



# CECOM DOTS and DASHES

- 5 The Decisive Edge
- 11 The Critical Link
- 21 Around the Command
- 24 History Highlights

## CECOM Commanding General promoted to Major General

by Kristopher Joseph, CECOM Public Affairs

Brig. Gen. Bruce T. Crawford, Commanding General, U.S. Army Communications-Electronics Command and Aberdeen Proving Ground (APG) Senior Mission Commander, was promoted to major general during a promotion ceremony on July 21.

Gen. Dennis L. Via, Commanding General of Army Materiel Command, led the ceremony among more than 500 senior leaders, service members, CECOM civilians, family members, and friends.

“This is a great day for the Crawford family and the presence of so many of our senior leaders is a tribute to their ongoing contribution to our Army,” said Via during his opening remarks.

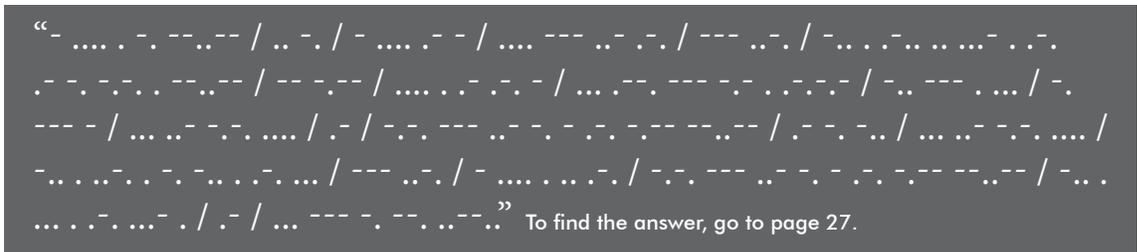
Via mentioned that in the approximate 82,000 Army officers, only 116 are major generals. Crawford was one out of 31 brigadier generals that was selected for promotion, Via said.

“Brig. Gen. Crawford has a long history of exemplary service and I can’t think of a more qualified leader to be promoted to major general,” said Via.

Crawford recognized his mother Sarah, wife Dianne, and niece Kamirin, by presenting them bouquets of flowers. He also thanked his other immediate family and friends including his two sons 1st Lt. Bruce Crawford Jr. and Corey. Crawford recognized the impact that they had on his life, and he also highlighted many others who have helped through his 28 years of service.

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Can you decode what’s in this box?



” To find the answer, go to page 27.



# Youth STEM Programs: Our investment in the future



**Maj. Gen. Bruce T. Crawford**

My family and I recently participated in the launch of a new STEM pilot program here on APG called Real-world Internships in Science & Engineering (R.I.S.E). The two-week internship includes 16 Harford County high school students who have voiced their interest in the critical areas of Science, Technology, Engineering and Math.

This is why I applaud the efforts of the various CECOM and APG teams to recognize the need of supporting our youngsters' interest in STEM. The R.I.S.E program is only one of several initiatives here on post. Our K-12 Educational Outreach Program is critical to sustaining an installation workforce focused on technical capabilities. Just last year, the STEM Education and Outreach Center opened and we've had many APG employees and organizations supporting events such as the National Junior Science and Humanities Symposium, the APG STEM Expo and the USA Science and Engineering Festival, just to name a few.

Several APG organizations to include CECOM, SEC and CERDEC have established relationships with our local schools and have taken the initiative in providing the time and resources for these programs that give students practical, real-world experiences in STEM that they would otherwise not receive in their classrooms.

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*Through these varied programs, we reach about 25,000 students in this region alone. All of this shows that APG is making a tremendous impact and contribution to our youth and the future.*  
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Here on APG, we are blessed to have some of the most talented professionals working everyday to improve and prepare our Armed Forces for a future environment where innovations in STEM will be crucial for the security and progress of our Nation.

These students have an amazing mentorship opportunity to work side-by-side with these professionals creating real results that will hopefully open new doors to their curiosity in STEM.

Growing up in South Carolina, I was the lucky beneficiary of a local support system that helped spur my interest in serving my country and receiving a higher education. I would not be where I am today had it not been for the encouragement of mentors who took it upon themselves to help me.

From a broader perspective, I view these programs as part of our inherent responsibility to give back to our community and invest in our overall future. We are living in a time of rapid evolutionary change such that our youth are learning how to solve problems that don't even exist yet. It's been predicted that the education and technology that they will learn in their first two years of college will most likely be obsolete by the time they graduate.

I encourage everyone to find a way to contribute to building an interest in STEM for our next generation. You would be amazed how just a pat on the back and a kind word of encouragement can make a difference in a young person's life. We owe it to our family, our community and our Nation to put our best foot forward for our collective future.

**"Army Strong".**

.....> cover story continued

"I've been truly blessed for the guidance, care and concern that all of you have taught me over the years," Crawford said after being promoted. "I thank all those who saw more in me than I saw in myself."

Crawford is a native of Columbia, S.C., and was commissioned May 28, 1986, after graduating with a B.S. in Electrical Engineering from S.C. State University. He also holds a Master of Science in National Resource Strategy from Industrial College of the Armed Forces.

Crawford said he is a product of an environment of nurturing family members and encouraging mentors, including his then ROTC instructor from SCSU.

"My ROTC instructor told me something that I'll never forget, he said that it's all about 'genuine care and concern.' That is something I've always remembered and try to do that every day in this job," said Crawford.

Crawford emphasized that the entire promotion ceremony was less about him and all about an, "opportunity to publically thank those who are most responsible for me standing here today."

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*"If you take nothing else from this ceremony remember that I take seriously the enormous responsibility that has been bestowed on me, I take seriously what we stand for as a nation, and my family and I will continue to try and make a difference while standing on point for you."*

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Crawford has 28 years of military service in a variety of leadership positions at tactical, operational and strategic levels. He assumed command of CECOM on May 20 after his most recent post of J6, Director of C4/Cyber and Chief Information Officer, U. S. European Command. Prior to that, he served as the Commanding General, 5th Theater Signal Command, and G6, United States Army Europe in Wiesbaden, Germany.



**(Center) Maj. Gen. Bruce T. Crawford, Senior Mission Commander at Aberdeen Proving Ground (APG) and Commanding General, U.S. Army Communications-Electronics Command, was pinned by (left) Gen. Via, Commanding General U.S. Army Materiel Command, and (right) his wife, Dianne Crawford, during his promotion ceremony held at the C4ISR campus at APG on Monday, July 21. Via presided over the event. (Photo by Sean Kief, Aberdeen Proving Ground Garrison photographer)**



**Sgt. Maj. Kennis J. Dent**

# COMMAND SERGEANT MAJOR'S PERSPECTIVE

In my role as the Communications-Electronics Command's (CECOM) command sergeant major, my focus and area of responsibility is centered on the training, professional development, retention, readiness and discipline of the CECOM workforce. As a member of the Department of the Army workforce, you are a vital component of the Army Profession. And as an Army professional, uniformed or civilian, it is extremely important that you maintain your readiness and resiliency by completing your annual mandatory training in order to ensure that you are in compliance with all the requirements and guidelines for being the best Army professional you can be. As we enter the fourth and final quarter of the fiscal year, it is imperative that all of us complete our yearly mandatory training requirements by September 30.

Whether you are a newly hired civilian employee or a more seasoned team member with years of valuable federal service, we can all benefit from the content in these required courses. The mandatory training is a component of being a ready and resilient team mate.

The training courses provide you with a map to navigate the sometimes turbulent waters we may have to cross in our professional lives. Much of the required training is updated on a yearly basis to provide you with the most recent developments and challenges that each respective training session prepares you for.

I understand completely that your continued hard work, dedication, and support to the warfighter can make it difficult or inconvenient for you to find any down time in your daily schedules to complete the courses. As we enter the fourth quarter of fiscal year 2014, please do not wait until the last minute to finalize your training requirements; the close of the fiscal year generally brings the challenges of increased workloads and pressure of deadlines. Practice good time management and complete the courses beforehand. We all must prioritize this training and view it as an enrichment to our individual professional development, as well as to the enhancement of our organization as a whole.

Mandatory training equips you with the critical knowledge base and skill sets to efficiently and effectively carry out your job functions while minimizing any potential risks for incurring security or ethical violations. The strength of our CECOM team rests in the hands of our individual team mates. Issues like preventing sexual harassment, combating substance abuse, protecting

personally identifiable information, re-emphasizing our ethics and, perhaps most important, implementing operational security are always vital to fully understand. The training aligns with the core Army values and embodies the standards of excellence such as high moral character, trust, good stewardship and honor that our country has come to know and expect from our Army profession.

*Working together, we will not only meet our workforce mandatory training goals as a command, but continue to ensure our CECOM Team remains a highly effective and exceptional group of professionals respected and admired by all we support.*

Please do not hesitate to reach out to your organization's training coordinator for a timeline of what courses need to be completed and when. For links to mandatory training, please go to the Total Employee Development website at: [https://ted.csd.disa.mil/ted/TED\\_Main.cfm](https://ted.csd.disa.mil/ted/TED_Main.cfm)

Thanks for all you do each and every day!

I look forward to continuing to serve as your champion, advisor, and team mate.

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**Ever vigilant and Army Strong!**

# THE DECISIVE EDGE

## CECOM hosts global communications exercise at Aberdeen Proving Ground

by Kristopher Joseph and Marissa Anderson, CECOM Public Affairs and Communications Media

“Effective Cyber operations in a Joint Information Environment” was the focus of this year’s Joint User Interoperability Communications Exercise (JUICE) hosted by U.S. Army Communications-Electronics Command (CECOM) at Aberdeen Proving Ground (APG), Md., during the month of June.

In its 21st year, this worldwide communications exercise brings together the joint services, coalition partners, Department of Defense (DoD) groups, and key U.S. government and federal agencies in an effort to test and train tactics, techniques and procedures that will lead to improved interoperability and synchronization during real-world scenarios.

“JUICE is ultimately our way of preparing for the future joint tactical environment where more operations will occur in cyberspace,” said John Kahler, IT specialist for CECOM Software Engineering Center (SEC) and chief, Joint On-demand Interoperability Network. “Civilized nations have become dependent on the internet as a critical link between its citizen’s information dissemination and support infrastructure. The vision that the Department of Defense has laid out for a Joint Information Environment between joint, multi-national and interagencies is being realized by the hard-working professionals of this capstone event here on APG.”

JUICE includes network planning, systems integration, network operations and cyber defense operations to identify lessons learned for improvements to existing operational capabilities. The exercise also seeks to address operational gaps identified by deployed units, coalition partners, DoD working groups, governmental agencies and first responders.



**Marines receive training on a solar panel charging station during the 2014 Joint Users Interoperability Communications Exercise (JUICE) hosted by the U.S. Army Communications–Electronics Command held at Aberdeen Proving Ground, Md., during the month of June. (Photo by Marissa Anderson, CECOM Public Affairs)**

The U.S. Strategic Command is the official sponsor of this year’s event. One of their five priorities is to “build cyberspace capability and capacity.” JUICE is focusing on cyber as a way to improve overall network defense.

“In today’s environment, it’s not a question of will a network be attacked but rather when a network will be attacked. For these reasons, JUICE 2014 is focused on the joint cyber defense of a deployed joint task force (JTF) and communications interoperability between our Federal, State and local responders supporting the President’s Executive Order 16318 National Security and Emergency Preparedness,” said Kahler.

SEC was the lead CECOM organization involved in the exercise.

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**Marines examine a Satellite Transportable Terminal during the 2014 Joint Users Interoperability Communications Exercise (JUICE) hosted by the U.S. Army Communications–Electronics Command held at Aberdeen Proving Ground, Md., during the month of June. (Photo by Marissa Anderson, CECOM Public Affairs)**

Air Force Col. Eric Good, JUICE chief of communications, J6, went on to describe JUICE's role in defending the network in a joint environment.

"Traditionally, the cyber monitoring and defense is done at a higher headquarters level. Now cyber defense capabilities are at the tactical edge and grant us greater situational awareness," said Good. "At JUICE this year, we can get that understanding at the tactical level. We may have had the communication abilities in the past, but now we have true command and control capabilities in defense of the network."

The notional setting of JUICE was a forward-deployed JTF that is responding to several simulated real-world scenarios involving both natural disasters and terrorist attacks against the United States. These included a major earthquake in the mid western U.S., a coordinated cyber attack on the nation's communication infrastructure, and the release of a biological agent in a major metropolitan area. Each incident required the JTF to establish communications with several government and civil agencies in order to provide immediate support to tactical elements and other first responders. The objective of the JTF training is to heighten readiness and responsiveness through the use of cutting edge technology and the diverse capabilities from the participating agencies and groups.

Participants in the JUICE exercise included the DoD, Department of Homeland Security, Federal Bureau of Investigation, the Federal Emergency Management Agency, Department of Justice, Department of Transportation, Transportation

Service Authority, as well as civil and local authorities, and first responders.

"The objective is to work together as a team," said Kahler. "This collaboration will further develop the TTPs now so that in the event we are called upon, we will have already trained together as a team," Kahler explained.

Throughout the exercise facility on APG, different patterns of camouflage could be seen working side-by-side in the various operations cells. JUICE also aims to train the joint team on state-of-the-art enterprise services and communication systems so that they are familiar with each other and the capabilities they will take into battle.

Marine Corps Lt. Col. Grant Johnson, U.S. Strategic Command, was one of the participants in JUICE and further described its inherent value to the joint services.

"The joint fight is not necessarily a new concept, but has proven difficult in the past. Each service component brings a different capability to the fight. Ninety percent of the participants in this exercise are not located at APG," said Johnson. "JUICE was created 21 years ago in order to facilitate those interoperabilities. "JUICE takes new and emerging technologies, tests them out, and places them in an operational-like environment to ensure that each interoperability piece works amongst the services."

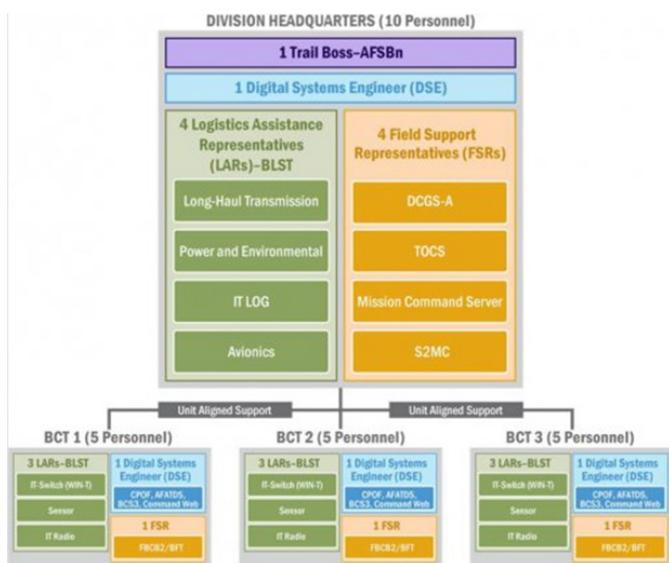
The primary system supporting JUICE is the Joint On-demand Interoperability Network (JOIN). JOIN gives all worldwide participants the ability to collaborate with one another and share data in near real-time.

"JOIN provides a distributed testing environment in which systems can be tested across the same environment and can be leveraged to connect the tactical community into the acquisition community so they can test and support fielded systems during the sustainment process. JOIN is an enabler, supporting the development, sustainment and deployed forces execute their mission cost effectively while reducing and mitigating risk," said Kahler.

*JUICE and the JOIN present the Army with a "one of a kind" resource that serves as a critical link between the development and sustainment communities providing better support to the warfighter.*

# C4ISR Field Support updates coming to 1st ID

by Robert Dimichele, CECOM Public Affairs & Communications Media



**Within the new C4ISR field support structure, Brigade Combat Teams will elevate issues as needed to a nine person division level support team that will provide either on-site or remote support as needed**

Last month marked the beginning of a new era for C4ISR field support Army-wide, as leadership from the 1st Infantry Division and the C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) Center of Excellence came together to kick off implementation of a new field support solution.

“We’re thrilled to be out in front on this,” said Lt. Col. Patricia Sayles, assistant chief of staff, Division G-6, 1st Inf. Div. “The new C4ISR field structure is going to be a good thing -- it supports Soldiers, it better aligns to shifting mission requirements, and will expedite operator and maintenance tasks across the board.”

The C4ISR Center of Excellence, comprised of the Communications-Electronics Command (CECOM), the Program Executive Office for Command, Control, and Communications Tactical (PEO C3T), the Program Executive Office for Intelligence, Electronic Warfare and Sensors (PEO IEWS), the Program Executive Office for Enterprise Information Systems (PEO IES), and the Communications, Engineering, Research and Development Center (CERDEC), is rolling out the new field support model that doesn’t eliminate or reduce field support capabilities, but reorganizes how they are deployed in the field. The intent is to facilitate gradual, deliberate shifts in C4ISR field support staff across the force structure, while prioritizing Soldier training and readiness.

Moving forward, field support personnel will be arranged into brigade teams, division teams, and regionalized support that consists of a combination or several types of staff.

- CECOM logistics assistance representatives (LARs) are multifunctional Department of the Army civilians that advise, assist and train in all areas of logistics and support for commanders in attaining and sustaining material readiness. They also assist with field-level maintenance and provide technical support.
- PEO C3T digital system engineers (DSEs) are Department of the Army civilians that provide training and technical assistance on unit-owned C4ISR equipment.
- Select C4ISR multifunctional field support representative and engineers (FSR/FSEs). FSR/

.....> story continued on next page

FSEs are subject matter experts that assist with field-level troubleshooting and component repair, and provide training and technical and maintenance support.

- CECOM Trail Bosses serve as the C4ISR touch point for division headquarters for external resources aligned to the unit.

A typical brigade combat team will have five personnel assigned, inclusive of three multifunctional LARs, a DSE and a system-specific FSR. This staff will be supported by an additional ten personnel aligned to the division, to include the CECOM Trail Boss, four multifunctional LARs and four system-specific FSRs, and one Division DSE, as well as by other system-specific FSRs and FSEs that are regionalized out of Fort Hood, Texas.

“When we first examined the C4ISR field support structure, we conducted site visits at the National Training Center (Fort Irwin, Calif.) and the Joint Readiness Training Center (Fort Polk, La.) and observed home-station training events at Fort Hood (Texas) and Fort Drum (New York),” said Rich Licata, PEO C3T field support manager and C4ISR Center of Excellence Field Support Integrated Project Team member. “We found that we were missing an opportunity to empower Soldiers to handle operator and maintenance level tasks, so we developed the new model, piloted it, validated it, and today, we stand ready to implement.”

To support the reorganization of resources, a new work flow process is being rolled out to ensure the right checks and balances are in place, as issues are identified and trouble tickets are submitted. An updated Universal Trouble Ticket System, or UTTS, SharePoint application will be launched to provide Soldiers an automated process to document and request division level and regional field support resources, further streamlining the existing incident management processes. Additionally, training needs analyses

are being completed to connect units to the right training resources, so that Soldiers and units are prepared.

“From the CECOM perspective, this implementation is a direct result of a multi-year effort designed to enhance our services to the field,” said Barron Williams, acting director, CECOM Field Support Directorate. “We’ve partnered with our C4ISR Center of Excellence counterparts, Forces Command and the Training and Doctrine Command to ensure that we provide a comprehensive solution that doesn’t just realign resources, but provides the training and the tools to maintain readiness levels.”

Near-term, the focus will be on connecting units with training through the Signal University and Mission Training Complex classes and training on a new field support trouble ticket system was held in June. By August and September, division-level implementation will be underway in order to prepare for collective unit-led training events in the October timeframe and a validation process in November to verify readiness.

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*“Sometimes change is hard, and that’s why in this case, we’re being careful to prepare adequately, and I think we definitely have a solid plan in place,” said Maj. Patrick Sullivan, 1st Inf. Div. G-6 NETOPS officer in charge. “Overall, this will be good for the Army, because it will help build a self-sufficient force, and the 1st ID is excited to be leading the way.”*

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# Man Transportable Robotic Systems testing underway at Tobyhanna

by Justin Eimers, Tobyhanna Army Depot

Engineers are conducting testing on robotic unmanned ground vehicles in an effort that could bring future robotics work to Tobyhanna Army Depot (TYAD).

The Program Manager for Unmanned Ground Vehicles selected Tobyhanna to conduct a proof of concept for potential upgrades to the Army's medium-class robotics fleet.

Responding to urgent warfighter needs in recent conflicts left the Army with a mixed fleet of systems and high sustainment costs. Under the Man Transportable Robotic System's second increment (MTRS Inc II), the Army will move to one Unmanned Ground Vehicle with one configuration.

Electronics technicians in the Communications Systems Directorate are removing all proprietary components in prototype vehicles and replacing them with government-designed components. This allows the Army to compete purchases of replacement parts in the future. Additional changes include replacing the heavy control units with much lighter ruggedized computers running government-designed software.

Chase Gardner, electronics engineer in the Production Engineering Directorate, said success with this effort could lead not only to additional MTRS systems, but other robot overhaul programs as well.

"If we perform well with this project run, it could lead to the production of about 1,200 MTRS kits," said Gardner, adding that further success could lead to obtaining more Army ground robotic systems overhaul workload. This is the second robotics project performed by Tobyhanna, following the iRobot unmanned ground vehicle mission.

Man Transportable Robotic Systems represent common, remotely-operated, tracked vehicle platforms designed to perform buried mine detection, engineer route clearance, special

operations, and explosive ordnance disposal missions. Each unit weighs roughly 120 pounds and has a range of 800 meters, providing safety and security for warfighters operating the systems in combat zones.

To prepare for MTRS testing, Electronics Worker Nicholas Prehotsky and James Serafin, an electronics mechanic, received systems operations training from robotics team personnel at Picatinny Arsenal, N.J. Prehotsky has conducted testing on several MTRS systems and recognizes the robot's many capabilities.

"The MTRS robots come equipped with a long list of benefits to Soldiers," said Prehotsky. With four video cameras, a 200 pound towing capacity, and ease of use, these robots present a "highly-innovative solution for warfighters to stay out of harm's way."

During developmental testing, Prehotsky and Serafin control the MTRS from a remote control unit and measure the maximum distance the system can operate before going out of range. Serafin said the process is simple but crucial to the mission—especially for bomb and chemical disposal activities.

"Without an accurate measurement of the system's range, there could be adverse effects once the system is deployed to theater," said Serafin. "Although this is the first phase of the program, we're taking every step to overcome challenges and prepare for any additional robotics programs that may come to Tobyhanna."



**Electronics Mechanic James Serafin, left, and Nicholas Prehotsky, electronics worker, conduct testing of a Man Transportable Robotic System at Tobyhanna Army Depot. (U.S. Army photo by Chris Sauers)**

# CECOM SEC assists IMCOM in completion of SharePoint migration

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by **Software Engineering Center**

With the support of the Communications-Electronic Command (CECOM) Software Engineering Center (SEC), the U.S. Army Installation Management Command (IMCOM) recently completed the migration of its Staff Action Tracking Automation Tool (SATAT) to the Defense Information Systems Agency (DISA) Enterprise Portal Services (DEPS) environment. The SATAT is a tool used by over 150 unique IMCOM users on a daily basis to automate the collaboration, coordination, tracking, and approval or rejection of staff actions and tasks across the headquarters and regions. As a result of the migration, users will experience enhanced performance and improved records management and archiving capabilities for the tool.

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*“The increased performance and capabilities of SATAT make daily work incredibly more efficient,” said Michael Kuiper, IMCOM chief information officer (CIO)/G-6. “The success of the migration is a direct outcome of the teams’ hard work and dedication to implementing a smooth transition over the last several months.”*

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The work began in October 2013 when IMCOM’s SATAT was selected to be part of the Enterprise Content Management and Collaboration Service (ECMCS) pilot to provide Army organizations a consistent platform where geographically dispersed users would be able to collaborate across boundaries and access

Microsoft SharePoint 2010 Enterprise features. IMCOM selected the Enterprise Content Management (ECM) services team of CECOM SEC to execute the migration. The ECM team, with its in-depth subject matter expertise in policy and guidance and its practical adoption and implementation experience, was the perfect partner for IMCOM for this effort.

“As a result of the IMCOM and CECOM SEC ECM Partnership, we have significant lessons learned and metrics that provide a foundation of knowledge, experience, and data to input into future enterprise service acquisitions,” said Jack Badstibner, division chief (acting), CECOM SEC Data Services Division. “It represents a significant accomplishment in enabling centrally hosted enterprise content management and collaboration services across the Army.”

The ECMCS pilot kicked off in April 2013, when the Army Acquisition Executive (AAE) approved the CIO/G-6 proposal for the Program Executive Office Enterprise Information Systems (PEO EIS) to conduct the ECMCS Pilot of the DISA hosted and managed solution for Enterprise Collaboration. The pilot was set for nine months, with goals related to evaluating the DISA managed Enterprise Collaboration Solution, collecting data and metrics to inform the acquisition strategy, and realize new cost savings.

“As one of the first complex customers for the Enterprise Content Management and Collaboration Services pilot, IMCOM demonstrated how the DISA DEPS environment increases both performance and collaboration capabilities for the Army,” said Mike Krieger, Army deputy CIO/G-6. “IMCOM’s transition data and feedback provide vital input to help the Army move towards a final enterprise solution.”

PROVIDING THE  
**CRITICAL  
LINK**

**Central Technical Support Facility (CTSF)**

**Assurance and validation events**

The Central Technical Support Facility is planning for the 4th quarter fiscal year 2014 Coalition Interoperability Assurance and Validation (CIAV) events. During the 4th quarter, the U.S. will lead the assurance and validation of new versions of the Combat Identification (CID) Server and Combined Information Data Network Exchange (CIDNE). The CID server assessment will verify the capability of transferring data via North Atlantic Treaty Organization Friendly Force Information format that provides increased situational awareness to aircrews for troops in contact, convoy operations and intelligence, surveillance, and reconnaissance support. The CIDNE events will focus on interoperability exchanges between the latest releases of Interim Geo-Spatial Intelligence Tool and Joint Operations and Intelligence Information System.

**Command Headquarters**

CECOM hosted an Army Materiel Command (AMC) Civilian Senior Leadership Forum last month at Aberdeen Proving Ground, Md. The forum was led by AMC's senior civilian, John Nerger, executive deputy to the commanding general. CECOM's senior civilians found it to be a very informative meeting. Insights offered by Gen. Dennis Via, commanding general, and presentations, including those by the Hon. Katherine Hammack, Assistant Secretary of the Army for Installations, Energy, and Environment; Lt. Gen. Thomas Spoehr, director, Office of Business Transformation; and Lt. Gen. Vangjel, Department of the Army Inspector General; helped them to frame and further plan for the challenges to our programs and workforce management resulting from the constrained fiscal environment.

**Software Engineering Center (SEC)**

The U.S. Army Communications-Electronics Command (CECOM) has awarded an \$87 million task order for engineering support services of field software for worldwide intelligence systems to Sotera Defense Solutions. Under the new task order awarded by CECOM's SEC, Sotera will provide integration, sustainment and training services for the Army's users of fixed and tactical intelligence systems at garrisons and during exercises, contingency operations and combat. The two-year task order was issued under the command's Software and Systems Engineering Services Next Generation (SSES NexGen) Indefinite Delivery, Indefinite Quantity contract. SSES NexGen is a contract vehicle through which CECOM procures engineering and scientific support services. Sotera Defense Solutions, Inc., is a national security technology company that is headquartered in Herdon, Va.

**Property accounting**

SEC developed and released a new Property Book Unit Supply Enhanced (PBUSE) software Interim Change Package that provides Army supply personnel with upgraded capabilities and increased security, and replaces the social security number with the Department of Defense Identification number. PBUSE is the Army's web-based, state-of-the-art, Combat Service Support property accountability system. It provides Army logisticians with real time asset visibility for effective supply operations management.

**Veterans' service history**

The CECOM SEC demonstrated the search capability they developed for the Center of Military History's (CMH) war repository to Gerald O'Keefe, Administrative Assistant to the Secretary of the Army. The search capability enables organizations, like the Department of Veteran's Affairs, to rapidly verify what units an individual warfighter has been associated with in order to accurately determine their benefits. This tool was used to support Capt. William D. Swenson's Medal of Honor award.

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### **Risk Reduction Dashboard**

Support for the Commander's Risk Reduction Dashboard (CRRD) continues by SEC. The CRRD is a Vice Chief of Staff of the Army (VCSA) tasking under the Army Ready and Resilient Campaign. It is a management information system that provides commanders the ability to detect, measure, and track unit-level risk behavior, and to identify Soldiers who are high risk in order to engage in prevention and intervention activities. SEC is rolling out the proof of concept to additional users and preparing two Sprints for fielding. Sprint 6, which is scheduled for release in early August, will improve the law enforcement information available to commanders and includes a new risk factor for Crimes Against Society, expanded information to distinguish similar offenses, and information regarding externally referred cases. Sprint 7, which is scheduled for release in late September, will complete support for Domestic Violence and Child Abuse risk factors from the Army Central Registry. It will also include improvements to allow the CRRD proof of concept to move into sustainment.

### **Tobyhanna Army Depot (TYAD)**

#### **Upgrade support for fleet of terminals**

TYAD employees are working alongside members of the the 86th Communications Squadron at Ramstein Air Base, Germany, to assemble and install a U.S. Army Modernization of Enterprise Terminals (MET) antenna system. The Army launched the MET program to upgrade its aging fleet of enterprise strategic SATCOM ground terminals. The MET terminals will allow Defense Department services access to increased satellite bandwidth and will reduce acquisition and life-cycle logistics costs for Army, Navy, Air Force and Marine Corps users. The program is managed by the Project Manager Defense Communications and Army Transmission Systems, Program Executive Office Enterprise Information Systems.

#### **Technicians, and Guardsman work side-by-side to hone skills**

Members of the Maine Army National Guard's 152nd Component Repair Company spent two

weeks at Tobyhanna Army Depot increasing their ability to rebuild transmissions and engines, machine new parts for weapons systems and repair night vision systems. Several depot directorates and a tenant agency hosted 57 Soldiers during their annual sustainment training. The company completed more than 2,400 hours of work while there.

### **Information Systems Engineering Command (ISEC)**

#### **Intelligence and Security Command**

Last month, ISEC completed the systems acceptance test and turnover of the NIPR and SIPR networks for the 780th Military Intelligence Brigade headquarters building in support of the U.S. Army Intelligence and Security Command (INSCOM). INSCOM will conduct configuration and testing of World-Wide Communications System network devices. ISEC has completed its formal portion of this project and will have a small contingent on site for follow on support if needed.

#### **Support to PEO EIS**

In support of Program Executive Office Enterprise Information Systems, ISEC continues to support the Yongsan Relocation Program and Land Partnership Plan by providing technical reviews of Corps of Engineers Facility Designs and Product Manager Power Projection Enablers design documents. These documents will provide the critical designs needed to consolidate and converge data and voice into a single, integrated architecture for the new facilities at Camp Humphreys in South Korea.

#### **Medical treatment facilities**

ISEC recently completed site surveys of medical treatment facilities across the Korean Peninsula, in support of the Defense Health Agency -Enterprise Infrastructure program. This was the first phase of effort for future local area and wireless network infrastructure upgrades. Improved interoperability across medical applications and agencies will result via network upgrades and state-of-the-art engineering solutions.

# CECOM employee recipient of national resource management award



by Marissa Anderson, CECOM Public Affairs and Communications Media



**(Right) Robert Chambers, Jr., Audit Team Leaders/ External Audit Liaison, Internal Review Office, Communications-Electronics Command, receives the award for Assistant Secretary of the Army, Financial Management and Controller for Resource Management in Analysis and Evaluation from (left) Robert M. Speer, acting Assistant Secretary of the Army, Financial Management and Comptroller, during the 2014 National Professional Development Institute award ceremony at the Washington State Convention Center in Seattle, Washington on May 29, 2014.**

U.S. Army Communications-Electronics Command (CECOM) employee, Robert Chambers, Jr., was recognized for excellence in the resource management career field at the 2014 National Professional Development Institute.

The recognition was delivered in an awards ceremony at the Washington State Convention Center in Seattle, Wash., on May 29, 2014.

Chambers was the award recipient of the Assistant Secretary of the Army (Financial Management and Controller) for Resource Management in Analysis and Evaluation. The award recognizes outstanding performance and achievement in the field of resource management in a

leadership capacity. Award recipients must have demonstrated significant contributions in their organization that resulted in efficiencies and cost reductions; improvements in the timeliness and accuracy of information; enhanced customer service; and streamlined/standardized policies and procedures.

The event was hosted by the American Society of Military Comptrollers, a nonprofit and educational organization for personnel involved in the military comptrollership career field.

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*“Mr. Chambers provided an unparalleled example of professionalism, competence and selfless service for all to emulate,” said Dominic D’Orazio, director of CECOM Internal Review Office.*  
.....

A native of Chester, Pa., Chambers currently serves as Audit Team Lead/External Audit Liaison for CECOM’s Internal Review Office. His primary responsibility includes providing support and coordination between the command and the external audit agencies. Additionally, Chambers is responsible for performing internal audits requested by CECOM, and the Program Executive Office (PEO) community, as well as following up on agreed-upon recommendations to make certain activities realizes their maximum return of investment on current daily operations.

Chambers was dually recognized for providing extensive internal audit support services representing CECOM and PEO organizations between external audit agencies (U.S. Army Audit Agency, Government Accountability Office,

.....> **story continued on next page**

Department of Defense Inspector General (DoD IG), and Small Business Administration) managing over 30 audit teams during fiscal year 2013. Chambers prepared eight exceptional command replies for external reports to include coordination efforts with the Logistics Readiness Center's Security Assistance Management Directorate to substantiate a \$1.2 million acquisition of spare parts leading to the DOD IG redaction of the claim in their report.

"As an internal auditor/liason officer for the command, I believe it's imperative to professionally challenge recommendations by external audit organizations to ensure the accuracy and quality of their recommendations," explained Chambers. "I'm very critical on external audit recommendations being well-supported, effective; and if implemented, achieving their desired beneficial results needed to propel CECOM (and the PEO organizations we support) forward to meeting its current and future objectives."

Chambers first entered federal service as an auditor for the U.S. Army Audit Agency in the functional areas of civil works, environmental research and development, acquisition and installation operations. In one of his previous roles, he supported the U.S. Army Corps of Engineers' acquisition strategies and risk mitigation procedures for contractors with assisting in the rebuilding of the Hurricane Protection System resulting from Hurricane Katrina. Chambers was then promoted to Auditor-in-Charge by the Office of Inspector General (OIG) for the U.S.

Department of Housing and Urban Development (HUD) to perform multiple white collar and mortgage fraud engagements before coming to CECOM in his current capacity.

Chambers described the benefits that internal audit brings to CECOM and the Army mission.

"I believe internal audit is the conduit to ensuring the command accomplishes its mission. During our current fiscal environment where resources are very limited; but core missions and goals must be achieved, I believe internal audit is one essential tool used by leadership to bridge the gap between an organization's goals and the legitimate barriers that are hindering this process ... Internal audit always has, and always will be, a consistent and reliable way to solve Army's complex issues internally and externally. Internal audit creates value to any organization, and I enjoy contributing added value to our command ..." Chambers said.

Chambers holds a Bachelor of Science degree in Accounting and Business Administration from Cheyney State University of Pennsylvania and a Master of Science degree in Human Resources from Central Michigan University. He also holds Certified Fraud Examiner and Certified Internal Control Auditor certifications.

Chambers is married to his wife of 11 years, Juanere, and they have two young children (Corinthian 9 and Zayden 5).



## SEC chief graduates from Civilian Education System

(Left) Dr. Robert Brunk, director, Civilian Education System (CES) Advanced Course, recognizes (right) Calvin Simpson, chief, CECOM Software Engineering Center, Security Division, during the graduation that was held on June 27 at Fort Leavenworth, Kan. The CES Advanced Course focuses on developing skills needed to lead a complex organization in support of National Security and Defense Strategies; integrating Army and Joint Systems in support of the Joint Force; inspiring vision and creativity; implementing change; and managing programs.

(Photo by U.S. Army staff)

# Employees successful at work they love

by Jacqueline Boucher, Tobyhanna Army Depot



**Engineering Technician Charles Brown assists depot engineers and general contractors by creating full design/construction packages for facilities categorized as new construction or modernization of existing structures. (Photo by Steve Grzezdowski, Tobyhanna Army Depot.)**

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*The key to success for two Tobyhanna Army Depot (TYAD) employees is best described by quoting Confucius "when you love your work, you never work a day."*  
.....

Engineering Technician Charles Brown and Logistics Management Specialist Frank Egidio were named TYAD's 2014 Employees of the Quarter for the second quarter in the junior and senior category, respectively.

Egidio is the project manager for three Air Traffic Control and Landing Systems (ATCALs): AN/MPN-14K, AN/TPN-19 and AN/GPN-22. His responsibilities include coordination and oversight of the overhaul, re-shelter and repair process of these radars while at the depot during the programmed depot maintenance process and in the field during the electronics mobile depot maintenance process.

Coworkers and supervisors describe Egidio as a problem solver; always ready with a viable solution to any challenge.

"Frank's work ethic and the subsequent results serve as an example to all branch personnel," said Jeremy Jones, Production Management Directorate's Air Traffic Control Branch chief. "He serves as a valuable resource, not only within his assigned area of expertise, but in several other areas." Jones explained that Egidio is well versed on parts-related issues, requisitioning inquiries, Logistics Modernization Program processes and established production management processes.

As project manager, Egidio thrives on the complexities of his job. While in this post he's mastered the art of multi-tasking, become proficient at risk assessment and gained valuable leadership skills.

"I like a challenge and am willing to do whatever it takes to get the job done," Egidio said. "Above all, my experiences here have taught me that communication is the key to any successful project."

.....> story continued on next page

Egidio spends a majority of his time working with personnel in several maintenance shops to make sure the ATCALs systems are completed on time and in budget. Meeting the customer's needs relies on keeping everyone informed and on-track during the year-long repair schedule, he stated.

"Frank willingly shares the details of his disciplined, process-oriented approaches to project management that allow him to manage a demanding job and achieve a high-level of success," Jones said. "His ideas have helped reduce repair cycle time, streamline processes and in one instance resulted in additional funding to solve a problem with obsolete parts."

Tobyhanna used the funding to fabricate prototype assemblies and procure, test and evaluate suitable replacement parts.

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*It's always rewarding to be recognized by peers, coworkers and management, according to Egidio. "I love what I do," he said. "What happens here effects people all over the world and they deserve the best we have to offer."*

.....

Brown's job puts him at the center of the depot's modernization effort. As lead draftsman for the Engineering Branch, he provides engineers and contractors the information they need on existing structures or site locations scheduled for upgrade or modification.

"I get any information needed to do cost estimates, sketches and small one-line diagrams," Brown said. "It's satisfying to know that what I'm doing helps revitalize Tobyhanna facilities for future workload."

An average work day for Brown consists of creating full design/construction packages for facilities categorized as new construction or modernization of existing structures. Another aspect of the job involves maintaining a reference library of drawings. According to Brown the drawings provide crucial information about any structure such as the location of underground utilities.

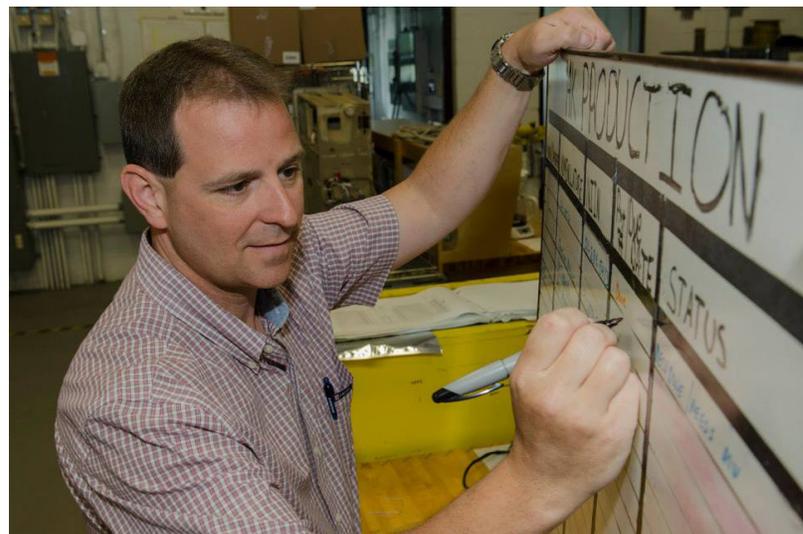
"Brown displayed personal courage to take on challenging tasks and excelled," said Garth Shull, Installation Services Directorate's Engineering Division chief. "As the depot's only draftsman, he works hard to stay ahead of a significant workload."

Lean and its everyday uses play a big part in Brown's success. He sets the example for coworkers by initiating ideas to improve processes, according to Garth.

"Not long ago, Brown identified a way to integrate Global Positioning System survey points into stand-alone computer applications," Shull said. "This effort helped avoid costly contract modifications, which conserved funding for future maintenance and repair of facilities."

The draftsman uses the management tools learned here to efficiently get projects underway and keep them on track from start to finish. Coworkers mentioned that he also has an innate ability to treat others with respect while providing a high level of customer service.

"I like to think I'm a pretty simple guy," Brown said. "I love what I do, therefore I do it to the best of my ability."



**Logistics Management Specialist Frank Egidio uses several management tools to keep coworkers informed and track repair schedules for three Air Traffic Control and Landing Systems. (Photo by Steve Grzedzinski, Tobyhanna Army Depot.)**

# HAIL & Farewell

The Communications-Electronics Command would like to welcome its new Military service members.

*Lt. Col. Kim Bivins*  
Logistics and Readiness Center (LRC)

*2nd Lt. Delois L. Carr*  
Information Systems Engineering  
Command (ISEC)

*Capt. Joseph Levin*  
CECOM Legal Office

*Pfc. Class Erik D. Stangler*  
ISEC

*Chief Warrant Officer 2 Jovanny Suarez*  
CECOM Legal Office

*Lt. Col. Matthew C. Lorenz*  
ISEC

*Master Sgt. Kimberly Stokes*  
Communications Security Logistics Activity

*Capt. Brent A. Sohn*  
ISEC

.....

CECOM congratulates the following employees on their retirement:

*Lt. Col. George Rivers*  
LRC  
June 20, 2014

*Terry L. Layton*  
LRC  
June 30, 2014

*Barbara S. Passe*  
Office of the G8  
June 30, 2014

*Paula M. Hood*  
Software Engineering Center,  
July 3, 2014

*Col. Andre Wiley*  
LRC  
Aug. 30, 2014



# Awards

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## CECOM Employees of the 2nd Quarter FY14:

**Senior Category**– Jenna Halgas, Logistics and Readiness Center (LRC)

**Mid-Level Category**– Eric Bowes, Software Engineering Center (SEC)

**Junior Category**– Michael Ricks, SEC

## C4ISR Employees of the 2nd Quarter FY14:

**Senior Category**– Jenna Halgas, LRC

**Mid-Level Category**– Barbara Cousins, Army Contracting Center

**Junior Category**– Michael Ricks, SEC

## C4ISR Team of the 2nd Quarter FY14:

**Army Contracting Center,  
Aberdeen Proving Ground,  
Pricing Team:**

Roderick Redman  
Monique Holmes  
Steven Wienecke



## Training:

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Friendly reminder to make sure all mandatory training for FY14 is completed by **September 30!**



# “My help comes from the Lord!”

Maj. (P) Young D. Kim, CECOM Command Chaplain

*Psalm 121 is one of my favorite psalms. Verses 1 & 2 read, “I lift my eyes to the mountains—where does my help come from? My help comes from the Lord, the maker of heaven and Earth.”*

There are many stressors and problems in our daily lives such as family problems, financial difficulties, marriage issues, health concerns, etc. In moments of stress or problems, where do we find the strength to move on? Where do we look for our sources of strength? When tragedy strikes and loved ones are lost, or when we are confronted with difficult tests of character and will, how do we overcome the fear, pain or anguish that grips us? Perhaps some will be able to rely on the support of family and friends, while others will turn to inspirational words. But the Bible says that our strength comes from God.

The psalmist acknowledges that our help and our source of strength come from the Lord and the Creator. The almighty God not only created our inner most beings, but He is still intensely interested in our lives and loves to take care of us faithfully. As all parents love their children

and love to see them succeed, God wants to see us lead successful lives and wants to help us. A great theologian, Bonhoeffer, said, “I should like to speak of God, not on the borders of life but at its center...God is the ‘beyond’ in the midst of our life.”

Verse 7 says, “The Lord will keep you from all harm—He will watch over your life.” He is our helper and cares for our safety. A great preacher, Charles Spurgeon says in reflection of Psalm 121:7, “God is the sole keeper of the soul. Our soul is kept from the dominion of sin, the infection of error...What can harm a soul that is kept of the Lord?” And Bacon said, “We cannot too often think, that there is a never sleeping eye that reads the heart, and registers our thoughts.” God watches over our physical lives and spiritual lives, too. What or whom then shall we fear, when we have the Creator of heaven and Earth watching over us at all times? The psalmist said in Psalm 27:1, “The Lord is my light and my salvation-whom shall I fear? The Lord is the stronghold of my life—of whom shall I be afraid?” And Psalm 29:11 says, “The Lord gives strength to his people; the Lord blesses his people with peace.”

**May the Lord bless each one of you and give you His peace!**

# Getting in shape for summer!

A guest editorial by Robert McNabb, CECOM Safety

How many of us have tried lately to button up a summer shirt, or pull on a tee shirt, or other summer clothing (bathing suit) only to find “they shrunk” over the winter?

Since we are not as active in the winter as we may be in the warmer summer months, we all put on a few extra pounds during the colder months. To some of us it may be hard to lose this extra weight.

Excessive weight can cause health problems such as heart disease, high blood pressure, diabetes, chronic back pain and joint pain (knees especially). It can also make us more uncomfortable in the summer heat and humidity.

Taking brisk walks or bicycle riding in cooler evenings is better exercise than sitting in the recliner and exercising our fingers on the television remote control or ‘thumb exercise’ on your smartphone texting. Taking time out during the lunch hour for walks around our work areas will help with your weight, but will relieve some stress too. On rainy days or excessive heat days use the fitness center or use the stairs at work. Start a lunchtime exercise group; walk to the Shoppette, or walk to that meeting – do not drive. It’s one way to get your blood pumping and your body will feel better for it.

Now is the time for us to maintain a healthy diet and eat balanced meals. Think twice about ordering those French fries and ice cream sundaes. Successful weight reduction includes a balanced diet, daily exercise and a healthy overall attitude toward eating the right foods. Your heart and body will thank you!



# AROUND *the* COMMAND



Fort Huachuca, Ariz. – The CECOM Information Systems and Engineering Command (ISEC) presented a token of appreciation to Command Sgt. Maj. Brenda Kadet (center) during a farewell dinner on June 23 at Fort Huachuca, Ariz. Kadet's new assignment is at the Pentagon. (Left to right) Col. Patrick Kerr, commander of ISEC, William K. Citera, deputy to the commander, Albert M. Rivera, technical director and Debbie Page, executive assistant. (Photo by U.S. Army staff)



Aberdeen Proving Ground, Md. – (Right) Maj. Gen. Bruce T. Crawford thanks (left) Kathy Duran and (center) Laura Paone from the Communications-Electronics Command (CECOM) Office of the G8 for their efforts in planning and executing the command and staff organizational day activities. The G8 hosted the event at Capa Field. (Photo by Gregory Mahall, CECOM Public Affairs)



Sierra Army Depot, Calif. – (Left to Right) Forrest Patterson, Jeffrey Shields, Derrick Lee, and Mose Golden, members of the Communications-Electronics Command Non-Standard Equipment (NSE) project team, recently conducted a visual inspection and inventory of equipment, in preparation for recommending final disposition to the Army Material Command NSE review board. (Photo by U.S. Army staff)



Aberdeen Proving Ground, Md. – (Left) Phillip L. Pierson, Communications-Electronics Command (CECOM) Inspector General, serves up hamburgers and hot dogs to staff during the command and staff organizational day held on June 25 at Capa Field. (Photo by Gregory Mahall, CECOM Public Affairs)

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# Lean workshop continuous learning, improvement

by Brad Jones, Tobyhanna Army Depot Productivity Improvement and Innovation Directorate



**Depot Commander Col. Gerhard P.R. Schröter gives opening remarks during the event and challenged Tobyhanna Army Depot employees to use the workshop's information to help improve the depot. (Photo by Steve Grzedzinski, Tobyhanna Army Depot.)**



**Keynote Speaker Kevin Duggan provides an interactive briefing on Operational Excellence and Mixed Model Moving Lines. (Photo by Steve Grzedzinski, Tobyhanna Army Depot.)**

Eighty continuous improvement professionals and practitioners came together at Tobyhanna Army Depot's (TYAD) second annual Lean Learning Workshop to share ideas and insights from industries as diverse as deep water drilling to ornamental plant growing and health care.

"The similarities are greater than the differences when it comes to continuous process improvement and this workshop certainly brought that point home," said Kathleen Sharp, Senior Performance Innovation consultant with Geisinger Health Systems.

Faced with travel restrictions and an environment of constrained budgetary resources, TYAD decided to host its own Continuous Process Improvement/Lean workshop as a unique educational opportunity for the depot and the region. Several national lean experts volunteered to brief at the gathering, sharing their expertise in order to enhance the competitiveness of all attendees. "You'd normally have to pay hundreds of dollars to hear experts of this caliber; here it only cost attendees the price of lunch" said Brad Jones, director of the

Productivity Improvement and Innovation Directorate.

Kevin Duggan, founder of the Institute for Operational Excellence and a featured guest on the Fox Business Network and CNN, was the keynote speaker. Duggan challenged the audience to "up their games" by designing "self-healing" value streams and empowering employees to take action when flow breaks down. He reminded attendees that the purpose of lean and improvements in general, is to "grow the business."

Michael McCarthy, author of "Sustain Your Gains", introduced applied behaviorism into the mix by emphasizing the reinforcing role of supervisors in helping employees turn improvements into deeply ingrained habits. "Every first line supervisor needs to be a first line coach for process improvements to truly become rooted in the culture."

Two depot supervisors, Kelvin Spencer and Michael McKeefery, fired up the audience with "hooah's", quizzes, and motivational tools illustrating how Army leadership principles make for good lean leadership as well.

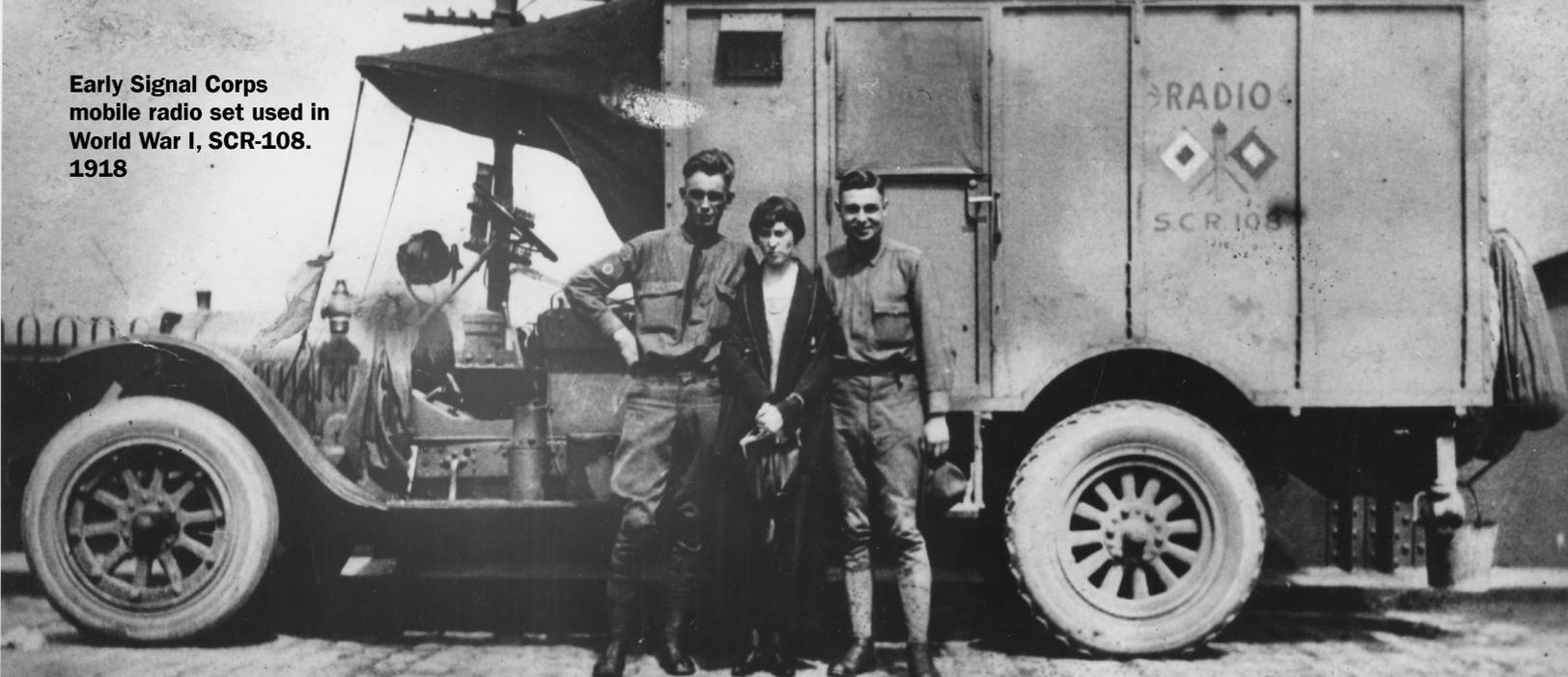
"I loved the energy they brought to the group; it was a powerful message for all supervisors" said John Borosky, radar overhaul supervisor. The workshop concluded with a tour of TYAD's Refinishing Center where visitors saw laser stripping technology and other productivity improvements made by rank and file TYAD employees like Paint Branch Leader Marc Ostroski.

"We all want to grow the business, so we all put our best ideas out there," said Jennifer Conrad, Industrial Engineering technician at Tobyhanna. "I learned a ton today and will use it to make our business more competitive when I get back to work."



**Brad Jones, director of the Productivity, Improvement and Innovation Directorate, kicks off the 2014 Lean Learning Workshop. (Photo by Steve Grzedzinski, Tobyhanna Army Depot.)**

Early Signal Corps mobile radio set used in World War I, SCR-108. 1918



# Signal Corps technology in World War I

by Susan Thompson, CECOM History Office

Growing from the insights and direction of Brig. Gen. Adolphus Greely, the Signal Corps would embrace the powers of technology (telephone, radio, and aviation) and build on these to create a force that could rise to meet the challenges of a nation experiencing its advent as a power on the world stage.

Greely embraced and promoted the development and use of new technologies, such as the field telephone, aviation using balloons and dirigibles, and funding the development of “heavier-than-air” technologies. It would fall on his successors to carry out and perfect these experiments, but the three Chiefs of Signal who would guide the Signal Corps through the early years of the 20th century were Greely’s equals in terms of embracing and championing innovation. Generals James Allen, George Scriven, and George O. Squire had served under Greely, carrying out the Signal Corps’ early experiments in radio technology and

## History Highlights

gaining experience around the world. They were innovative men, open to new ideas and new technologies being developed outside the military, and relied on the expertise of industry to assist when necessary.

The challenges presented by World War I would require the combined efforts of military and industry. The situation in France was very different from the Signal Corps’ experience in the United States. Flags and other visual signaling were useless in the close fighting on the French front. The Signal Corps’ existing field wireless sets were mostly useless, too. The technologies didn’t allow for communications to be secret; any set, friendly or enemy, could pick up a transmission from the open frequencies, and fine tuning wasn’t possible with the existing sets. The same problem existed with the buzzer phone technology in use.

In order to overcome these issues, the Signal Corps fell back on those three innovations promoted by Greely – telephone, radio and aviation. John J. Carty, chief engineer of Bell System and later commissioned as a colonel in the Signal Corps, promoted the idea of telephones as essential for modern warfare, as early as January 1916. Using a system laid-out by Bell Systems, the Signal Corps created a wired telephone system across the French countryside, and set up the largest switchboard

in France. The Signal Corps also immediately began work on Radio Lafayette, that when completed in the spring of 1918, would be the most powerful station ever built, enabling the American Expeditionary Forces to be instantly in contact with Washington D.C. Most importantly, the Signal Corps pioneered the development of radio telephone technology, which was described as "the most spectacular accomplishment of the Signal Corps."

Prior to WWI, the use of radio was limited almost exclusively to "wireless" telegraph (all transmission passed in dots and dashes). Under the impetus of the war, great technical strides were made by the Signal Corps in developing radios that could carry voice. Voice transmissions were dependent on improving tube technology, which was embraced by Gen. Squire, in cooperation with General Electric and Western Electric. Many of the best technicians from industry were commissioned into the Signal Corps. Squire saw a need for new laboratory facilities to support these efforts, and so created a major laboratory at Camp Alfred Vail (Fort Monmouth, N.J.). In mid-1918 radiotelephone equipment began arriving in France from America – allowing voice commanded air squadrons and increasing the military value of aircraft formations (SCR-68). Squire recruited men like John Carty from AT&T to staff the expanded Signal Corps laboratories in the U.S.,

where the Signal Corps engineered copies of more technically sophisticated Allied radios and designed entirely new sets and provided drawings and specifications to the manufactures while the laboratory at Vail provided all the technical facilities needed for the development of ground and air radio.

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*The great expansion of the Signal Corps during this 20 year period can be directly attributed to the great leadership established under Greely.*

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It can also be attributed to the many contributions made by academia and industry to the mission of the Signal Corps. What started at the "radio labs" at Camp Vail, established under the direction of Squire, has grown to encompass many organizations here at Aberdeen Proving Ground, including the Communications-Electronics Command, Communications-Electronics Research, Development, and Engineering Command, the Program Executive Offices, and our industry and community partners. Our shared Signal Corps traditions can provide a blueprint to follow into the future, as we plan for a new era of support to the Joint Forces.



Telephone exchange room #432, Hotel Mediterranee, Paris, France. April 1918.



Lt. J.M. Murphy, Pilot, 88th Aero Squadron, and Sgt. B. Keing, 3rd Div. photographer, starting on a flight over Marne River, Groves Farme, Aisen, France, Aug. 10, 1918

# Picture Libraries 101

by Renee Ullman, CECOM Public Affairs and Communications Media

A SharePoint picture library is an effective way to store, view, and share photos. You should consider using a picture library for images needed for reports, briefings and other products created to support a program or function.

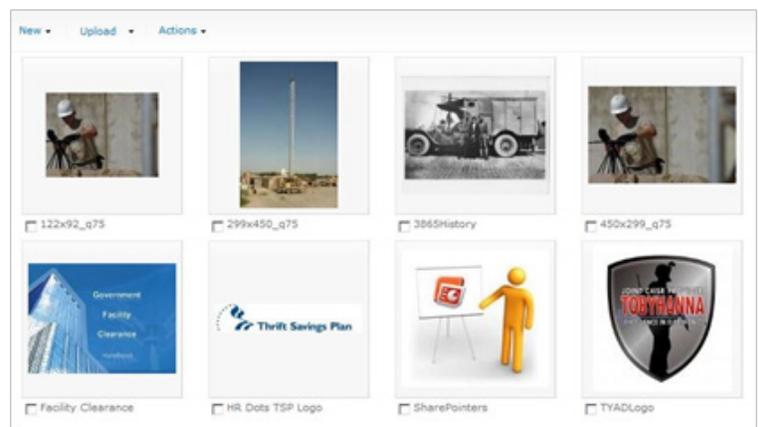
One of the benefits is that photos are displayed in a gallery format. This makes it easy to view and manage the images. In addition, metadata may be included for each image that facilitates organization and search activities.

Here is a list of the basic operations that may be accomplished using the picture library:

- Upload and store single or multiple photos.
- Describe the picture with this information: file name, title, date picture taken, description and keywords.
- View selected photos in a slideshow.
- Send a picture to an open file (such as Word or PowerPoint).
- Create a new file (such as Word or PowerPoint) directly from the picture library without downloading and uploading.

- Send the picture via email.
- Place an alert on the picture or a gallery of several photos to be informed of any changes made to it.
- Edit using Microsoft Picture Manager.

Step by step instructions for using the features of picture libraries may be found at milUniversity <https://www.milsuite.mil/learn/capability/sharepoint/> as well as other help sites such as Microsoft Office Support <http://office.microsoft.com/en-us/windows-sharepoint-services-help/working-with-sharepoint-picture-libraries-HA001123335.aspx>



Send questions and comments to Renee A. Ullman, [renee.a.ullman.civ@mail.mil](mailto:renee.a.ullman.civ@mail.mil), Public Affairs and Communications Media office

