

DEPARTMENT OF DEFENSE NEWS RELEASE  
(DEC. 10, 2008)

### **Army Announces Modeling and Simulation Awards Winners**

The Department of the Army announced Dec. 5 that 14 winners have been selected for the annual Department of the Army Modeling and Simulation (M&S) Awards. The awards were presented to winners at the Interservice/Industry Training, Simulation & Education Conference (I/ITSEC) in Orlando, Fla. The winners for each category are:

#### **Acquisition (Team)**

Title of Winning Nomination: "Vehicle Propulsion System Evaluation Tool"

Submitted by: U.S. Army Research Development and Engineering Command-Tank-Automotive Research, Development and Engineering Center (RDECOM-TARDEC)

The Vehicle Propulsion System Evaluation Tool (VPSET) was developed as a government-owned software tool to streamline Modeling and Simulation (M&S)-based acquisition of ground vehicles by the Army and Marine Corps.

#### **Acquisition (Team)**

Title of Winning Nomination: "Future Combat Systems (Brigade Combat Team) Communication Effects Server (CES)"

Submitted by: Future Combat Systems (Brigade Combat Team) Modeling and Simulation Office

The FCS One Team Partners (the Army and the Boeing Corporation) began development of a model to simulate the FCS communications network. The goal of the effort is to create a model that would accurately represent the new Joint Tactical Radio System (at the engineering waveform level) and would predict message delivery and network latencies running real-time with explicit representation of all radios in an FCS (BCT) (some 10,000+ nodes) operational environment. The CES model is currently being used to serve as a communications simulation/stimulation environment for testing and analyzing both FCS vehicles and the newly developed network management software.

#### **Acquisition and Analysis (Individual)**

Title of Winning Nomination: "Stryker Fleet Sustainment Analysis"; Army Lt. Col. James W. Ware

Submitted by: Center for Army Analysis

Army Lt. Col. James W. Ware met with the current Stryker vehicle experts to determine how each variant flowed from one process to another and the time taken for repair and transport. He then developed a list of important factors for the systematic flow of Stryker vehicles and developed metrics and standard data sources for these factors. Ware developed a discrete event simulation called the Stryker Flow

Model that combines these metrics and data to forecast the condition and location of every Stryker in the U.S. Army inventory for the next 10 years.

#### **Analysis (Team)**

Title of Winning Nomination: "Fusion-Oriented Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Utility Simulation (FOCUS)"

Submitted By: RDECOM, U.S. Army Materiel Systems Analysis Activity

FOCUS simulates C4ISR processes, including sensor performance; tasking, collection, exploitation, and processing of data from all sources; fusion of this information into tracks; and the communication of current predicted tracks to a visual simulation of the Common Operating Picture in a three-dimensional battlespace. FOCUS is designed for the analyst with user/algorithm efficiency at the forefront with an analysis package incorporated into the model. FOCUS simulation output data can be easily extracted to other applications to facilitate further analysis.

#### **Experimentation (Team)**

Title of Winning Nomination: "Duty Cycle Experiments (DCE)"

Submitted by: RDECOM-TARDEC

The team designed and built a human-in-the-loop motion-based simulation experiment for the purpose of measuring the duty cycle of a notional Joint Light Tactical Vehicle (JLTV) in a relevant military operation. The crew's vehicle usage, the instantaneous power consumption and production, and all external events affecting the vehicle were monitored and recorded. The aggregated records became the duty cycle that this experiment was intended to measure. As the Army continues to move in the direction of hybrid-electric solutions for vehicle systems, it is extremely important that it have a scientific modeling and simulation process that enables it to design and evaluate these potential solutions.

#### **Experimentation (Individual)**

Title of Winning Nomination: "Current Performance of Gunner's and Robotics Operator's Tasks in a Simulated Mounted Environment and Effects of Cueing and Individual Differences"; Dr. Jessie Y. C. Chen

Submitted by: RDECOM U.S. Army Research Laboratory, Human Research and Engineering Directorate

Dr. Jessie Y. C. Chen used a One Semi-Automated Forces (OneSAF) simulation environment to capture the multitasking requirements for these future systems including communication and gunner tasks that required threat monitoring 360° around a moving mounted vehicle. The robotic tasks were instantiated by integrating Remote Sensing Analysis

Facility (RSAF) software simulating robotic missions into the overall mission package.

### **Training**

Title of Winning Nomination: "Distribution Management Cognitive Trainer (DMCT)"

Submitted by: RDECOM Simulation & Training Technology Center (STTC)

The DMCT prototype is being used today to train U.S. Army logistical planners on how to exploit the capabilities of the Battle Command Sustainment Support System (BCS3), exploit the capabilities of additional logistics information management systems, and for training key logistics staff personnel on the principles of Distribution Management (DM), in order to improve the analysis, mission planning, and decision making skills of tomorrow's logistical planners.

### **Training**

Title of Winning Nomination: "Bilateral Negotiation (BiLAT) Simulation"

Submitted by: RDECOM Simulation & Training Technology Center (STTC)

The BiLAT is used today to train soldiers on how to plan for and conduct successful bilateral meetings and negotiations in different cultural settings. The tool was initially employed to support training for future brigade and battalion commanders attending the U.S. Army School for Command Preparation (SCP) at Ft. Leavenworth, Kan.

### **Training (Individual)**

Title of Winning Nomination: "Battle Command Training Center (BCTC) Fort Sam Houston"; Joel V. Williams

Submitted by: Office of the Dean, Academy of Health Sciences, Army Medical Department Center & School

Submitted by: RDECOM-TARDEC

Joel V. Williams serves as the supervisor and manager of the Fort Sam Houston (AMEDDC&S) Battle Command Training Center (BCTC) and the principal training developer for constructive simulations/stimulations for MEDCOM/AR-NORTH, and ARSOUTH. The BCTC serves as the developmental and distribution hub for digital battle simulation/stimulation familiarization training to Institutional Programs of Instruction, Reserve Component, and National Guard operational units within its area of operations.

### **Testing and Evaluation (Individual)**

Title of Winning Nomination: "Testing and Evaluation of Fowlpox as a Non-pathogenic Simulant for Smallpox";

Amanda E. Chambers

Submitted by: RDECOM

Amanda E. Chambers conducted kinetic studies to measure the reaction rates of vaccinia and fowlpox with the

decontaminants, determine half-life values, and calculate the delta H (change in enthalpy) and delta S (change in entropy) values associated with these reactions. The results of these studies were published in September of 2008 as ECBC-TR-639, "Fowlpox as Decontamination Simulant for Variola Major."

### **Test and Evaluation**

Title of Winning Nomination: " Facial and Ocular Countermeasures Safety (FOCUS) Headform Development Team Submitted by: U.S. Army Medical Research and Materiel Command (MRMC), U.S. Army Aeromedical Research Laboratory

The Facial and Ocular Countermeasures Safety (FOCUS) headform was developed to provide Army materiel developers the ability to assess the protection provided by newly developed facial and ocular protection devices without the need for cadaver testing, streamlining the decision-making process for fielding improved protective equipment to the warfighter.

### **Plans and Operations**

Title of Winning Nomination: "United States Army Graduate Program Anesthesia Nursing (USAGPAN) Simulation Program"

Submitted by: U.S. Army Medical Department Center and School, Fort Sam Houston, Texas

In 2005, USAGPAN aggressively developed Plans and Operations to initiate and implement a formal simulation program. This formal simulation plan trains the students to assess, analyze, test, and evaluate different approaches for safe anesthesia performance. Also, the USAGPAN has experimented to determine the effectiveness of using simulation as a teaching strategy. The findings of these studies strongly suggest that using a Human Patient Simulator (HPS) increases higher level cognition, critical thinking, and the ability to perform.

### **Cross Cutting**

Title of Winning Nomination: "Extensible Command, Control, Communications, Computer, and Intelligence Suite Fire Support Application (ExCIS FSA)"

Submitted by: Fire Support Test Directorate, Operational Test Command, Fort Sill, Okla.

ExCIS FSA provided three key benefits in 2008: reduced the number of soldiers, systems, and command posts required for test and training events; provided realistic and robust testing of mission-critical systems; and supported systems developers with early problem identification.

The annual awards recognize achievement in support of the Army Vice Chief of Staff's overarching M&S strategy that

articulates an aggressive Army vision “to routinely employ modeling and simulations that support decision-making, course of action development, mission planning, rehearsal, and operations” by 2016.

### **Suggestion Saves Money, Increases Production**

*Anthony J. Ricchiazzi*

*ARMY NEWS SERVICE (DEC. 17, 2008)*

TOBYHANNA ARMY DEPOT, Pa.—Everyone knows that necessity is the mother of invention. The necessity of readying radios for the warfighter sparked a suggestion that increased production and will save the taxpayer more than \$235,000 per year.

Nick Lipcavage and John Nicosia realized they can repair a component of the Single Channel Ground and Airborne Radio System, known as SINCGARS, that was coded non-repairable. Both are electronics mechanics in the tactical communications division, communications systems directorate. They earned a \$4,378.62 Army Ideas for Excellence program suggestion award.

“In 2006, we received a large work order for the AN/ARC-201 airborne SINCGARS, and we just started to repair the

Band Pass Filter component of the radio out of the need to “get product out the door rather than wait for new filters,” Lipcavage said.

The ARC-201 SINCGARS is used primarily in helicopters. The components filter out unwanted frequencies and at the time cost more than \$2,000 each, although Nicosia said the price has come down slightly.

They said there was a learning curve, including research to find out if parts of the component could be procured, but now they are repairing the filter regularly.

“We repair them in batches so they are ready for new workload,” Lipcavage said. “Once radios come in, we swap out the filters, which saves further time.”

Nicosia noted that before the repair program was initiated, they could wait two weeks or more for new filters.

“Once the filter is repaired, we test it against a new filter using a spectrum analyzer and signal generator,” he said. “If the filter passes, we test it again in a mock up ARC-201 SINCGARS.”



Nick Lipcavage, right, and John Nicosia, electronics mechanics in the tactical communications division, communications systems directorate at Tobyhanna Army Depot, learned how to repair a radio component coded non-repairable, saving more than \$200,000 per year.

Photo by Steve Grzedzinski

Once radios are repaired and tested, they are stored until needed.

Lipcavage and Nicosia were the only technicians working on the ARC-201 when they made the suggestion in 2007, but now they work with two technicians and a student in the Student Career Experience Program.

Tobyhanna Army Depot is the largest full-service command, control, communications, computers, intelligence, surveillance, and reconnaissance, or C4ISR, maintenance and logistics support facility in the Department of Defense.

Employees repair, overhaul, and fabricate electronics systems and components, from tactical field radios to the ground terminals for the defense satellite communications network.

Tobyhanna's missions support all branches of the armed forces. The depot is the Army Center of Industrial and Technical Excellence for communications-electronics, avionics, and missile guidance and control systems and the Air Force Technology Repair Center for ground communications and electronics.

*Ricchiuzzi writes for Tobyhanna Army Depot.*

### **Picatinny Employees Realize \$2.7 Million Cost Savings, Cost Avoidance During LSS Certification**

*Jacqueline Adams*

*ARMY NEWS SERVICE (DEC. 31, 2008)*

PICATINNY ARSENAL, N.J.—The Armament Research, Development and Engineering Center Lean Six Sigma staff recognized the newest LSS practitioners with a ceremony Nov. 17.

The ceremony recognized the hard work and dedication of the LSS project teams that earned green-belt and black-belt certifications from April through October 2008. Sixteen teams consisting of 39 team members achieved certification.

The teams were composed of representatives from the program executive office for ammunition, and ARDEC staff from Picatinny and Rock Island.

The teams that received certification spanned the spectrum from management projects to research, development, and innovation projects, realizing cost savings of approximately \$1.1 million and cost avoidance of approximately \$1.6 million.

The cost improvements provide direct benefit to the Picatinny community and the warfighters on a continuous basis, while allowing the workforce to still meet and exceed its requirements and expectations.

Black-belt certification recipients were Army Brig. Gen. William N. Phillips, Army Col. Andre C. Kirnes, James Caiazzo, Vincent R. Matrisciano, August Thiesing, and Lucita Kahn. Green-belt certification recipients were Army Lt. Col. Albert J. Hedeem, Hector Morales, Marvin Elmowitz, Peter Martin, Bonnie Gray, Alex Olaverri, Camille Gowdy-Alexander, Dan Peterson, Carl Guglielmini, Chad Clark, Anthony Di Giacomo, Amy Mulvoy, Brad Armstrong, Andréa Stevens, Robin Mason, Mary L. Kenison, Adam Hilburn, Leslie Hosein, Ming Liang, Stan Smith, Carolyn Pellegrino, Jay Jones, Laura Barber, Ann Do, Stephen Ernyey, Aaron Benfante, John Hirlinger, Richard Schrum, and Chris Brandt.

### **21 Air Force Civilians Receive 2008 Presidential Rank Award**

*Air Force 2nd Lt. Gina Vaccaro*

*AIR FORCE NEWS SERVICE (JAN. 7, 2009)*

RANDOLPH AIR FORCE BASE, Texas—Twenty-one Air Force senior executives and senior professionals received the 2008 Presidential Rank Award for sustained achievement in government service.

President George W. Bush announced the recipients at the Pentagon Sept. 30, 2008, and Air Force officials will honor the award recipients at a ceremony April 17.

"Air Force leadership is proud to be so well represented," said Cheryl Medlin, the former Air Force Presidential Rank Awards coordinator at the Pentagon. "This award is a testament to their leadership and dedication."

The 2008 Air Force recipients of the Distinguished Presidential Rank award are:

- Kenneth K. Dumm
- Dr. Donald B. Paul
- Barbara A. Westgate
- Patricia J. Zarodkiewicz

The 2008 Air Force recipients of the Presidential Rank Award of Meritorious Executive/Senior Professional are:

- David C. Bond
- Charles G. Carpenter
- Alok Das
- Robert Edward Dawes
- Joseph de Penne Rouge
- Robert E. Duignan
- David H. Eskins

- Martha J. Evans
- Dr. Barry L. Farmer
- Jay H. Jordan
- Martin M. Mazick
- Joseph M. McDade, Jr.
- Patsy J. Reeves
- Joe Sciabica
- Dr. Larry B. Simpson
- Barbara Jo White-Olson
- Patricia M. Young

The awards, administered by the Office of Personnel Management and the Office of the Secretary of Defense, are presented annually and are open to all government agencies. Each agency can nominate up to 9 percent of the career senior executive service employees and senior professionals. The president of the United States reviews the recommendations and picks the award winners.

Only 5 percent of the SES and equivalents, which make up approximately 0.03 percent of the total civilian federal workforce, may be awarded the meritorious-level rank award. Only 1 percent may be awarded the distinguished-level award.

Recipients in both categories receive a framed certificate signed by the president, a lapel pin, and a lump-sum bonus of either 35 percent or 20 percent of their basic pay, respectively. The PRA has the largest pay bonus associated with an award for the federal government.

"The Presidential Rank Awards are the most prestigious awards that are given at the senior executive and equivalent level," said Peruen Johnson, the Air Force PRA coordinator at the Pentagon. "They recognize and celebrate our very best career executives and professionals."

The April 17 Air Force ceremony and reception will be conducted at the Women in Service to America Memorial in Washington D.C., and will be hosted by the secretary of the Air Force and the Air Force chief of staff.

"The reception is not only a celebration for the award recipients, it is a way to honor the loved ones who have been there to encourage, support, and sacrifice so [the award recipients] could go above and beyond," Johnson said.

For more information about the Presidential Rank Awards, a full list of this year's winners, or information on how to nominate an employee, visit the OPM Web site at <[www.opm.gov](http://www.opm.gov)>.

*Vaccaro writes for Air Force Personnel Center Public Affairs.*

### **Picatinny Employees Honored for Improvement in Hand Grenade Safety**

*Kevin Wong • Yusif Yafai • Kimberly E. Jamison  
ARMY NEWS SERVICE (JAN. 16, 2009)*

PICATINNY ARSENAL, N.J.—Picatinny employees Jason DeVenezia and Yusif H. Yafai were commended in December for their work on a device that will make hand grenades safer for soldiers to use.

Col. Raymond Nulk, project manager for Close Combat Systems, presented the two employees with Star Notes on behalf of Gen. Charles C. Campbell, commanding general of the U.S. Army Forces Command. The notes thanked them for their efforts on a piece of equipment called the Confidence Clip.

The Confidence Clip is a simple device that fits between the grenade fuze and body. It securely fastens the pull ring in place to prevent the accidental removal or rattling associated with a loose ring.

The Confidence Clip was developed to meet a long-standing need. As far back as World War II, soldiers have been taping their grenades for perceived safety or to reduce noise. This is a safety hazard because removing the tape can inadvertently pull the pin, resulting, as it has in some cases, in serious injury. It can also obscure vital markings, such as lot numbers, so otherwise functional grenades have to be destroyed before use.

The Army's program manager for Close Combat Systems staff was made aware of this unsafe and wasteful practice through feedback from theater and the Department of the Army Explosive Safety Council.

At the request of Campbell, PM CCS staff expedited the incorporation of the Confidence Clip into existing inventory of lethal hand grenades; they will be available beginning this month. Incorporating the Confidence Clip into new production items will begin in March or April.

### **Depot Employee Claims Award with Determination, Hard Work**

*Jacqueline Boucher  
ARMY NEWS SERVICE (JAN. 28, 2009)*

TOBYHANNA ARMY DEPOT, Pa.—A tenant employee earned a Defense Logistics Agency-level award for her role in processing over 45,000 lines of unserviceable and battle-damaged combat equipment valued at \$4.6 million.

Penny Graff, general supply specialist and customer service representative in the Defense Distribution Depot Tobyhanna, Pa. (DDTP) claimed the 2008 DLA Employee of the Quarter Award after spearheading several projects that helped put critical equipment into the hands of military members serving around the world.

Recognized as someone who rises to the challenge at work and as a member of the organization's Family Support Group, Graff's "selflessness and sense of urgency for the warfighter are unmatched," said Lt. Col. Michael Talley, DDTP commander.

"I like working with the customers and helping the warfighters in Iraq," Graff said. "There's a lot of job satisfaction knowing that what you do makes a difference."

Graff is the person coworkers turn to when tough, short-notice jobs occur. She also handles all customer-service duties, attends Tobyhanna's weekly production management meetings, and monitors the work being accomplished in DDTP facilities.

"Penny's ability to motivate others through her enthusiasm and competitive spirit is contagious," Talley said. "On several occasions, she challenged other distribution processors and managers to accelerate their efforts to exceed established goals."

To her credit, a Receiving Get Well Plan cleared an 8,000-asset backlog in 14 weeks, and a multi-depot generator redistribution operation resulted in strategically relocating thousands of mobile electric power generators.

Graff, along with a team of 27 employees, was responsible for checking the kind, count, and condition of the backlogged assets stored in DDTP warehouses. Once posted to an accountable record, Army officials were then able to pull the assets for repair and subsequent distribution. Records indicate she worked 200 hours overtime including 10 weekends to train several distribution process workers to help complete the project.

"Everyone worked together to get the job done in 14 weeks," Graff said. "Our success can be attributed to the support of the entire organization."

Talley also said that Graff was "singularly responsible" for planning, coordinating, and executing a multi-depot generator redistribution operation. She orchestrated planning conferences with several agencies, accurately calculated transportation requirements, and monitored the preparation



Penny Graff serves as a general supply specialist and customer service representative at the Defense Distribution Depot Tobyhanna, Pa.

Photo by Jacqueline Boucher

and loading of bi-weekly shipments of 2,000 generators to Defense Distribution Depot Albany, Ga., he added.

"Penny is a thoroughly dedicated and consummate professional who can be counted on to accomplish any task or mission," Talley said, adding that Graff was recently commended by the Aerostat Radar Program Manager and Tobyhanna directors for coordinating and executing two time-sensitive, high-priority weekend shipments to a forward operating base in Iraq.

Graff started her career as a clerk-typist 27 years ago. Since that time, she's worked in transportation for 18 years and was an acting site manager for two years. She's been on staff at DDTP since 1992.

"Penny Graff is truly a role model and leader of the highest caliber," Talley said. "She is an asset to the Defense Distribution Center and epitomizes the DLA values: stewardship, professional growth and development, leadership, and support to the warfighter."

### **DLA Recognizes Industry Partners**

*Jonathan Stack*

*DEFENSE LOGISTICS AGENCY PRESS RELEASE (JAN. 28, 2009)*

The Defense Logistics Agency honored 24 industry partners, customers, and individuals Jan. 28 with its 12th Annual Business Alliance Awards. The awards recognize those who have demonstrated outstanding efforts to partner with DLA and improve the agency's mission—providing supplies and services to America's warfighters.

"The full spectrum of what you provide is absolutely essential to keep our men and women supplied with everything they need to defend the United States, pursue the global war on terrorism, and interact effectively with our many allies and partners around the world," said Navy Vice Adm. Alan Thompson, DLA director.

He said he believes such recognition programs help improve the mission.

"I think it helps build the strong bonds between DLA, as a government defense entity, and you as the real providers of the goods and services that we need to keep our armed forces in business," he added.

Industry representatives and DLA customers were recognized in seven categories.

### **Vendor Excellence**

Awarded to businesses that have demonstrated overall excellence in superior product quality, on-time delivery, superior customer service, reliability, dependability, consistency, and accuracy.

- Moog Inc., East Aurora, N.Y. (large business)
- David Clark Company Inc., Worcester, Mass. (small business)
- TMI Enterprises Inc., Mapleton, Utah (small disadvantaged business)
- DARE Electronics Inc., Troy, Ohio (women-owned small business)
- Medical Products LTD Inc., Eagle Pass, Texas (service disabled, veteran-owned small business)
- Breton Industries Inc., Amsterdam, N.Y. (historically underutilized business zone, small business)

### **Innovative Business Performer of the Year**

Awarded to businesses that have undertaken risks associated with innovative business practices such as shared production, electronic commerce, prime vendor contracts, and quick response time, and have demonstrated overall excellence in superior product quality, on-time delivery, superior customer service, reliability, dependability, consistency, and accuracy.

- Airgas National Welders, Charlotte, N.C. (large business)
- Machine-Tek Inc., Rockford, Ill. (small business)
- Underground Pipeline Inc., Eagle, Wis. (small disadvantaged business)
- ORO Manufacturing Co., Monroe, N.C. (women-owned small business)
- PAL Services Inc., O'Fallon, Mo. (service disabled, veteran-owned small business)
- Seagoing Uniform, Marshville, N.C. (historically underutilized business zone, small business)

### **New DLA Contractor of the Year**

Awarded to a business that contracted for the first time with DLA and has demonstrated overall excellence in superior product quality, on-time delivery, superior customer service, reliability, dependability, consistency, and accuracy.

- Henze Stamping & Manufacturing Co., Troy, Mich. (small business)

### **Outstanding Readiness Support**

Awarded to businesses that have provided extraordinary customer support, service, or product during a crisis situation and have demonstrated overall excellence in superior product quality, on-time delivery, superior customer service, reliability, dependability, consistency, and accuracy.

- Cryotech Deicing Technology, Fort Madison, Iowa (large business)
- Greenlees Filter, LLC, Forest Park, Ill. (small business)
- Amjay Chemicals, Katy, Texas (small disadvantaged business)
- East/West Industries Inc., Ronkonkoma, N.Y. (women-owned small business)
- North American Rescue Products Inc., Greer, S.C. (service disabled, veteran-owned small business)
- Carter Industries Inc., Olive Hill, Ky. (historically underutilized business zone, small business)

### **Outstanding AbilityOne Program Vendor**

Awarded to non-profit agencies—National Industries for the Blind or National Industries for the Severely Handicapped—that exemplify overall excellence in superior product quality, on-time delivery, superior customer service, reliability, dependability, consistency, and accuracy.

- Travis Association for the Blind, Austin, Texas (NIB)
- Shares Incorporated, Shelbyville, Ind. (NISH)

### **Customer of the Year**

Awarded to the Department of Defense customer organization and the non-DoD customer organization that exemplifies the highest degree of professionalism and meets or exceeds criteria in one or more of the following categories:

vendor excellence, innovative business performer, or outstanding readiness support to DLA.

- U.S. Army Medical Materiel Center-Southwest Asia, Camp As Sayliyah, Qatar (DoD)
- Environmental Protection Agency, Sustainable Facilities Branch, Washington, D.C. (non-DoD)

### **Commander's Choice Award**

Awarded to the non-DLA individual whose dedication and commitment to the DLA mission affects the quality of life for U.S. men and women in uniform.

- Zaki Saleem, managing director, Cogeco (PVT) Limited, Lahore, Pakistan

### **ARL-Funded Scientists Win Prestigious Award**

*U.S. ARMY RESEARCH LABORATORY NEWS RELEASE (FEBRUARY 2009)*

Two ARL-funded university scientists will share the 2009 Ahmed Zewail Award in Ultrafast Science and Technology.

They are Prof. Margaret Murnane and Prof. Henry Kapteyn of the University of Colorado at Boulder and the National Institute of Standards and Technology. Murnane and Kapteyn are funded under the ARO Physics Division in a project to develop the shortest pulses of light ever produced.

This new effort in ultra-short pulses is based on bursts of light that are shorter than the wavelength of visible light. Called attosecond (10<sup>-18</sup> sec) science for its goal to reach pulses of light that are a mere 25 attoseconds in length, this new field is expected to allow new kinds of measurements never before made.

Just as the achievement of femtosecond (10<sup>-15</sup> seconds) pulses opened a new world of science, attosecond science will lead to a new and unexplored realm. Applications include using short pulses to image through opaque materials, developing laser pulses that can manipulate molecules in ways never before allowed, and to virtually measure electron dynamics within atomic structure.

Examples of these applications are the possibility of creating new technologies that will allow soldiers to "see through the wall," and to increase the capability of remote sensing to detect minute amounts of explosives from larger distances, allowing for the detection of IEDs.

In 2005, the American Chemical Society established the Ahmed Zewail Award in Ultrafast Science and Technology. This award, which carries a cash prize of \$5,000, is intended to recognize outstanding and creative contributions to fun-

damental discoveries or inventions in ultrafast science and technology in areas of physics, chemistry, biology, or related fields.

### **Army Civilian Honored with 'Black Engineer of the Year Award'**

*Patrick Pinter*

*ARMY NEWS SERVICE (FEB. 23, 2009)*

WARREN, Mich.—For Christopher Scott, success has never been an option. It has always been a choice, and that drive for excellence has been recognized.

Scott, a Detroit native, was selected for a 2009 Black Engineer of the Year Award in the Modern-Day Technology Leaders category and attended the Black Engineer of the Year Awards Conference Feb. 18-22, 2009, in Baltimore, Md.

He is part of the U.S. Army Research, Development and Engineering Command-Tank Automotive Research, Development and Engineering Center (RDECOM TARDEC) in Warren, Mich. He was one of only two members from RDECOM to receive the honor.

"I was very anxious to find out if I won. I put a lot of work into my application and I really wanted to see it pay off," Scott remarked. "I knew it was very competitive, but I knew I had a great chance. When I found out that I was selected, I was very much honored."

Black Engineer of the Year Awards recognize individuals who have achieved exceptional career gains in government and industry, in lifetime achievement, and in pioneering feats.

The category of Modern-Day Technology Leaders honors men and women of color who are demonstrating outstanding performance and will shape the future course of engineering, science, and technology.

Scott attended Cass Technical High School in Detroit and earned his B.S in electrical engineering from the University of Detroit Mercy. He is currently working on his master's degree at Lawrence Technological University.

"Coming up through the Detroit Public School system and making it to this point, I just want to show kids that applying yourself to education can lead to great things," Scott pointed out. "I want to be an example for these kids to look up to, and winning an award like this really adds power to the words I tell them."

Just to be nominated was a terrific thrill for the 26-year-old, but actually winning an award is something that Scott says will stay with him for the rest of his life.

"This is something that is really going to stick with me. I am very excited to go to the conference and be among all the great people in the engineering field. It is a great honor to be recognized beside these people," remarked Scott. "This is truly something that I will remember for the rest of my life."

In addition to his work with TARDEC, Scott also donates much of his free time serving his community. He participates in anti-crime and educational projects within Detroit.

### **Kuwait Logistics Center Improves Supply Pipeline to Afghanistan**

*Beth Reece*

*Special to American Forces Press Service (Feb. 24, 2009)*

FORT BELVOIR, Va.—As 17,000 soldiers and Marines ordered to Afghanistan by President Barack Obama prepare to deploy this spring and summer, logisticians already are orchestrating the shipment of critical supplies such as food and lumber.

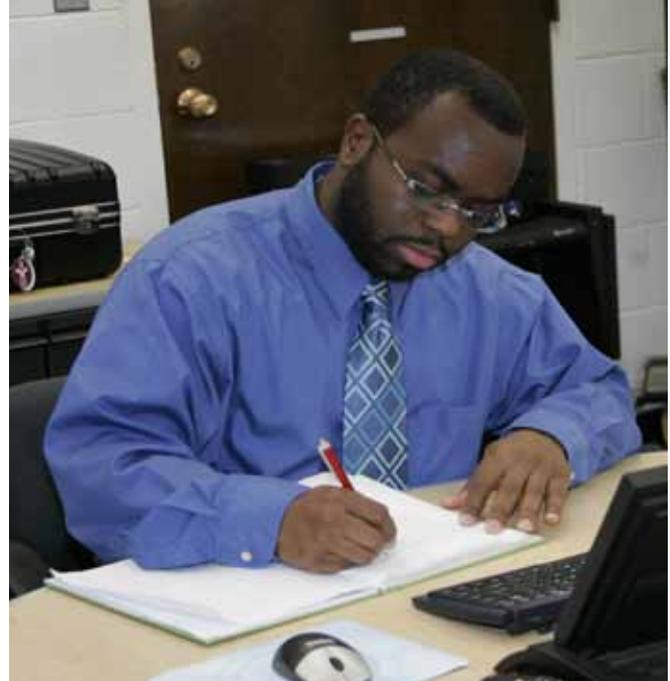
The Defense Logistics Agency has been working with U.S. Central Command's Deployment Distribution Operations Center in Kuwait since January to support the troop increase requested last year by U.S. Forces Afghanistan Commander Gen. David D. McKiernan, Navy Rear Adm. Mark Heinrich, director of DLA's Logistics Operations and Readiness Directorate, said.

The operations center merges experts from U.S. Transportation Command, Military Surface Deployment and Distribution Command, Army Materiel Command, DLA, and service components. Together, they plan the most efficient and timely movement of supplies to troops.

"We're planning for increased demands of food subsistence, building supplies, spare parts, and packaged petroleum products in Afghanistan," Heinrich said. "All of our supply centers are deeply involved with the CDDOC and working closely with DLA support teams in Kuwait."

Defense Supply Center Philadelphia is partnering with the operations center to ensure collapsible housing units are sent where needed.

"The [distribution center in Kuwait] is playing a role in metering the flow—some by air, some by ship—and getting them to where they need to be to meet warfighters' require-



Christopher Scott is one of the winners of the Black Engineer of the Year Awards in the Modern-Day Technology Leaders category. As a member of the U.S. Army Research, Development and Engineering Command—Tank Automotive Research, Development and Engineering Center (RDECOM TARDEC) in Warren, Mich., he is one of only two members from RDECOM to receive the honor. U.S. Army photo

ments," Heinrich said. "The fact that they're doing that and have visibility, and we know who to talk to there, has been very beneficial to DLA.

Heinrich, who headed the operations center during a voluntary five-month deployment last year, said the arrangement is working because the right people are working together in the right ways. "Our response to warfighters is greater because DLA and its strategic partners have put boots on the ground over there, which allows us to fuse our information and be persistent," he said.

The operations center is the first of its kind to be used in wartime, Heinrich said. It was established in 2004 at CENTCOM'S request, with the goal of achieving shorter delivery times and lower costs.

The admiral said he believes the center already has made big improvements. The center lets DLA members see how the supplies they procure are actually sent to customers, he said, which challenges them to evaluate agency processes and occasionally make adjustments that speed delivery.



Army Staff Sgt. Thomas Marstin of Company B, 1st Battalion, 4th Infantry Regiment, rides in an M939 5-ton truck at Forward Operating Base Lane in Afghanistan's Zabol province, Feb. 15, 2009. The Defense Logistics Agency is planning for increased demands of food, building supplies, fuel, and spare parts for additional troops expected to arrive in Afghanistan by midsummer.  
U.S. Army photo by Staff Sgt. Adam Mancini

For example, he said, small changes at the Defense Distribution Depot Kuwait, Southwest Asia, shortened the time it takes to prepare pallets for shipment.

"DDKS produces about 60 pallets each day for air delivery, and when you send a pallet via air, there's an expectation that it's going to get there fast," Heinrich said. Pallets built at the depot were being weighed and measured on the airfield, then offered for bid to commercial carriers.

"But the CDDOC started looking at the process and asked, 'What if we did all this at DDKS?'" he said. "'Can we improve the process?'"

Two months later, the depot had installed the Air Mobility Command's Global Air Transportation Execution System, which gives visibility of pallets awaiting shipment.

"So we were able to report those air pallets as soon as they were built at DDKS to the people who offer them to commercial carriers," Heinrich said. "What took about seven-and-a-half days now takes about two days."

Partnerships generated at the center are being used now as the depot assumes management of a formerly Navy-owned warehouse in Bahrain.

"Today, when folks in Bahrain requisition material from Kuwait, we fly it at a cost of about \$1.98 a pound," he said. "Now that we have a warehouse in Bahrain, we can fill it with material from Kuwait; and working with TRANSCOM, we can truck it, and it will only cost us about 10 cents a pound."

The center also has improved end-to-end distribution by increasing cargo visibility and maximizing airlift assets. And by initiating the use of "pure pallets," which contain items for one customer only, the center eliminated the need to break down and repackage cargo for specific users in theater.

"The CDDOC plays an important role in synchronizing operations right there on the ground," Heinrich said.

"The future for CDDOC is limitless, and I feel lucky to have been a part of its beginning," he added. "It's made me a better logistician and a stronger member of the DLA team."

*Reece writes for Defense Logistics Agency public affairs.*