisition staff action officer experience and leadership experience as assistant product managers (PMs) and/or deputy product managers. CDG candidates are competitively selected through a DA board process. Today’s program is reaching out to a select but geographically dispersed population of acquisition personnel to orient them on a path that will provide the foundation for a successful career. Typically, CDG selectees are intermediate careerists at the Broadband III or GS-13 level, have earned a graduate degree, 8-15 years of technical experience in their primary acquisition functional areas at the Level III certification level, 2-10 years in multiple functional areas, served in multiple assignments and demonstrated an aptitude and desire to serve in senior staff and program management leadership positions.

Successful CDG program completion ensures that graduates are exceptionally qualified to assume senior-level acquisition leadership positions. On average, more than 66 percent of any CDG year group is promoted prior to graduation. Participants have assumed the duties of acquisition senior staff officers in all acquisition career fields at the Office of the Secretary of Defense; the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology (OASAALT); program executive offices (PEOs); and field operating agencies. They have taken their place as senior leaders to include acquisition branch division chiefs, deputy directors, directors and deputy program, project and product managers.

The U.S. Army Acquisition Support Center, under the direction of COL Genaro J. Dellarocco, is proud to recognize the competitive selection and assignment of the following CDG Year Group 2005 selectees. Congratulations!

Name	1st Year Development Assignment
Appel, Garry	Joint PM Chem/Bio Defense
Bradley, Larry	OASAALT
Brown, Barbara	Space and Missile Defense
Burrow, Craig	PEO Aviation
Dahm, Bruce	PEO Soldier
Davis, John	PEO Soldier
Gonzalez, Marcos	OASAALT
Guidry, Marian	Joint Project Office Ground Mid-Course Defense
Jones, William	OASAALT
Kampschroeder, Jean	Communications-Electronics Command
Krepacki, Victor	Science Training Technology Center, Applied Research Programs
Marck, David	Space and Missile Defense
McKayan, Norma	PEO Soldier
Schmoll, Peggy	PEO Aviation
Waterford, Karen	Ground Mid-Course Defense



## News Briefs

### DOD IT Standards Registry and DISRonline

The DOD Information Technology (IT) Standards Registry (DISR) provides a new process that program managers are directed to use to begin building technical views (TVs). DISR, the next generation of the Joint Technical Architecture (JTA), now mandates the minimum set of IT standards and guidelines for the acquisition of all DOD systems that produce, use or exchange information.

The DISR TV development tool is accessible through the Joint C4I [command, control, communications, computers and intelligence] Program Assessment Tool-Empowered (JCPAT-E) on the Secret Internet Protocol Router Network (SIPRNET), which is part of the overarching Joint Capabilities Integration and Development System (JCIDS) process. Here, system developers are able to build, store and share technical standards profiles. Access to this application requires a SIPRNET account and is available at <https://jcpat.ncr.disa.smil.mil>.

Army policy, now in the staffing process, retiring the JTA-Army and mandating compliance with the DISR is forthcoming. DISR use for developing TVs is ordered by *Chairman of the Joint Chief of Staff Instruction 6212.01C*, Nov. 20, 2003, from paragraph (5), "It is DOD policy that all IT and NSS (National Security Systems) and major modifications to existing IT and NSS will be compliant with the *Clinger-Cohen Act*, DOD interoperability regulations and policies, and the most current version of the DOD Information Technology Standards Registry (DISR)."

The DISRonline Nonclassified Internet Protocol Router Network (NIPRNET)-accessible is a Web-based application that provides configuration management support to the IT standards contained in the DISR. This online standards registry database is replicated on the SIPRNET and used to support the JCIDS. DISRonline NIPRNET is where change requests (CRs) are submitted and adjudicated, and pertinent information is posted. It is also where the DISR calendar is maintained, identifying time frames and meeting schedules for updating the DISR. Here, users can view and

search the current registry as well as past JTA versions. The Defense Information Systems Agency (DISA) is the DISR Executive Agent. Services and other DOD organizations participate through the structured oversight, management and working groups. Oversight of the Army's DISR role is provided by the Chief Information Office (CIO/G-6) Army Architecture Integration Cell (AAIC) Technical Architecture Division. To influence system development, Army organizations, including headquarters, major commands, subordinate commands and developers, are encouraged to actively participate in the DISR in coordination with CIO/G-6, by submitting CRs and manning the Technical Working Groups (TWGs) described below.

The DISR governance structure overarching guidance comes from the CIO Executive Board. The IT Standards Oversight Panel is tri-chaired by the Under Secretary of Defense for Acquisition, Technology and Logistics; Assistant Secretary of Defense for Networks and Information Integration/DOD CIO; and the Joint staff (J-6). The panel provides the direction and issue resolution to the IT Standards Committee (ITSC), which in turn adjudicates issues, sets priorities and promulgates IT standards programs. The four Mission Area Subcommittees — Business, DOD Intelligence, Enterprise Information Environment and Warfighting — each consist of several TWGs that are at the beginning of the standards adjudication process and perform any required related technical analysis.

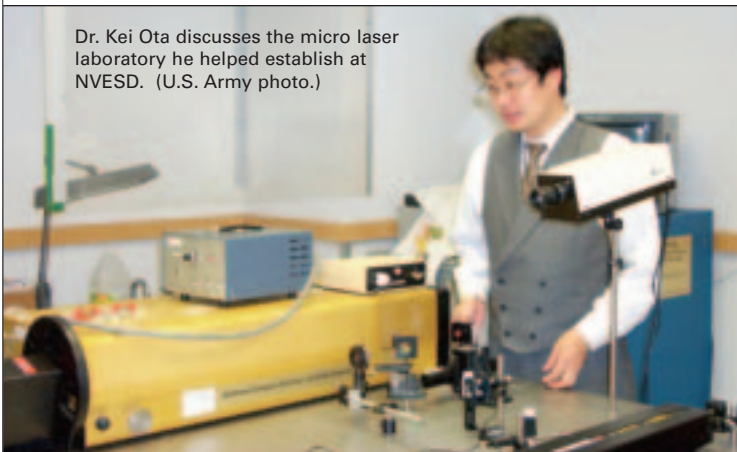
Any DISRonline account holder is able to submit a new standard or request that an existing standard be eliminated via the CR tool available on the DISRonline. The CRs will be reviewed and officially released by the associated service's or organization's recognized ITSC representative and are then assigned a working group to undergo the DISR adjudication process.

Potential DISR users have several training options. DISA is working with the services to provide training at various forums. A DISRonline demonstration compact disc may be provided upon request to the points of contact (POCs) given below. A DISRonline demonstration was given at the Association of the United States Army's October 2004 conference and the JCPAT-E Users conference co-hosted by DISA and the Joint staff in December 2004. Also, DISA frequently conducts DISRonline training in Falls Church, VA, which is made more widely available via video teleconference. In the near future, users will also have access to an unclassified self-training system that DISA is developing, which is expected to be available on the Web in FY05.

To find more information on DISR, request an account and keep abreast of IT standards management initiatives, go to <http://disronline.disa.mil>. More information on the Army's JTA-Army program and DISR implementation can be found on the AAIC portal/Technical Architecture Division/Technical Architecture Development and Implementation page at <https://aaic.army.mil/DesktopDefault.aspx?tabindex=33&tabid=84> (AKO login required). AAIC POCs are John Shipp, Director, Technical Architecture Division at [john.shipp@us.army.mil](mailto:john.shipp@us.army.mil); Adele McCullough-Graham at [adele.mcculloughgraham@us.army.mil](mailto:adele.mcculloughgraham@us.army.mil); and Karyn Richardson at [karyn.richardson@us.army.mil](mailto:karyn.richardson@us.army.mil).

### Exchange Unites Scientists From Around the World

There are many differences between the United States and Japan. However, the U.S. Army Research, Development and Engineering Command Communications-Electronics Research, Development and Engineering Center Night Vision and Electronic Sensors Directorate's (NVESD's) participation in the Engineer and Scientist Exchange Program (ESEP) is closing the gap between the two countries. ESEP allows scientists from foreign countries to work at laboratories in the United States, and vice versa, in an effort to foster the exchange of ideas and offer valuable learning experiences for all parties involved.



Dr. Kei Ota discusses the micro laser laboratory he helped establish at NVESD. (U.S. Army photo.)

Dr. Kei Ota, from Japan, recently participated in the program. In 2003, Ota began working at NVESD and fully immersed himself in life at the lab, working alongside Science and Technology Division members. In one year, Ota compiled an impressive list of achievements, including the measurement of laser parameters, set up of a micro laser research

facility and the initiation of a new data exchange agreement between NVESD and the Technical Development and Research Institute, part of the Japanese Defense Agency.

At his farewell ceremony, Ota shared what he learned during his stay in the United States and presented his briefing on the characterization of lasers using the micro laser research facility. In his briefing, Ota compared himself to a chef preparing a recipe. The steps he took in creating the lab — the preliminary research, interviews of team members to find out their vision and goals for the facility and analyzing and using his available resources — were his ingredients. He put all of his collected information together to create the final product, the laboratory — much like a chef mixes together all the ingredients to make a culinary dish.

During his time at NVESD, Ota continually impressed his colleagues. Dr. Ward Trussell, who oversaw much of Ota's work for the laser team, said, "I was impressed by the quality and quantity of his efforts. He was very well organized. He did a comprehensive literature search and also absorbed the technical papers that we provided him before beginning his efforts." Fellow team member Glen Templeton was also impressed by Ota's productivity and drive. "Dr. Ota accomplished so much in such a short time, with all the obstacles that come with working in a foreign country," Templeton remarked. "His strong work ethic proved Ota was worthy of the title hanging outside of his office door: 'Distinguished Visiting Scientist.'"

Ota also made time to enjoy American culture outside of work. His wife and two young sons came to the United States with him, and they all learned to speak English fluently. "When they argue now, they argue in English!" Ota laughs. While in the United States, Ota learned to ski, an activity he very much enjoyed. He and his family were active in their community, joining neighbors for potluck dinners, to which they brought a taste of Japan. Ota also helped smooth the transition to American life for future visiting foreign scientists by preparing a notebook full of pertinent information about life in the United States, such as getting a drivers license, buying a car and finding a place to live.

Although Ota's time at NVESD has ended, his presence remains. His contributions to the lab continue to benefit the laser team as they develop and create new technologies and conduct micro laser research. Ota's visit further proved the benefits of ESEP and is an experience NVESD hopes to repeat with other scientists from abroad.

## U.S. Army Materiel Command Merges Units in Europe

In step with the Army's transformation, Combat Equipment Group-Europe (CEG-E) and Army Materiel Command (AMC) Forward-Europe merged, forming AMC Field Support Brigade-Europe (FSB-E). The new unit mirrors its parent's (Army Field Support Command) mission and will deliver full-spectrum logistics power projection and support to forces in theater.

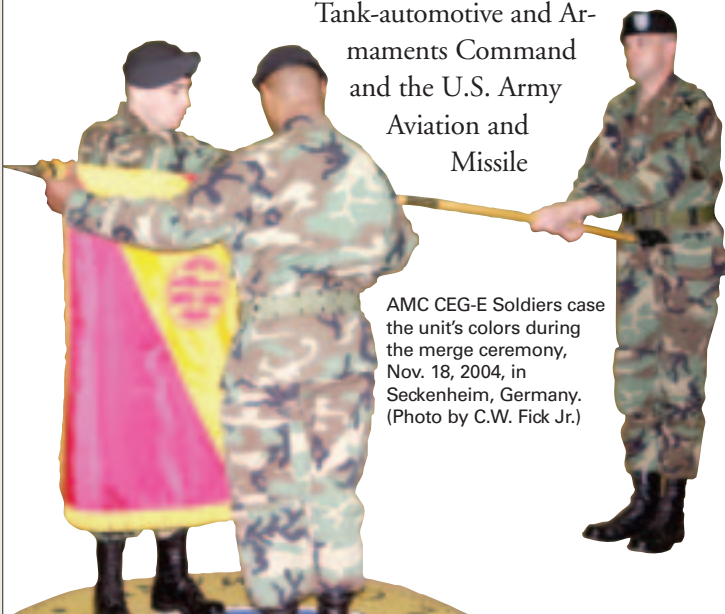
"By combining two AMC units that are experienced in supporting the warfighter, the Army gains a leaner organization, focused on delivering expertise and equipment to Soldiers throughout the European area of operations," said COL Max Lobeto, commander of the newly formed brigade.

AMC FSB-E's focus is to service units in the field. "Adopting a brigade structure aligns us with the Expeditionary Army units we support in Europe and beyond," Lobeto remarked. "AMC FSB-E provides an essential and enduring link from America's arsenal to units in the field."

More than 300 people form the brigade's core, with several hundred more host-nation service providers and contractors adding capabilities, including mechanical repairs and logistics assistance. "We have more than 1,600 people on the ground in Europe supporting U.S. Army Europe units to deliver logistics readiness power," Lobeto noted.

AMC FSB-E can reach back to commands in the United States "Our team includes representatives from AMC's major subordinate commands — such as the U.S. Army

Tank-automotive and Armaments Command and the U.S. Army Aviation and Missile



AMC CEG-E Soldiers case the unit's colors during the merge ceremony, Nov. 18, 2004, in Seckenheim, Germany. (Photo by C.W. Fick Jr.)



GEN Benjamin S. Griffin, AMC Commander, delivers remarks during the AMC CEG-E/AMC Forward-Europe merge ceremony. (Photo by C.W. Fick Jr.)

Command — enabling us to deliver expertise and equipment directly to Soldiers," Lobeto said.

Additionally, AMC FSB-E has pre-positioned equipment and repair capabilities. Field support battalions located in the Netherlands, Italy, Luxembourg and the United Kingdom bring 20 years' experience in delivering combat-ready equipment to the battlefield. "Many of

the tanks and trucks that the 3rd Infantry Division drove to victory in *Operation Iraqi Freedom* were delivered by CEG-E, which is now the field services arm of the new brigade," Lobeto commented.

Throughout the merge, the pace of operations has not slowed down. "Now that the 1st Armored Division (1AD) is back in Germany, our workforce is heavily in a RESET mission — rapidly repairing and returning equipment to the field. Our capabilities enable 1AD Soldiers to concentrate on training and getting back to full-operational readiness," Lobeto observed.

AMC FSB-E provides a means to deliver synchronized, integrated logistics power. "We're part of an Army at war and we are adapting to the mission. By merging capabilities into one command, we're providing combatant commanders with one-stop logistics services," Lobeto concluded.

## 2004 USD (AT&L) Workforce Development Award Recipients

*Whitney F. Koeninger*

As Acting Under Secretary of Defense (USD) for Acquisition, Technology and Logistics (AT&L), Michael W. Wynne established seven goals for the AT&L Workforce. Accomplishing Goal 7 — Motivated, Agile Workforce, will lay the groundwork

for achieving the other six goals. In May 2004, Wynne created the AT&L Workforce Development Award Program to honor the achievements of field organizations that promote career-long learning and development in accordance with Goal 7. The program also identifies best practices used throughout the AT&L community that may be useful to other organizations.



The first annual USD AT&L Workforce Development Award Ceremony was held Nov. 16, 2004, at the Officer's Club, Fort Belvoir, VA. During the ceremony, Wynne

explained that the award winners were chosen because of "their scope and innovation of the organizational approach, including mentoring, continuous learning, career counseling, job rotation and shadowing, executive coaching, leadership development and succession planning."

Three award categories were presented during the event. The U.S. Air Force's Air Armament Center, Eglin Air Force Base, FL, was the Gold winner, while the U.S. Navy's Navy Facilities Engineering Command, Navy Yard, Washington, DC, was honored with the Silver award. The U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI), Orlando, FL, took home the Bronze.

PEO STRI was chosen for its integrated approach to training and career development activities. The organization's initiatives include a Total Employee Development Program, Employee Development Plan, Leadership Education and Development Course and Creativity Day Camp. PEO STRI's efforts also include an aggressive internship program



PEO STRI representatives receive the Bronze AT&L Workforce Development Award. From left: Defense Acquisition University President Frank J. Anderson Jr.; Acting Under Secretary of Defense for AT&L Michael Wynne; Traci Jones, PEO STRI Project Support Executive; and Robert Reyenga, PEO STRI Business Operations Executive. (Photo by SGT Mason Lowery.)

that offers valuable skills and training for future AT&L Workforce members.

Wynne ended the awards ceremony by thanking all applicants for the time and energy put into their submissions. He commented, "I have great confidence in the future of the AT&L community. Without a doubt, our people will have the right skills, in the right place, at the right time, with the right resources doing the right things — smartly supporting the warfighter."

*Whitney F. Koeninger is the Manuscript Editor for Army AL&T Magazine.*

### Kotchman Awarded the Military Outstanding Volunteer Service Medal

COL Donald P. Kotchman, Deputy Program Executive Officer for Ground Combat Systems (PEO GCS) at the U.S. Army Tank-automotive and Armaments Command, Warren, MI, was recently awarded the Military Outstanding Volunteer Service Medal for 15 years of exceptional volunteer support. While serving in key U.S. Army Acquisition Corps leadership positions, Kotchman dedicated his personal time to Boy Scout activities, youth sports programs and chapel activities. He demonstrates significant concern for quality family life and sets a strong example for others.

As a Scoutmaster and Boy Scout Committee Chair, Kotchman has helped more than 20 of his troop members become Eagle Scouts and has created more than 30 community enrichment projects. Kotchman's involvement as a youth sports coach provides a wholesome and physically challenging outlet for military children.



COL Donald P. Kotchman, recent recipient of the Military Outstanding Volunteer Service Medal, greets President George W. Bush as he arrives in Clinton Township, MI.

His participation in chapel activities helps enrich worship services for church members. Overall, Kotchman's volunteer efforts have provided a balance of intellectual, athletic and spiritual activities for military families.

In 1979, Kotchman graduated from the U.S. Military Academy with a B.S. in applied science and engineering, and was commissioned in the Ordnance Corps. As Deputy PEO GCS, Kotchman oversees a variety of Army fighting equipment, including the Abrams tank, Bradley Fighting Vehicle, Stryker family of vehicles, robotics systems and artillery systems.

## ALTESS News

The Acquisition, Logistics and Technology Enterprise Systems and Services (ALTESS) Product Management Office, the acquisition domain's gatekeeper, remains vigilant and ready to implement the latest business and technological improvements to equip our users with tools to better manage their programs and responsibilities. This article updates you on the latest ALTESS developments and informs you of upcoming workshops, hands-on training events, conferences, symposiums, ALTESS history, recent architecture efforts and ALTESS' role in acquisition workforce training. It is an honor to be able to address the community in this respected publication, and we look forward to bringing you much more news and information on relevant issues facing today's acquisition community in the near future.

### ALTESS History

ALTESS was originally established as the Ordnance Industrial Data Agency (OIDA). Our mission was to collect and process ordnance industrial capability data for more effective management of national ordnance procurement and production programs.

The Deputy Chief of Staff for Logistics (DCSLOG) renamed OIDA the Data Processing Center (DDPC) in 1962. Assigned to the Deputy Chief of Staff for Research, Development and Acquisition (DCSRDA) in 1974, the DDPC was renamed the U.S. Army Research, Development and Acquisition Information Systems Agency (RDAISA). In 1978, RDAISA became a U.S. Army Computer Systems Command field operating agency, transferring to the U.S. Army Information Systems Command from 1985 until 1993, then to HQDA.

When HQDA reorganized in 1987, RDAISA was assigned to the Assistant Secretary of the Army for Research, Development and Acquisition (ASARDA). In 1999, ASARDA was redesignated as the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT). Under both ASARDA and ASAALT, RDAISA remained under the Deputy Assistant

Secretary for Plans, Programs and Resources. Redesignation of RDAISA as Product Manager (PM) ALTESS under PEO Enterprise Information Services (PEO EIS), formerly known as Standard Army Management Information Systems, was initiated by the Army reorganization in October 2001.

During the 44 years that this organization has provided automation support for the Army's materiel acquisition and budget preparation mission, enormous advances have occurred in information technology (IT). Throughout dramatic changes in the IT world, ALTESS has been an information management leader. ALTESS has kept pace with the dynamic nature of technological innovation by evolving from a first-generation, batch-oriented mainframe operation to a network-centric, knowledge-based, collaborative environment.

Since 1987, ALTESS has supported the Army Acquisition Executive (AAE) and his staff. Today, our mission has evolved to support the Army acquisition domain. We are responsible for supporting the AAE, his staff, PEO and program/project/product managers. ALTESS provides various products and services to the acquisition community including acquisition information management, Probability for Success Web, Army, RDA, Update Computer System (WARBUCS), procurement and research, development, test and evaluation forms, Acquisition Career Record Briefs, Individual Development Plans (IDPs) and Chief Information Officer Assessments. ALTESS is the Defense Acquisition University (DAU) temporary duty coordinator and hosts PEO Ammunition and the U.S. Army Research, Development and Engineering Command (RDECOM).

### Army Acquisition Business Enterprise Architecture (AABEA)

The Army can achieve substantially higher acquisition cost savings in IT by following the industry's lead in developing the enterprise architecture (EA) for Army acquisition. Commercial companies' lessons learned provide invaluable insight to EA's implementation into business processes. Acquisition business processes should include streamlined and seamless business practices. To achieve higher cost savings, the Army must reengineer business processes within its organizational structures (acquisition domains). This shift will require a focus change from individualized business functions to a top-down approach. Within the Army acquisition domain, each PEO has made significant IT investments to ensure that the systems produced provide force superiority through technical advantage. Also, HQDA has invested in comprehensive oversight functions and capabilities to ensure the systems developed are managed and produced efficiently. However, there are inconsistent and convoluted business processes that



Rosie Williamson, ALTESS Visual Information Specialist, briefs (left to right) LTC Fernando L. Torrent, PM ALTESS; Joe C. Capps, Director, Enterprise Systems Technology Activity Network Enterprise Technology Command; Vernon M. Bettencourt, Deputy Chief Information Officer (CIO)/G-6; and LTG Steven W. Boutelle, CIO/G-6.

fail to streamline activities, causing a decrease in available funds for direct support to the warfighter. Using best practices, sound business decisions and core business EA principles and objectives in the acquisition business process will help the Army save money and better protect warfighters.

Recent government legislation emphasizes the need to pursue interoperable, integrated and cost-effective business practices and capabilities within each organization across DOD. *Public Law (PL) 107-314 (National Defense Authorization Act FY03)*, Section 1004, discusses the Business Management Modernization Program (BMMP) Authority to operate. Its purpose is to “support warfighters with world-class business operations.” A BMMP strategy is “developing and maintaining the business EA.”

*The Government Performance and Results Act (GPRA) of 1993* and *Information Technology Management Reform Act (ITMRA)*, also known as the *Clinger-Cohen Act of 1996* are two other legislative acts that impact DOD architecture analysis and integration activities. Together, *PL 107-314*, *Clinger-Cohen* and *GPRA* serve to codify the efficiency, interoperability and leveraging goals being pursued by DOD’s commands, services and agencies. In response to these laws, and the delineation of roles, the responsibilities documented in the Army Knowledge Management Plan and the ASAALT Strategic Plan, the Deputy Assistant Secretary of the Army (DASA) for Plans, Programs and Resources (PP&R) was tasked to provide compliant architecture products.

To support the AABEA initiative, Steven Love, under the direction of DASA PP&R, and LTC Fernando L. Torrent, PM ALTESS, are jointly working to integrate and develop operational and systems architecture across the acquisition domain. Love heads the Knowledge Management Coordination Office,

which is responsible for AABEA oversight, focusing on knowledge management, strategic objectives, documenting business processes and capturing architecture elements and taxonomy across domains, developing AABEA artifacts, AABEA Concept of Operations and the ALTESS AABEA Plan. PM ALTESS will manage the technical infrastructure and provide content management, including hosting the Army Acquisition Architecture Database, maintaining hardware and software, and providing software configuration and systems engineering support.

The AABEA provides a capability that enables efficient documentation, visualization, mapping and modeling processes and technologies intrinsic to the acquisition life cycle. A suite of techniques is providing the technical and program management support for identifying, developing and continuously evolving architecture requirements. The goal is to enable the acquisition community to fully realize DOD Architecture Framework (DODAF) products and add value by developing domain-specific products. AABEA helps:

- Develop objective-supporting documentation for recommendations provided to Army and OSD senior staff in personnel- and budget-related issues.
- Transition current processes and technology infrastructure to an enterprise network-centric interoperable environment such as the Advanced Collaborative Environment.

The desire to streamline the acquisition life cycle to rapidly and effectively field the appropriate weapon systems to support warfighters is a high priority. AABEA will provide a mechanism for understanding and managing both the processes and systems.

#### EA

*OMB Circular A-130: Management of Federal Information Resources* cites an EA as “the explicit description and documentation of the current and desired relationships among business and management processes and information technology.”

EA provides:

- A blueprint of where you are and what you want to achieve.
- A map for planning how to get where you want to be.
- An integrated perspective of what is affected and what must be done.
- A way to strategically align a company with its business investment.
- A way to manage IT assets as a portfolio rather than as individual items.

## Why Develop EA?

EA provides a comprehensive and/or structured description and a common understanding of your business, information flows/exchanges and systems and technologies. As such, EA supports analyses and decision making for communities with various objectives such as the planning, programming, budgeting and execution process; defense acquisition systems; and operations. Likewise, EA improves interoperability among systems through better-documented interfaces, information exchanges and more efficient reuse of data. EA also reduces redundancy among business IT systems resulting in cost savings that provide additional funds for direct support to warfighters, increases in efficiency and enhancements in data integrity and security. Additionally, EA improves collaboration across the acquisition community and related domains — including accounting, finance and logistics — resulting in enhanced communication and coordination, alleviating staffing issues (retirement, deployment and mobility) and improving accountability and accessibility.

## Training the Army Acquisition Workforce

A key ALTESS responsibility is to execute the Army's DAU Training Program. DAU training is mandatory for workforce members to meet position certification requirements within a limited time frame. With the ever-increasing mission demands placed on the workforce and its limited resources, it's challenging to provide DAU training in a timely manner to meet the evolving acquisition workforce's needs.

The Army Deputy Director of Acquisition Career Management (DDACM) tasked ALTESS with this mission in 1996, when the workforce included nearly 24,000 military and civilian members. ALTESS processed applications and registered students for DAU training and managed the travel dollars to get students to training locations. It was a monumental task for students to apply, register and attend DAU training. Students had to complete a *DD Form 1556*, send it to their supervisor for approval and then forward it to their training office for the application to be entered manually into the Army Training and Resources System (ATTRS). Many times ALTESS received the training application late, the information on the application was inaccurate or training offices failed to notify the students once they had a reservation. This resulted in students' frustration, missed training, unfilled seats and a delay in certification. In addition, the students' organizations had to prepare their travel orders. Often, the incorrect financial information created problems with voluminous negative unliquidated obligations and unmatched disbursements.



ALTESS Facility Engineer William Denny, center, gives a tour to (from left to right) Lee Harvey, Deputy PEO EIS; Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology LTG Joseph L. Yakovac Jr.; and LTC Fernando L. Torrent, PM ALTESS.

Because ALTESS personnel were determined to improve the application process and provide better student customer service, they worked diligently on developing a new system. In 1999, the first automated Internet application system for DAU training was unveiled — the ATRRS Internet Training Application System (AITAS) (<https://www.atrrs.army.mil/channels/aitas/>).

AITAS allowed students to prepare their own applications and submit them through their supervisors directly to ALTESS, bypassing the need for manual input by their training offices. This provided added value to the student and reduced the workload for training offices. DAU training classes had more filled seats. Since then, the U.S. Navy and U.S. Air Force have adopted DAU's application system as the model for their own Internet training application systems.

Beginning in May 2000, the centralized travel order issuance module in AITAS was unveiled. It relieved the students' organizations from locally preparing travel orders and allowed ALTESS to correctly and centrally cite funds.

Today, ALTESS serves more than 38,000 acquisition workforce members by processing training applications, establishing priorities and issuing travel orders. AITAS has evolved since 1999, better assisting students and helping to streamline the training process. ALTESS personnel continue to look for innovative methods to enhance the application system and improve customer service. One such initiative is the ATRRS Data-On-Demand, <https://www.atrrs.army.mil/channels/dataondemand>, where students can review class schedules, locations, vacancies, etc. Commands and organizations can also use Data-On-Demand to review DAU training statistics.



ALTESS is creating more initiatives that will enhance student services and further reduce student-training costs. One such initiative is the new travel management system that is being integrated with the training application system. This will provide a one-stop student travel process. ALTESS' commitment to train and provide the best customer service resulted in more than 24,000 workforce members receiving training in FY04. ALTESS has helped the Army achieve the lowest student training costs for DAU training and the highest training utilization rate (averaging 95 percent since 1996) of all DOD services.

However, it is ALTESS's personal touch that gets the mission done. ALTESS personnel are in daily contact with students, supervisors, training personnel and the Defense Finance and Accounting Service to resolve training and travel issues. Whether a student is being deployed, cannot travel, can only train at a specific time or is training for promotion, ALTESS meets these challenges and provides outstanding service and assistance.

If you are interested in learning more about our products and services, please contact ALTESS at (540) 731-3434 or DSN 231-3434.

## Worth Reading

### *The Donkeys*

Alan Clark  
Pimlico, 1961



*Reviewed by Scott Curthoys, a counterintelligence analyst contracted to a federal agency, and a retired Army military intelligence and foreign area officer.*

Military observers and members of the media are increasingly discussing how the war in Iraq is taking a toll on the U.S. military. It has been suggested that the war in Iraq is destroying the Army. Much of this recent speculation can be attributed to the 2004 presidential campaign. Nevertheless, influential

people in political circles sympathetic to the Bush administration and its policies are also voicing concerns.

Despite these concerns, the professional core of the Army still stands as a viable fighting force. The war in Iraq is not going to destroy the professional foundation of the U.S. Army. This stands in stark contrast to the fate that befell the United Kingdom's Regular Army units in 1915, a destruction told with grace and poignancy by well-known military historian, the late Alan Clark, in *The Donkeys*. (The book's title is derived from a conversation between two German officers in which British soldiers are described as fighting like lions but led by donkeys.)

In Clark's own words, *The Donkeys* is, "The story of the destruction of an army — the old professional Army of the United Kingdom that always won the last battle ... and were machine gunned, gassed and finally buried in 1915." The reasons Clark offers for this destruction should resonate with today's leaders at all levels.

Clark does an excellent job of describing the British army's senior leaders at the beginning of WWI. He sketches the personalities of the principals, their relationships with each other, the conditions of the soldiers and the gap between the army's senior leaders and its private soldiers. However, the reader can sometimes become lost in the parade of names because Clark assumes a certain level of historical knowledge on the reader's part.

He highlights the tensions between senior British and French leaders. Relations between British Commander-in-Chief Field Marshal Sir John French, his French counterpart and their respective staffs, were often marked by distrust and arrogance. The reader gets a palpable sense that the French military leadership looked down on their British comrades and viewed them simply as support to the French army's main effort.

Unlike WWII where the major combatants drew on lessons from the previous world war, the British had no repository of experience in WWI. They engaged new weapons using old tactics. Consequently, British commanders constantly sought to create the conditions of open maneuver for cavalry only to be blunted by machine guns, gas and the limits of their own tactical thinking.

Clark describes in stark detail the four major battles of 1915 — battles that decimated the British regular army and caused the United Kingdom to turn to Kitchener's recruits for help. The Neuve Chapelle battle plan, where massed

British formations were thrown against a small section of front in an attempt to break through, was seemingly repeated later in the year at Aubers Ridge. The British commanders failed to learn the lesson of the earlier battle and didn't develop a counter plan to the German's well-sighted machine guns emplaced 800-1,000 yards behind the line. As a consequence, both battles ended with high British casualties and little or no key terrain gained.

The Battle of Ypres, famous for the first German use of poison gas, was a study in inflexible leadership by British commanders. Instead of reducing the salient and withdrawing to a more defensible position, British commanders ordered a counterattack that was ineffective and caused many battlefield casualties.

The British retaliated with a gas attack at Loos, France. However, this attack was uncoordinated and resulted in a casualty rate of more than 80 percent (8,246 British casualties out of approximately 10,000 attackers), compared to zero German losses. With this debacle, the professional core of the British Army was completely destroyed.

For many current Soldiers, WWI is remote and unknown. However, to many historians, that conflict represents an early example of how industrialization impacts war, a process that began during the American Civil War. As the art of war continues to evolve, modern leaders can learn from the British commanders' mistakes to become more effective on the battlefield. As such, *The Donkeys* should be required reading for every Army senior leader.

## Conferences

### Acquisition E-Business Conference Slated

Strategic acquisition through electronic systems is the future, and e-business is leading the journey to achieve this ideal. The Office of Defense Procurement and Acquisition Policy, E-Business (DPAP, EB) is hosting an E-Business Conference, May 23-26, 2005, in Orlando, FL. Acquisition and procurement executives who oversee strategic plans and manage transformation policies are encouraged to attend.

The E-Business Conference will focus on the approaches, strategies and initiatives that will make this environment a reality. The conference will cover:

- Enterprise architecture — movement away from application silos.
- Portfolio management — an assessment of technical and functional capabilities supporting strategic acquisition.
- Transition planning — a plan to transform the acquisition domain from what is to what should be.
- Governance — reflective of both procurement and acquisition processes and strategies.

The 2005 DPAP EB Conference will convene at the Rosen Centre Hotel located at 9840 International Drive, Orlando, FL. For more information about the hotel, go to [www.rosencentre.com](http://www.rosencentre.com) or call (407) 996-9840. For registration or additional information, go to <http://www.dodebconference.com>.

## Contracting Community Highlights



This issue's feature article highlights the career development initiatives undertaken by the Picatinny Center for Contracting and Commerce (PC3) at Picatinny Arsenal, NJ. The article is a collaborative effort by four Army Contracting and Acquisition Career Program (CP-14) interns at Picatinny, and it presents detailed information on the formation and processes of the organizations that have been established to augment career development in the PC3. The three self-directed groups described in the article are the Procuring Contracting Officers' (PCOs') Roundtable, New Associates Development Group (NADG) and Associates Development Group (ADG). These groups' goals are to leverage a more efficient, mission-driven organizational performance for its members by engendering a climate of continual process improvement and mission understanding through peer support.



In addition to the feature article and the regular "DAR Council Corner," we are proud to pass on news from several of our contracting organizations. We have also included

news about the 2005 Intern Professional Workshop scheduled for May 1-5, 2005, in Dallas, TX.

We appreciate support from the field in providing material for publication, and we hope you are finding the submissions as informative and interesting as we do. If you need more information on any of the topics presented, call or e-mail my office for the pertinent contact information.

**Ms. Tina Ballard**

Deputy Assistant Secretary  
of the Army  
(Policy and Procurement)

**An Innovative Approach to Career  
Development of Contracting Personnel**

*Kendra Archbald, Beth Scherr, John Tangalos and James Turner*

PC3 at Picatinny Arsenal is one of seven contracting offices within the Tank-automotive and Armaments Command (TACOM) Acquisition Center. PC3 developed a trio of organizations of working-level associates who are tasked with improving individual and organization performance. These three organizations are the PCOs' Roundtable, NADG and ADG. Each group is self-directed and pursues issues within its purview with the intent of empowering first-line workers to make effective and progressive changes. This advances conventional employee empowerment by providing a support network and intercommunications structure that allows for an effective pursuit of change and a peer structure to test and modify approaches and new solutions.

The establishment of these three groups for contracting officers and newer associates allows the individuals involved to focus improvement efforts on their immediate areas of concern and bring the expertise necessary to solve problems.

**PCOs' Roundtable**

The PCOs' Roundtable was chartered in November 2000. The roundtable provides all members the same opportunity to shape, change and improve acquisition practices via the exchange of open communication and concept generation. The roundtable was created as an integral part of the PC3 executive management's goal to maintain acquisition excellence within DA and the contracting profession. A key emphasis has been defining and shaping PCOs into highly skilled multifunctional

acquisition business advisors who are indispensable to customers and participate early in the acquisition process.

The PCO Roundtable comprises current and aspiring PCOs. The roundtable continually seeks to improve and provide outstanding customer support and quality contracting as a business advisor to the Picatinny acquisition community. The roundtable has created innovative strategies and solutions such as the PC3 Associate Experience, Expertise Knowledge Bank and the PC3 Virtual Library, which consists of current technological/job-specific, management and "tools-of-the-trade" information and training resources.

The roundtable focuses on PCO evolution, knowledge sharing/communication, training, recruitment and retention. Emphasis is placed on mentoring and training to improve functional and leadership skills of PC3's new journeymen and senior associates. The roundtable also examines industry partner practices and has initiated recruitment from commercial forums. The roundtable has set an excellent example and has paved the way for NADG and ADG formation. These three groups strive to improve the leadership skills of all participants and to provide top-notch customer service.

**NADG**

In September 2000, newly hired PC3 associates formed a self-directed association of entry-level (those with less than 2 years' experience) associates within the 1102 career field to quickly and efficiently integrate themselves into the organization. At that time, PC3 was under a hiring freeze and no new employees had been hired for some time. PC3 was at its lowest manpower levels while facing continuing escalations in workload and responsibility, which were placing an additional strain on the traditional apprenticeship method of new associate integration.

This group of new associates temporarily operated before being chartered as the NADG. The group proceeded with its mission to effectively integrate new associates into the PC3 and to provide a forum for members to seek group solutions for problems and opportunities to enhance their skills through acquisition topics presented by speakers and mutual information sharing. Initially, the group was primarily directed toward new-associate concerns, but began to prove its value beyond the human resources assistance it was initially formed to facilitate. The NADG began to facilitate natural communication between groups and became a "super branch" that provides an overall picture across customer-focus lines. A fresh exploration of PC3 processes and the necessity of teaching the organization's

mission have brought about new opportunities to reevaluate base assumptions and procedures within the organization. Career development paths are reinforced in a planned method, and DOD training emphasis and methods are changed systematically.

This group has benefited from a less-structured association — versus a “required” membership — and holds monthly formal meetings. A senior new associate chairs the meetings with the assistance of a junior new associate co-chair. The leadership accepts tasks for NADG on a voluntary basis and coordinates speaker luncheons, social events and additional training opportunities at negligible cost and with voluntary attendance. Guest speakers from various organizations have presented topics and training including:

- The National Contract Management Association, the Small Business Administration (SBA) and various PCOs that addressed SBA Set-Aside programs and 8(a) Set-Asides, Certificates of Competency, Small/Disadvantaged Businesses and Small Business Goals.
- The Picatinny Arsenal Quality Engineering Directorate provided a general orientation about the its role with an emphasis on armament acquisition.
- The Defense Contract Management Agency (DCMA) provided information on pre-award surveys, contractor invoicing and the services DCMA provides.
- PCOs spoke on DD254’s DOD Contract Security Classification System.

To further support the mission, NADG authored and published a *New Associates Manual* in 2003 to assist new hires in the introductory phases of their development as acquisition professionals. This manual has been instrumental in smoothly transitioning these employees into the workforce. The manual includes articles written by the NADG membership or drawn from direct sources. A new associate is instructed in topics such as first day activities and procedures; obtaining identification badges; DOD, TACOM Acquisition Center and PC3 overviews; training; Individual Development Plans (IDPs); Acquisition Career Record Briefs; Defense Acquisition University (DAU) procedures; certification procedures; military culture; phonetic alphabet and military time; contracting overview; Total Army Performance

Evaluation System; and acronym listings and Web sites frequently used in contracting.

In addition to the *New Associates Manual*, a *PC3 Training Guide* also instructs new associates in their educational development. The training guide’s primary goals are:

- To establish an overarching tool to strengthen and diversify skills, as well as to implement a consistent approach in developing new associates as part of the overall workforce revitalization efforts.
- To provide multidisciplinary, multifunctional training opportunities that will assist associates in supporting the organization’s expanding mission needs and responsibilities.
- To prepare associates for leadership positions at Picatinny and within the Army



CP-14 interns James Turner, Kendra Archbold, Beth Scherr and John Tangalos.

acquisition and contracting community by providing career-broadening education, training and experience opportunities.

The *PC3 Training Guide* is undergoing revision by the roundtable and will soon be handed over to an intergroup Training IPT for custodianship.

### ADG

The ADG is a natural outgrowth of the NADG and is formalizing its charter. Composed primarily of NADG members, the ADG also includes any other associates who wish to join. The group’s purpose is to preserve the momentum created by the NADG and to use that momentum to transform the organization’s associates into a more professional, capable and customer-focused workforce. The ADG is also a self-directed organization that promotes better practices among its membership through information sharing. If new associates see a better method of performing a task, they will implement it themselves — especially if the idea comes from a peer.

Although operating in an open format, the ADG has a formal method of tracking and presenting tasks. Similar to the NADG, the ADG has a chair, co-chair and secretary. These officers provide support and facilitate team leaders’ work. The team leaders and their members take on specific tasks of finite duration. This process was implemented to help eliminate burnout and the “other-duties-as-assigned” syndrome that sometimes occur. These tasks performed by the team leaders build into the life cycle of a particular topic, eventually

resulting in a recommendation and implementation plan. If the project is useful, it can be transitioned to the PC3 Board of Directors or the roundtable for approval, amendment and formal adoption. The information generated by the teams will also be captured in a user-friendly manner (the ADG Web site), where rationale for the acceptance or non-acceptance of specific actions is outlined.

The ADG also holds quarterly meetings to discuss and formally present research. This allows sufficient time for projects to be performed and provides a usable community framework to observe and react. Time and cost for ADG activities are minimal, as savings are recouped through improved-process implementation. Another ADG aspect is outreach to the natural customer base. Picatinny Arsenal has hired many new engineers and program support staff unfamiliar with the DOD acquisition environment. ADG is forging stronger links with its counterparts and facilitating cross training and organizational understanding that is otherwise lost with every retirement and policy revision. The ADG will promote networking so that customer service is not an initiative but a natural consequence of doing business, while teaching procurement mechanisms to the next set of upcoming project managers and their staffs.

These three working groups interact with one another through the Training IPT. These groups and the Picatinny chapter of the National Contract Management Association have initiated training programs within the organization. Acting in an IPT interface, they coordinate and leverage their activities to bring better educational opportunities to the PC3 associate and fulfill operating partnership agreements with its customer base.

The PC3, in an effort to further expand upon its commitment to both employee development and efficient customer service, has established a rather unique cooperative partnership with the program executive office (PEO)/program management (PM) community. The PC3 and its customers have agreed to jointly provide educational and training opportunities for eligible contracting series (GS-1102) personnel that will result in effective customer support. These opportunities will enable participating 1102 personnel to obtain *Defense Acquisition Workforce Improvement Act* Level II certification in both contracting and program management. To facilitate that goal, this joint partnership will provide opportunities for eligible 1102 personnel to attend DAU courses necessary to obtain certification in both disciplines. Training opportunities will be based on a work assignment process that is geared toward dual certification. To better accomplish these goals, the PC3 has also aligned its organization into customer-focused contracting groups to meet customers' needs.

This joint collaboration between the PC3 and PEO/PM offices serves as an excellent example of how the acquisition and PEO/PM communities combine their resources to more effectively meet warfighter needs. By working together to help promote the education and training of Acquisition Center associates, partnered organizations benefit from a veritable win-win situation where developmental needs are met through shared resources.

The PC3 has established internal working groups covering the full spectrum of its associates and managers. These groups' end goal is to bring about a more efficient and mission-driven performance by the organization and its workforce members by engendering a climate of continual process improvement and mission understanding through peer support. This is the PC3 working group's core goal as it strives for professionalism in supporting warfighters.

*Kendra Archbald, Beth Scherr, John Tangalos and James Turner are CP-14 interns in the PC3.*

### Competitive Professional Development Opportunities

The Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) is offering 1-year developmental assignments to all DA employees at the GS-12 level (or Acquisition Demonstration broadband equivalent) in the Contracting and Acquisition Career Program (CP-14). The CP-14 Office funds travel and temporary duty costs. For details, see the Oct. 31, 2003, memorandum titled *FY2004/2005 Competitive Professional Development (CPD) Announcement for the Contracting and Acquisition Career program (CP-14) (Updated)*.

ASAALT has two developmental employees who would be happy to share their experiences with you. For information, e-mail Tina Grove at [tina.grove@hqda.army.mil](mailto:tina.grove@hqda.army.mil) or JoAnn Lee at [leej4@hqda.army.mil](mailto:leej4@hqda.army.mil).

The U.S. Army Acquisition Support Center at Fort Belvoir, VA, can also provide additional information about this opportunity. Contact Sally Garcia at (703) 805-1247/DSN 655-1247 or [sally.garcia@us.army.mil](mailto:sally.garcia@us.army.mil). Online information is also available at <http://asc.army.mil/programs/cp/opportunities.cfm>.

## 2005 Intern Professional Workshop

The U.S. Army Acquisition Support Center Contracting Career Program Office (CP-14) will host a 2005 Department of Army Intern Professional Workshop May 1-5, 2005, at the Westin Park Central Hotel, Dallas, TX. The workshop theme, "Preparing Future Contracting Leaders — Today" will focus on leadership and the evolution of the Army's military and civilian components and the contracting and acquisition workforce. The workshop's overarching goal is to expose DA interns to top-level Army leadership and ideas, provide functional-level professional and personal development training, increase fellowship among the intern population and reinforce the Army's investment in interns as the future of the tactical and strategic Army civilian workforce. The target audience for this event is CP-14 interns who are in the second year of their 2- or 3-year program.

On May 1, 2005, workshop registration opens and will be followed by an evening social. Three full days of workshop activities will officially commence the morning of May 2, 2005, with welcoming remarks by Tina Ballard, Deputy Assistant Secretary of the Army for Policy and Procurement, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology. Sessions will combine briefings by top-level Army and DOD speakers with panel discussions and a series of breakout topics. The workshop may also include one or more plant tours of Dallas-area defense contractors and organization-specific briefings.

## News From the Field

**Corps of Engineers SWD Creates Centralized Acquisition Web Site.** To create a more efficient and effective organization, the Southwestern Division (SWD) Contracting Regional Support Community of Practice began regionalizing its expertise, processes and lessons learned and created a centralized acquisition Web site that will serve as the entry point for all SWD acquisition knowledge. The Web site focuses on knowledge sharing through its use of an acquisition-based forum and library of policy, regulations, standard operating procedures, lessons learned and acquisition-career-related links. The Web site also features an indefinite indefinite delivery quantity

(IDIQ) contract database showing up-to-date capacities for a wide range of IDIQ and multiple award task order contracts that cover the entire division, thereby increasing the knowledge of available contract tools to project managers when planning for future workload.

## RDECOM Acquisition Center's Unique Missions Division Uses Time-Sensitive Approach for Proposal Evaluation.

The Unique Missions Division of the U.S. Army Research, Development and Engineering Command (RDECOM) Acquisition Center successfully awarded a multiple award 5-year IDIQ contract using a unique time-sensitive approach used for proposal evaluation.

Offerors were given complex, real-life sample task orders, each with an accelerated proposal turnaround time that would be required in performance of the actual contract. Sample task orders included a management task, a rapid-prototyping task and a project-planning task.

The proposals were evaluated on the contractor's ability to access and assemble special technologies, understanding of operational issues and parameters associated with developing equipment and systems and ability to access and leverage programs and organizations involved in advanced technology development — all under accelerated time constraints of real-time contract requirements.

The contracts awarded will enable the U.S. Army to leverage established centers of excellence as well as other nontraditional research and development organizations to develop, test and field items and systems for advanced technology and equipment.

**ACA-Southern Region Sponsors 2004 Army Contingency Contracting Conference.** The 18th Airborne Contracting Command (Provisional) and the Fort Bragg Directorate of Contracting hosted the 2004 Army Contingency Contracting Conference Aug. 18-19, 2004, in Fayetteville, NC. The Army Contracting Agency (ACA)-Southern Region sponsored the event, which annually brings various contingency contracting-related commands and organizations together to promote information sharing and to provide a forum for exchanging ideas and techniques among contingency contracting officers (CCOs). The conference's theme was "Transformation While at War." LTG Joseph L. Yakovac Jr., Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT), highlighted the conference with a keynote speech addressing the state of the U.S. Army Acquisition Corps (AAC) and the future of



Former AMC Commander GEN Paul J. Kern presents an award to TACOM's Dan O'Day, IMCVS SSEB Deputy Chairman, while TARDEC/RDECOM's Ed Bohdanowicz, IMCVS SSEB Chairman, looks on.

contracting in the AAC. Other conference topics included lessons learned in *Operations Enduring* and *Iraqi Freedom*, modularity transformation within the Contracting Functional Area, U.S. Army Reserve Command's transformation, contracting with the Office of Coalition Provisional Authority (CPA), contracting in the Balkan theater, using the Logistics Civil Augmentation Program and what the National Training Center is doing to battle-test CCOs.

**TACOM Responds to Iraqi Ministries Civilian Support (IMCVS) Program.** On April 2, 2004, the CPA in Iraq and at HQDA asked the U.S. Army Tank-automotive and Armaments Command (TACOM) to acquire approximately 100 types of urgently needed nontactical vehicles to support various civilian ministries that were scheduled to be instituted in the yet-to-be-established sovereign authority in Iraq. The CPA provided TACOM the initial vehicle requirements, with minimal specifications, at an estimated dollar value of more than \$400 million. Because these funds were Iraq Relief and Reconstruction Funds, Congress required that TACOM acquire these vehicles using full and open competition.

TACOM and the U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC) assigned a dedicated team of logisticians, engineers, small businesses, legal and contracting personnel to acquire the vehicles. Because of the stated urgency and the commerciality of the vehicles (e.g., buses, trucks, construction equipment), TACOM decided on an acquisition strategy of issuing separate requests for proposals (RFPs) for each item. Although the process was considerably more labor intensive, it maximized competition and also avoided costs for a program integrator.

A secretarial determination and findings was drafted and approved by ASAALT Claude M. Bolton Jr., authorizing a reduction in the combined publicizing and response time to

no less than 10 days from the normal 40 days. The TARDEC engineers scrubbed more than 100 specifications to remove restrictive requirements and open them up to competition. Requirements personnel in TACOM's Integrated Logistics Support Center, Small Business Office, legal staff and contracting personnel agreed upon standard scope of work, common source-selection criteria and evaluation plan. Between April 27, 2004, and May 4, 2004, TACOM simultaneously posted 96 RFPs on its Business Opportunities page and the Army's Single Face to Industry site.

Because requirements continue to come from our Soldiers in Iraq, TACOM is in various stages of acquiring 103 separate vehicles. A number of the initial RFPs did not receive any valid offers, so TACOM has actually issued 117 RFPs, and another 10 RFPs are awaiting specification approval by Iraqi Ministry officials before issuance. As of Oct. 1, 2004, TACOM's IMCVS team has evaluated more than 320 proposals, made trade-off decisions and awarded 81 2-year IDIQ contracts. The average time to award after RFP closing is just under 65 days.

**RDECOM's Natick Contracting Division Develops Recruiting Initiatives.** One goal of RDECOM's Acquisition Center Strategic Plan is to recruit, develop and retain a first-class acquisition workforce. To help ensure success, the Natick Contracting Division (NCD) has developed several initiatives to attract business graduates from the many colleges and universities that flourish in the local area. Maria Dunton, NCD Executive Secretary, spearheaded NCD's participation in the FY04 FAST TRACK program.

The program, designed to encourage college students to pursue careers in acquisition, was announced to the workforce in early June 2004. Offices were asked to nominate candidates, with the most qualified being selected for the program. The RDECOM Acquisition Center-funded FAST TRACK program consists of 2 summers of full-time work with possible conversion to a noncompetitive intern position upon graduation. The first NCD nominee for program participation was Howard Gou, a full-time Brandeis University student, who was subsequently selected by the RDECOM Acquisition Center. NCD worked closely with the Intern Coordinator, FAST TRACK Coordinator and Civilian Personnel Advisory Center employees to ensure the program's implementation. Approximately 1 month after his nomination, Gou began the first phase of his FAST TRACK employment with NCD.

This effort's success led NCD to consider placing recruitment ads in local papers, including *The Boston Globe*. A professionally produced animated video infomercial was

developed and placed on the NCD Web page, which links to the Northeast Civilian Personnel Operations Center Vacancy Announcement site. The animation was developed in conjunction with Matt Foster of Computer Consulting. Check out **Careers** at <https://www3.natick.army.mil/>.

**ACA-Southern Region Launches New Suite of BPAs for Office Products.** On Sept. 1, 2004, the ACA Southern Region Contracting Center-East (SRCC-E) launched a new suite of 19 Blanket Purchase Agreements (BPAs) for the Armywide purchase of office products. The Deputy Assistant Secretary of the Army for Policy and Procurement issued a memorandum on Sept. 2, 2004, reiterating that, with limited exceptions, Armywide BPA use is mandatory for all office product purchases within CONUS.

All BPAs were issued against existing Federal Supply Schedules (FSSs) awarded by the General Services Administration (GSA) and provide Army cardholders with additional discounts as well as incentives offered by customer management programs proposed by vendors. All BPAs conform to the terms and conditions of their respective GSA schedules as well as additional requirements negotiated by the SRCC-E. The terms and conditions will be strictly enforced through diligent and dedicated contract administration. BPA holders will offer only items listed within their respective GSA FSS, and all GSA catalog prices will be further discounted on the Army BPAs.

In addition to capturing economies of scale, the office product BPAs are intended to ensure that office product purchases comply with the statutory preference afforded to products manufactured under the *Javits-Wagner-O'Day Act (JWOD)* (purchases from nonprofit organizations that support the employment of people who are blind or severely disabled), and to maximize small business (SB) participation. The Army reaffirmed its commitment to purchasing from JWOD organizations by awarding a BPA to the National Industries for the Blind (NIB) and by implementing checks and balances to ensure that, when substitutes exist, all BPA holders provide the JWOD product in lieu of commercial alternatives. The Army further demonstrated commitment to socioeconomic programs by awarding the remaining 18 BPAs to 16 SBs and 2 consortia that collectively represent more than 260 SBs. The new Army BPA vendors are Access Products, ABM Federal Sales, American Office Products (AOPD - consortia), Bettertype Ribbons, Caddo Design, Capitol Furniture, Chesapeake Office Supply, Chuckals Inc., Document Imaging Dimensions Inc., Future Solutions, Independent Stationers (IS Group - consortia),

KM2 Inc., Metro Office Supply, Miller's Office Supply NIB/JWOD, RGH Enterprises, Stephens Office Supply, VIP Printing and Office Supplies and WECsys LLC.

The Army continues to use DOD Electronic Mall (EMALL), [www.emall.dla.mil](http://www.emall.dla.mil), to place orders against the BPAs. The Defense Logistics Agency is working to improve the EMALL and an "Army Corridor" is now in place to ensure cardholders remain within the Army BPA shopping environment. A new and improved EMALL search engine will be implemented in the coming months to improve cardholder search capabilities. The SRCC-E is continuing coordination with the EMALL Program Management Office to identify and implement changes that will make EMALL easier and more efficient for Army users. An EMALL help desk has been established to assist users with registration and ordering problems. The toll free number is 1-888-352-9333.

For additional information on this effort, contact Charlene G. Geong, Army BPA Administrator, at (404) 464-1783 or [Charlene.G.Jeong@us.army.mil](mailto:Charlene.G.Jeong@us.army.mil).

**ACA-Northern Region (NR) Works with TRADOC to Develop Training for Service Contracting.** The evolution of Service Contracting has strengthened the need for the contracting and requirements communities to work together to build an integrated relationship in the acquisition and management of service contracts. Recent policy in the form of *Army Federal Acquisition Regulation Subpart 5137.5* directs that "Oversight of services acquisition is the shared responsibility of requiring activities, contracting activities and the Assistant Secretary of the Army for Acquisition, Logistics and Technology." However, sharing responsibility can present a challenge to all involved in this process.

Embracing this challenge, the U.S. Army Training and Doctrine Command (TRADOC) requested ACA's liaison assist in efforts to train the workforce with respect to contract management and oversight of service contracts. Enlisting help from the ACA Policy Directorate, ACA Marketing and Outreach Officer and NR Headquarters, efforts began in earnest in April 2004 to develop and coordinate a training plan focused on the duties and responsibilities of government personnel and to augment other more formalized training already available through the Army Logistics Management College and Defense Acquisition University.

In June 2004, a representative from ACA NR Headquarters began conducting a 3-day Contracting Officer's Representative Refresher Training Course. After initial offerings, it was



revamped to ensure that it provided a common level of understanding regarding contract management and the contracting process. The course now includes 1 day devoted to interactive discussions on ethics, working with contractors in the workplace, improving business practices and expectations from the contracting office.

Additionally, the ACA has taken the lead in conducting executive-level training on contract management and the oversight of service contracts at TRADOC Headquarters to ensure government personnel understand the proper method of dealing with contractors in the workplace. Plans are underway to expand this training to all TRADOC schools and installations.

**WSMR FEW Chapter Names Most Influential Woman of 2004.** The White Sands Missile Range (WSMR) Chapter of Federally Employed Women (FEW) selected Cheryl Cretin, Director of the WSMR Directorate of Contracting, as the Most Influential Woman of 2004. WSMR Commander BG Robert J. Reese presented the award to Cretin during the Women's Equality Day luncheon held Aug. 26, 2004. The FEW president described Cretin as innovative, customer-oriented and efficient, and noted that she consistently gets the job done.

### The DAR Council Corner

#### UID Program

The Unique Item Identification (UID) Program is a key component for enabling DOD to reach established goals and objectives by enhancing total asset visibility, lowering life-cycle cost of item management, improving life-cycle property management, improving operational readiness and providing reliable accountability of property.

The UID and valuation is a two fold system of marking and valuing items delivered to DOD. It will enhance logistics, contracting and financial business transactions supporting U.S. and coalition troops. The requiring activity, program manager, item manager, contracting officer and others need to understand this process. All solicitations, contracts or delivery orders for tangible items delivered to the government will require a UID or a DOD-recognized unique identification equivalent, when one or more of the following applies:

- All delivered items for which the government's unit acquisition cost is \$5,000 or more.
- Equipment and reparable items for which the government's unit acquisition cost is less than \$5,000, when determined necessary by the requiring activity for serially managed, mission essential or controlled inventory equipment.
- The government's unit acquisition cost is less than \$5,000 and permanent identification is required for material that does not change form in manufacturing or consumable items.
- Any DOD serially managed subassembly, component or part embedded within a delivered item and the parent item that contains the embedded, subassembly, component or part.

The following exceptions exempt the contractor from providing a UID:

- The supplies are to be used to support a contingency operation or to facilitate defense against or recovery from nuclear, biological, chemical or radiological attack, as determined by the head of the agency.
- It is determined that it is more cost-effective for the government to assign, mark and register the UID after delivery of an item acquired from a small business concern or a commercial item.

Regardless, if an exception applies, the contractor still needs to provide the valuation for the government's unit acquisition cost.

A commercial identifier can be considered for use as a DOD UID equivalent if it meets these criteria:

- Must contain an enterprise identifier.
- Must uniquely identify an individual item within an enterprise identifier, product or part number.
- Must have an existing Data Identifier or Application Identifier listed in American National Standards Institute (ANSI) MH10.8.2, Data Identifier and Application Identifier Standard.

The commercial identifiers meeting these criteria that are recognized as DOD UID equivalents are the EAN.UCC (a system that standardizes bar codes and other supply chain solutions for more efficient business), Global Individual Asset Identifier for serially managed assets, the EAN.UCC Global Returnable Asset Identifier for returnable assets and the International Standards Organization Vehicle Identification Number.

An end item may include embedded items, such as sub-assemblies, components or parts. The prime contractor will pass down appropriate specifications, including the UID

marking requirements, to the tiered vendors for subcontracted subassemblies, components or parts. Spares may be purchased directly from the vendors or through the prime contractor. UID-qualifying spare items (subassemblies, components, parts, lots or batches) must be marked appropriately with the UID data elements. So, with the prime delivery of the end item, one UID is generated. The spares are delivered with their own UIDs. The government will often ask the prime to deliver a list of all UIDs for UID-qualifying embedded items in the end item.

As part of this initiative, an interim rule was issued Dec. 30, 2003, under *Defense Federal Acquisition Regulation Supplement (DFARS)* case 2003-D081. This interim rule included an implementing contract clause. The *DFARS 252.211-7003, Identification and Valuation Clause* (Jan. 2004), requires the delivery of “items” as defined in the clause, unless an exception applies. Items valued at or above \$5,000 shall be marked with a UID. On July 9, 2004, the Director of Defense Procurement and Acquisition Policy (DPAP) issued a memorandum on contract pricing and cost accounting in compliance with *DFARS 252.211-7003*. The final rule is being reviewed and is expected to be published by third quarter FY05. See the DPAP Web site at [http://www.acq.osd.mil/dpap/policy/contract\\_pricing.htm](http://www.acq.osd.mil/dpap/policy/contract_pricing.htm), or e-mail [barbara.binney@saalt.army.mil](mailto:barbara.binney@saalt.army.mil) for a copy.

### Wide Area Work Flow and the UID Registry

Wide Area Work Flow-Receipt and Acceptance (WAWF-RA) will be the standardized data-capture mechanism for transmitting UID data from contractors to DOD for new tangible item acquisitions. WAWF-RA is an acquisition application designed to eliminate paper from the RA process of the DOD contracting life cycle. A secure, Web-based application, WAWF-RA enables authorized defense contractors and DOD personnel to create, capture and process receipt, acceptance and payment-related documentation and to access contract-related documents electronically. The UID-capable version of WAWF-RA (v3.0.4) was placed in production in May 2004 and is in the pilot phase for UID capture with several vendors. The WAWF-RA UID capture function will soon be available to all vendors.

WAWF is a means of transmitting UID data elements into the UID registry. The UID registry is the ultimate repository where all UID data will be captured. The UID registry will serve as an acquisition gateway to:

- Identify what the item is.
- Identify who owns the item originally.

- Identify the initial value of the item.
- Identify procuring activity and acceptance timing.
- Intersect with other systems (e.g., property management, logistics and inventory management).

For more information on WAWF, go to the WAWF training site at <http://www.wawftraining.com>. The Assistant Secretary of the Army for Financial Management (ASAFM) is responsible for implementing WAWF. The point of contact is COL Hector Colon at [Hector.Colon@hqda.army.mil](mailto:Hector.Colon@hqda.army.mil). The Army Contracting Agency is assisting the ASAFM in implementation to contracting personnel. The point of contact is Karen Goldstein at (703) 681-3447.

For more information on UID, go to the Office of the Secretary of Defense Web site at <http://www.acq.osd.mil/dpap/UID/>. At this site, click on UID 101 to view a current policy memorandum and a guide titled, **Unique Identification 101, The Basics**. The guide focuses on the UID program, implementation and item marking and on the accounting and valuation process.

For additional information, contact DAR Council Army Policy Member Barbara Binney at (703) 604-7113.

### Devo- Revo- or Evolution – You Decide

*Bob Tiedeman*

Shortly after applying to the federal service in 1980, I joined the procurement workforce as an intern in what was then known as the U.S. Army Communications-Electronics Research Command (CERCOM). I graduated from the intern program 3 years later. Through this program, which consisted of both classroom and on-the-job training, I was initiated into the somewhat arcane world of government contracts. During these intervening years, CERCOM merged with the U.S. Army Communications Research and Development Command to become the U.S. Army Communications-Electronics Command (CECOM).

Even with my intern training and limited experience, I came to view “government procurement” as something of a cabalistic endeavor. It was fraught with curious, stovepiped procedures and impeded by myriad reviews and levels of oversight that were far removed from my perception of the real business



Improved information technologies have streamlined procedures and obviated the need for paper and paper-driven processes.

world. Our contracts were constructed from pre-printed inserts, oddly numbered forms with handwritten notations and/or a rudimentary word-processing system that converted codes into text. It was text that, however generated, retained the look of a weird science. It took days or weeks to generate a full-up contractual document and almost as long to mail it out for execution. All in all, it could take years to consummate a contract and longer yet to get the supplies and materiel to Soldiers in the field. Few of us ever actually saw the stuff that was obtained through contract and eventually fielded. In the 1980s, the Cold War was still in full tilt as we prepared for the “red menace” to breach the Fulda Gap.

“Procurement types” were not, generally speaking, well respected. Requirements/customer activities that had to “go to contract” for their supplies rather than obtaining them from a depot often just sucked their teeth and hunkered down for a long paperwork exercise — an exercise, mind you, that served little purpose and took months and months to complete. Few, if any, customers appreciated the legal and fiduciary responsibilities of contracting and procurement officers whom they perceived as quintessential bureaucrats who seemed disinterested in meeting their customers’ needs or providing state-of-the-art supplies to America’s Soldiers guarding freedom’s frontiers around the globe.

However, things began to change in 1983. The *Federal Acquisition Regulation (FAR)* System was adopted and replaced the various Armed Services and *Defense Acquisition Regulations*, as well as the plethora of regulations and procedural requirements devised for and by each executive department or agency.

The *Competition in Contracting Act (CICA) of 1984* occasioned some of the most fundamental changes to the contracting process since the 1940s when the Armed Services

Procurement Regulation was first devised. Most significantly, it introduced the notion of “full and open competition” to the contract-award process and prescribed rigorous justification and approval procedures in those cases where full and open competition would not be pursued. It also mandated that “competition advocates” be established to ensure that CICA was fully implemented.

The Packard Commission released its *A Quest for Excellence* report in 1986. The report contained numerous recommendations that would significantly change the way DOD managed its business practices and, specifically, defense acquisition business practices. The commission’s Acquisition Task Force, besides establishing the position of Under Secretary of Defense for Acquisition, made several significant suggestions. These suggestions — implemented over the next several years — occasioned many fundamental changes to the acquisition business process such as:

- Streamline acquisition organizations and procedures.
- Adopt information technologies to obviate the need for paper and paper-driven processes.
- Continually evaluate cost and performance to ensure that performance of critical systems is not diminished just to save money.
- Stabilize acquisition programs to prevent requirements creep that impact development and fielding of systems and supplies.
- Procure and adapt commercial-off-the-shelf products whenever possible for potential military use.
- Ensure that the quality and training of acquisition personnel is continually evaluated and modified to address acquisition workforce challenges in the ever-changing “government procurement” world.

As a profession, we soon became conversant in the new *FAR* language. We learned to harness the market effects of full and open competition and question unjustified sole-source requirements that more often than not resulted in higher procurement/operations costs. We reevaluated stovepiped processes that added no value to the acquisition business and served only to frustrate our customers. We implemented new information technologies and pursued new technologies that saved time, effort and money. We embraced the notion of parallel processing and collaborative generation of acquisition documents to save more time. We also questioned the facile notion of “low-bid” goods when quality, performance and timeliness were more important than just cost. We became more technically savvy to recognize nonvalue added requirements. We began to appreciate the benefits of a vital

and competitive commercial marketplace. We also began to assess and reassess our military business practices and to adopt commercial “best business” practices to the maximum extent practicable.

The next big change came in November 1990 with the passage of the *Defense Acquisition Workforce Improvement Act (DAWIA)*. *DAWIA* focused on the workforce’s professionalism rather than on organizational structures or practices that would be the subjects of acquisition reform and streamlining initiatives in the near future. *DAWIA* would impact a wide array of acquisition positions by recognizing the multidisciplinary and multifunctional character of the acquisition business. In this connection, it would impact every functional position in DOD, including program management, systems planning, development, engineering, testing, property management, logistics, quality control, manufacturing, financial management, Joint development and procurement.

*DAWIA* institutionalized new ways of thinking among US procurement types, thrusting contracting personnel into the roles of change leaders, contracting business managers and contracting business advisors. *DAWIA* transformed standard government procurement into a wide range of business

process transformation initiatives that would fundamentally impact the way we conducted the government’s most significant business processes. As contracting business managers and advisors, we willingly and gladly joined the larger acquisition community. But our most important, but often overlooked,

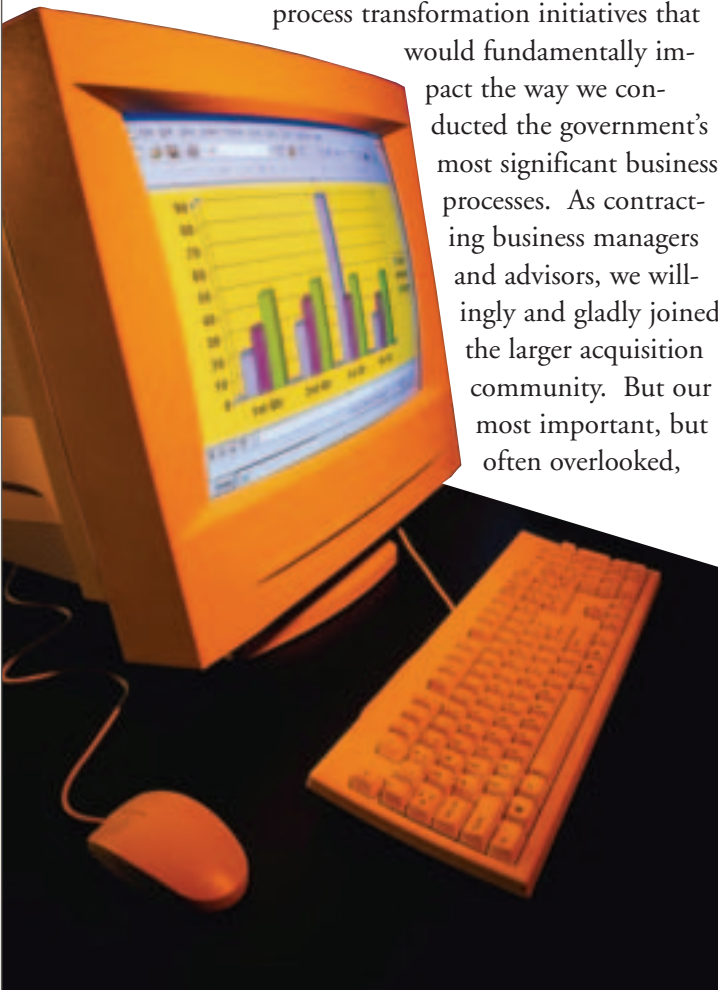
function was, and still is, is to bridge the gap between America’s Soldiers and suppliers.

Subsequent to the momentous changes occasioned by *DAWIA*, the acquisition business community was further shaken by the enactment of the *Federal Acquisition Streamlining Act (FASA)* and the *Federal Acquisition Reform Act (FARA)* in 1994 and 1996 respectively. *FASA* resulted in significant changes to acquisition law. Its enactment resulted in the reduction of paperwork, further encouraged the acquisition of commercial supplies and services, raised the threshold for “simplified acquisition procedures” and promoted the adoption of electronic commerce to further efficiencies and promote greater uniformity among the executive departments and agencies. *FASA* was a logical extension of the Packard Commission’s recommendations and served to institutionalize some of the initiatives borne of it. *FARA* furthered a number of the acquisition reform initiatives instituted with *FASA*. However, and very importantly, it repealed the *Brooks Act*. The *Brooks Act*, which had governed the purchase of information technologies for decades, was universally viewed as one of the most pointlessly bureaucratic government processes. *FASA* was combined with the *Information Technology Management Reform Act* and renamed the *Clinger-Cohen Act of 1996*.

By 1998, the procurement world had been shaken to the core. While still evolving, the role of erstwhile procurement specialist was founded upon a decade of successful acquisition reform efforts, rapid advancements in information technology and, most importantly, by the higher educational standard imposed by *DAWIA*. The contracting profession had been redefined. “Mission accomplishment” and “customer-service fulfillment” were firmly established as key goals throughout the contracting and acquisition community.

Contract specialists/officers were now empowered to be proactive doers and enablers and serve a useful purpose throughout the entire acquisition life cycle. These professionals now bring broad acquisition knowledge and experience, outstanding business acumen and an unparalleled devotion to public service in support of America’s Soldiers. As contracting business managers, procurement types understand their customers’ missions and processes. They also provide business solutions that transcend mere “contracting” and assistance, and they can advise customers to effectively plan and project their respective mission needs.

Today, contracting professionals are critical to the acquisition life cycle. They serve as an essential partner in bringing business operations and commercial practices to program



offices, requiring activities and other customers. They ensure that the critical bridge between Soldier and supplier is maintained and fortified.

At the CECOM Acquisition Center, we have gone from a very mechanistic structure to an organic one while the environment around it is unstable and change is constant. Our workforce has been transformed from “specialists” to generalists. It is a workforce where authority is vested at multiple levels and where innovation and forward thinking are fostered and rewarded. As an organization, we have become horizontal with a team concept that is better able and better suited to meet the challenges of constant change and the unforeseeable vagaries of the new geopolitical climate.

*BOB TIEDEMAN is a Procurement Analyst in the Acquisition Center at CECOM, Fort Monmouth, NJ, where he has been employed since 1980.*

### **Haber Wins AMC Small Business Specialist of the Year Award**

The Army Materiel Command (AMC) recognized one of its own at the eighth annual Army Small Business Conference in McLean, VA, Nov. 17, 2004, when GEN Benjamin S. Griffin, newly appointed AMC commanding general, presented the AMC Small Business Specialist of the Year Award to Christine P. Haber of the U.S. Army Communications-Electronics Command (CECOM) for her exceptional leadership in support of the CECOM Small Business Program.

In FY03, CECOM awarded more than \$1 billion to small businesses, representing more than 20 percent of CECOM's



GEN Benjamin S. Griffin presented Christine P. Haber with an engraved plaque acknowledging her exceptional support of CECOM, AMC and the Army Small Business Programs. From left: Edward Elgart, CECOM Principal Assistant Responsible for Contracting; Victor Ferlise, Deputy to CECOM Commander; Christine P. Haber; GEN Griffin; Scott A. Crosson, AMC Associate Director for Small Business; and Kevin Loesch, Chief, CECOM Small Business Office.

total U.S. dollars obligated — a first for the CECOM Small Business Program. Haber's efforts in implementing small business participation initiatives in CECOM source selections and, most notably, the CECOM Rapid Response Program, were instrumental in these historic achievements. These initiatives included setting thresholds for the number of contract awards and obligations to small businesses on multiple award acquisitions under full and open competition. Haber also assisted in defining subcontracting requirements as part of the evaluation baseline for performance-based services acquisitions.

Griffin thanked Haber for her contributions related to reengineering efforts that resulted in increased small business participation at both the prime and subcontract levels in acquisitions to support CECOM and program executive office customers.

### **PEO STRI Awards Contract for the Common Driver Trainer Stryker Variant**

The U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) awarded Science Applications International Corp. a \$6.9 million contract (with a total value of \$8.78 million if all options are exercised) for work on the Common Driver Trainer (CDT) Stryker Variant. The CDT Stryker Variant is part of a line of driver simulators that train Soldiers on tracked, wheeled and heavy equipment vehicles.

CDT teaches basic driving skills and tactical maneuvering for combat situations. CDT simulates all driving controls including the dashboard, lights, indicators, switches, instruments and pedals. Because it is not safe to train in a live environment, CDT simulates various types of terrain (desert, woodland, urban, mountainous and tundra) environmental elements (darkness, rain and fog) and other conditions that Soldiers encounter in theater.

The simulator provides a realistic representation of vehicle performance in accordance with the terrain and the actions taken by the driver, including vehicle malfunctions and embedded diagnostic and troubleshooting capabilities for the driver. CDT also generates an after action review to provide the driver and crew with critical lessons learned from their simulated missions.

“We are excited to have the Stryker variant of the CDT on contract,” said LTC Joseph A. Giunta Jr., Product Manager (PM) Ground Combat Tactical Trainers (GCTT), PEO STRI. “With

the current operations in Southwest Asia, the development and fielding of the Stryker driver trainer will allow us to better address the challenges our Soldiers face during battlefield operations.”

The CDT contract was awarded under the PEO STRI Omnibus Contract. The program will be managed under PEO STRI's PM GCTT, headquartered in Central Florida's Research Park, Orlando, FL. In addition to research, development and program management, PEO STRI provides life-cycle support and operations for Army training systems around the world. PEO STRI is dedicated to putting the power of simulation into the hands of our warfighters.

### **Albert Berger Outstanding NCMA Chapter Leadership Award Presented to Lori A. Deara**

The Albert Berger Outstanding Chapter Leadership Award was established in 1998 to give special recognition to those National Contract Management Association (NCMA) volunteers who demonstrate superior chapter leadership achievements in support of their chapters' goals and activities. The award honors the memory of a former NCMA National President — an initial leader of professional development in contract management. The Albert Berger Award is the highest honor an NCMA volunteer can receive for leadership activities.

Recently, Lori A. Deara received this award for her outstanding accomplishments. Her contributions include active recruitment resulting in a 30 percent membership increase, mentoring members for executive board positions and initiating a Chapter Web site and credit card program. Deara acts as a senior advisor for developing her chapter's Annual Operating Plan, Long Range Plan and Membership Retention Plan. She initiated a proclamation to recognize “Picatinny Contract Managers Week” that the Commander, U.S. Army Research, Development and Engineering Command, Picatinny, NJ, approved. Her forte is supporting and establishing educational events for her chapter's membership.

Deara is a contracting officer and grants officer for the Maneuver Ammunition Systems Group, U.S. Army Tank-automotive and Armaments Command-Picatinny. She entered federal service in 1993 and has been an NCMA member since 1994. Deara was previously the contracting officer for the Advanced Infrared Countermeasure Program, which developed XM211 and XM212 decoys, 105mm High

Explosive Tactical and Target Practice-Tracer cartridges for the Stryker Mobile Gun System and 120mm M829A Armor-Piercing, Fin-Stabilized, Discarding Sabot-Traced cartridges for the Abrams tank. A past Picatinny Chapter President and National Director, Deara is currently the chapter's Executive Vice President.

### **Call for Letters**

We need your input and feedback! Is there a subject you would like to see included in an upcoming issue of *Army AL&T* Magazine? Would you like to suggest a topic for an article or submit an article of your own? Have a comment, criticism or compliment? Our editors want to hear from you.


This is your magazine, and reader input is essential to the success of *Army AL&T* Magazine. We are here to serve the acquisition community, so let us know what is on your mind. Your recommendations matter to us. All comments and Letters to the Editor will be welcomed and duly considered for publication in either the paper or electronic versions of the magazine.

Please mail, fax or e-mail your suggestions and comments to *Army AL&T* Magazine, 9900 Belvoir Rd., Suite 101, Fort Belvoir, VA 22060-5567; (703) 805-4218 or [army.alt.magazine@asc.belvoir.army.mil](mailto:magazine@asc.belvoir.army.mil).



# Beyond Phase II: Ready for Transition

*Transitioning Innovative Technology Into Your Program!*



The National Small Business Innovation Research (SBIR) Phase II Conference gives acquisition professionals the chance to meet one-on-one with small high-tech firms that have innovative technologies ready to meet most government organization's technology needs. Don't miss this opportunity to learn about transitioning advanced SBIR research and development into your acquisition program.

**National Small Business Innovation Research Conference**

July 11 - 14, 2005 • San Diego, California

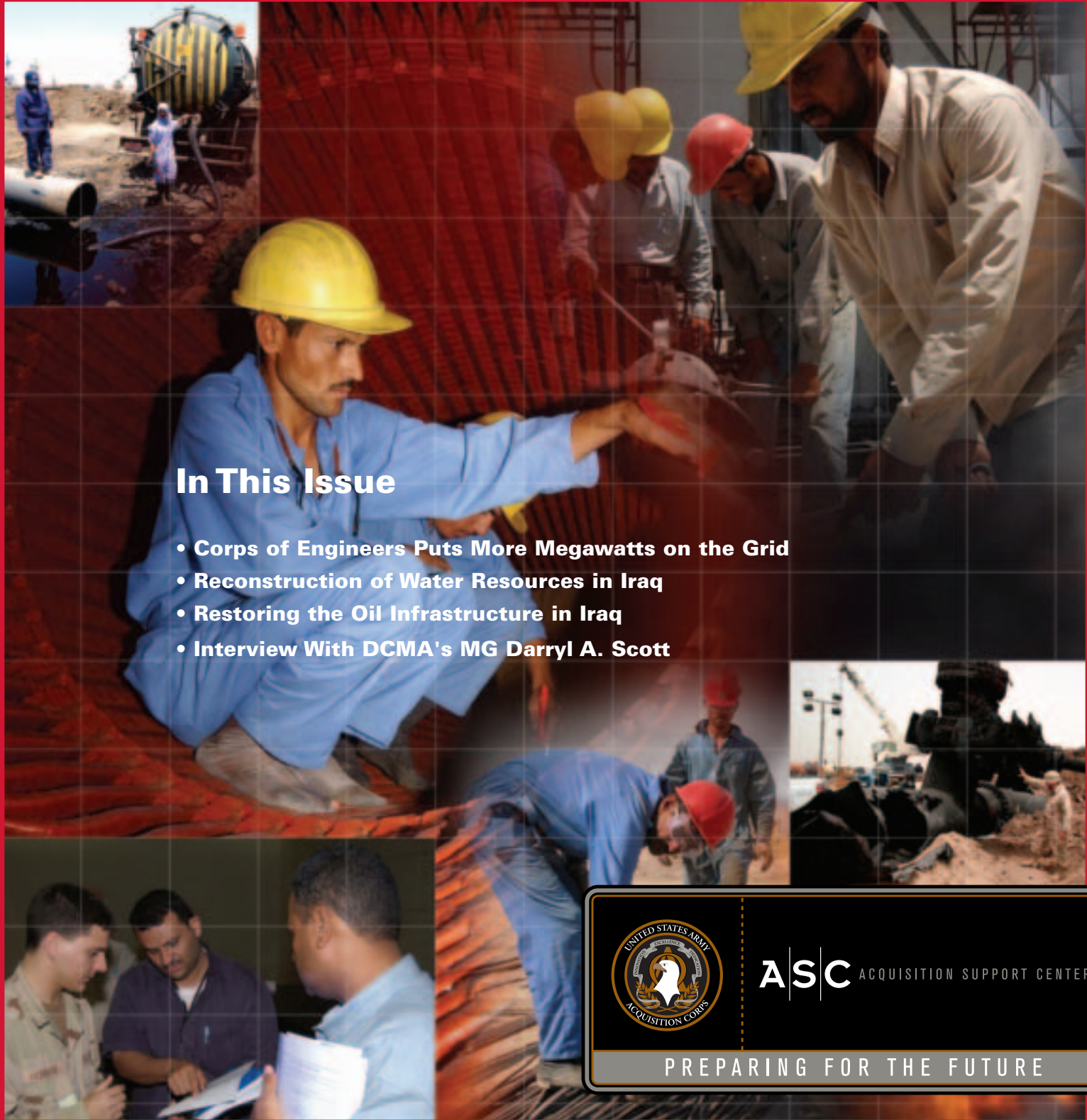
[www.dodsbir.net/conference](http://www.dodsbir.net/conference)

**ARMY ACQUISITION, LOGISTICS & TECHNOLOGY**

**ISSN 0892-8657**

DEPARTMENT OF THE ARMY  
ARMY AL&T  
9900 BELVOIR RD SUITE 101  
FT BELVOIR, VA 22060-5567

<http://asc.army.mil>



## In This Issue

- Corps of Engineers Puts More Megawatts on the Grid
- Reconstruction of Water Resources in Iraq
- Restoring the Oil Infrastructure in Iraq
- Interview With DCMA's MG Darryl A. Scott



**ASC** ACQUISITION SUPPORT CENTER

PREPARING FOR THE FUTURE