

# CECOM T DAY



ISEC PLAYS KEY  
COMMANDER'S  
Message

CECOM:  
One-Stop-Shop

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Priorities

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ONE MISSION, ONE VISION – THE



**CECOM Commanding General**

Maj. Gen. Randolph P. Strong

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Commander's Message

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CECOM: One-Stop-Shop

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Overseas / Reset / BRAC

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CECOM Highlights

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CECOM Linkages

## A new CECOM chapter begins with a flourish

By Maj. Gen. Randolph P. Strong

*We've arrived!* A new chapter in CECOM's history begins this month as we transition to our state-of-the-art headquarters and uncasing the CECOM colors at Aberdeen Proving Ground, Md.

Joining us in the center of excellence campus are our partners in the Army's C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) materiel enterprise are: the U.S. Army Communications-Electronics Research, Development and Engineering Center; the CECOM Contracting Center; and Army Program Executive Offices for Command, Control and Communications-Tactical; for Intelligence, Electronic Warfare and Sensors; and for Enterprise Information Systems.

I'm proud that CECOM and our C4ISR partners progressed smoothly through the many stages of relocating our workforce and materiel assets to Aberdeen Proving Ground over the past few years. We've done all this while seamlessly executing our missions in support of our nation's warfighters. By late summer next year more than 7,200 civilian, military and contractor positions dedicated to the C4ISR Materiel Enterprise will reside at Aberdeen Proving Ground.

CECOM and our materiel enterprise partners join a significant technology community on the installation including the Army Test and Evaluation Command;

the Aberdeen Test Center and the Army Research, Development and Engineering Command.

Together with these organizations, we will help solidify Aberdeen Proving Ground's growing reputation as the home to Army technology.

The uncasing of our CECOM color on Oct. 22, 2010 marks a momentous and symbolic occasion. Our colors represent our dedicated team of Soldiers, civilians and contractors – men and women who excel every day in meeting and exceeding mission requirements and in always being the best they can be. We're committed to continuing that proud tradition of excellence.

Our successful relocation to Aberdeen Proving Ground would not have been possible without the outstanding continuing support of the Garrison leadership and staff directorates; the welcome support of civic, community leaders and organizations throughout Baltimore, Cecil and Harford Counties in Maryland, New Castle County in Delaware, and York and Lancaster Counties in Pennsylvania; and the assistance of so many state government officials and organizations in Maryland, Delaware, and Pennsylvania. We thank all of you and look forward to many future years of mutual support and partnership.





Our move to Aberdeen Proving Ground signifies a grand endeavor to transform and enrich our organization, facilities and people. Our C4ISR campus places us in a close-knit environment of less than a dozen buildings, all within walking distance of each other. Our facilities and missions that were once spread across several buildings will now be much closer together. Our people are our most important asset. We will ensure they are well-trained, cared for, and have the right tools to perform their efforts. All of our civilians and Soldiers have opportunities to thrive in our state-of-the-art information technology environment.

It's also important to emphasize that the sum of CECOM's parts extends far beyond our headquarters location. You will read in this first edition of our "CECOM Today" publication about our five CECOM centers and their worldwide missions and workforce.

Those centers include the Central Technical Support Facility based at Fort Hood, Texas; the U.S. Army Information Systems Engineering Command located at Fort Huachuca, Ariz.; our Logistics and Readiness Center and Software Engineering Center located on our campus; and Tobyhanna Army Depot in Pennsylvania.

The Central Technical Support Facility tests and certifies every piece of code or application for interoperability across Army systems before it goes on the battlefield as well as joint Command, Control, Communications, Computers, Intelligence, or C4I, systems.

Our Information Systems Engineering

Command engineers the backbone infrastructure enabling information transport from the battlefield back to national command and control centers.

The Logistics and Readiness Center provides a global C4ISR logistics footprint in support of Army and Coalition forces and partners with Program Executive Offices to develop the maintenance scenarios of the future. It's also the Army's C4ISR National Inventory Control Point and the lead agency for C4ISR security assistance to U.S. Coalition partners.

Our Software Engineering Center delivers life-cycle software support solutions that ensure warfighting superiority and information dominance.

Tobyhanna Army Depot is the Army's premier depot providing maintenance, manufacturing, integration and field repair to C4ISR systems worldwide—including more than 80 forward repair activities located with Soldiers across the globe.

Together, these CECOM Centers provide a one-stop-shop to our customers for software, applications, electronics maintenance, sustainment, manufacturing, design and repair support. We serve not only the Army but all our nation's warfighters and coalition services. The breadth of our command services and expertise crosses Army boundaries, and extends support wherever needed within the Department of Defense.

It's my honor to lead this worldwide command as we continue to serve the nation with pride from our new headquarters at Aberdeen Proving Ground.

STOP-SHOP



### **U.S. Army Communications-Electronics Command:**

As a vital component of the Army's C4ISR Center of Excellence, CECOM provides the development, sustainment, maintenance, training and acquisition support services for the life-cycle of C4ISR equipment and capabilities for the joint Warfighter. CECOM is the Warfighter's 'one-stop-shop' source for support for life-cycle support of the communications-electronics systems and equipment they carry.

### **CECOM Top Priorities:**

- |                                 |  |
|---------------------------------|--|
| Overseas Contingency Operations | Reset & Modernization in support of ARFORGEN |
| - Iraq Drawdown                 | Base Realignment & Closure (BRAC)            |
| - Afghanistan Build-up          | - Establish the C4ISR Center of Excellence   |
| - Foreign Military Sales        |  |

### **CECOM Core Competencies:**

- |  |   |
|--|---|
| Communications Security                    | Inventory & Spares Acquisition                        |
| Configuration Management                   | Manage Logistics Infrastructure                       |
| Depot-level Manufacture, Repair & Overhaul | Network Interoperability, Integration & Certification |
| Enterprise Software Solutions              | Rapid Response Capability                             |
| Expeditionary Logistics                    | Satellite Communications                              |
| Field-Level Sustainment & Maintenance      | System of Systems Integration & Engineering           |
| Forward Maintenance Supply & Sustainment   | Total Package Fielding & New Equipment Training       |
| Information Assurance                      | Worldwide Software Field Support                      |

### **CECOM Organizations:**

- Central Technical Support Facility (CTSF), Fort Hood, Texas
- Logistics and Readiness Center (LRC), Aberdeen Proving Ground, Maryland
- Software Engineering Center (SEC), Aberdeen Proving Ground, Maryland
- Tobyhanna Army Depot (TYAD), Tobyhanna, Pennsylvania
- U.S. Army Information Systems Engineering Command (USAISEC), Fort Huachuca, Arizona

## The CTSF: A prime commodity in a plain brown wrapper

### Fort Hood, Texas

By David G. Landmann, CTSF

No matter the vantage point, from the turret of a passing Bradley fighting vehicle or the cockpit of an Apache attack helicopter overhead, the Whitfill **Central Technical Support Facility** – the premier test, integration and certification testing facility for Army LandWarNet/Battle Command systems – is an Army jewel located in an ordinary-looking “trailer park” on Fort Hood, Texas.

It serves other Army and joint command, control, communications, computing, intelligence, surveillance and reconnaissance systems as well in a constantly-expanding capacity.

The CTSF was organized in 1996 initially as a center for rapid development and testing of Army Battle Command Systems. In its early years, the CTSF saw its founding fathers develop a multi-disciplined, matrix-managed process to create, expand, and test early Army Battle Command Systems including the Maneuver Control System, the Commander’s Real Time Tactical Display (the forerunner of the current Air and Missile Defense Workstation), and Force XXI Battle Command – Brigade and Below.

A handful of Army and civilian experts performed the facility’s initial work, laboring in only four trailers. At present, the CTSF is manned by a small army of military, government civilian, and contract workers. It has grown into a 264,000-square-foot facility with 38,425 square feet dedicated to software configuration, tactical system of systems integration, Army configuration management, and Army interoperability certification testing.

Because of its location at Fort Hood, Texas, the CTSF has access to more than 100,000 acres of maneuver training area, live fire ranges, thousands of troops, and military systems of all kinds. Its scope of work has broadened from a

*(continued . . .)*



{ Grounds at the Central Technical Support Facility at Fort Hood, Texas }

“We want our customer base to know that we will help them achieve interoperability success by providing engineering support to integrate systems and by following through with interoperability testing, certification and fielding.”

— Col. Steven Drake, CTSF Director

handful of developmental products to include dozens of Army, Navy, Air Force, and Marine software systems.

The CTSF has seen several landmarks in the 21st century, the first of which occurred in December 2002. It was then that the Department of the Army expanded the CTSF’s original test and integration mission to include the verification of interoperability between all Army command, control, communications, computers and intelligence systems.

From that point on, all Command, Control, Communications, Computers, Intelligence, or C4I, systems would only be certified by the Army Chief Information Officer/G-6 if they were proven interoperable in CTSF testing.

In addition to its core integration, evaluation and configuration management staff members, the CTSF is also home to a number of program managers who represent many of the systems undergoing testing now and in the near future. This arrangement gives system representatives an opportunity to conduct non-attributed, developmental evaluations of their software and to collaborate with CTSF system-of-system personnel to assure success when actual attributed testing occurs.

“We’re helping them find their way to ‘yes,’” one CTSF test official commented recently.

The CTSF also holds a unique position as the hub of the Headquarters DA CIO/G-6’s Federation of Army Net-Centric Sites. In that capacity, it’s linked to a growing number of Army and joint facilities. This allows interoperability testing and integration between specialized facilities with the CTSF acting as facilitator. As the Federation of Army Net-Centric Sites hub, the CTSF facilitates testing, which at times may be conducted simultaneously at Fort Sill, Okla., and Redstone Arsenal, Ala.

Because most current military operations are conducted in a joint environment, the CTSF has expanded its

integration and interoperability testing to work in concert with the Joint Interoperability Test Command. As the Army’s lead agent for joint interoperability, the CECOM CTSF has an expanding role in staging Army test events in conjunction with joint events.

Recently, the CTSF hosted key AGILE Fires exercises involving Army, Air Force, Navy and Marine components in its newly-created, permanent, configurable joint test lab. CTSF test personnel and technicians are now working with Army, joint and coalition representatives on streamlining and improving the Afghan Mission Network.

At its core, the CTSF is comprised of three elements – Configuration Management, System of Systems Integration, or SoSI, and the Test Branch.

Configuration Management is responsible for managing the deployed force software baseline for the Army’s CIO/G6. Internally, Configuration Management supports interoperability testing by receiving and verifying all of the software submitted by systems under test.

SoSI provides engineering support to system program managers as they work to achieve successful test results. The SoSI support includes network analysis and maintenance and follows systems directly to the Warfighter.

The Test Branch is the execution agent for the CIO/G-6 Army Interoperability Certification evaluation process. Test also provides interoperability systems assessment directly to program managers.

“The CTSF, as the Army’s premier test and integration facility, stands prepared with its dedicated workforce and vast collective experience to meet the challenges associated with digitization,” director Col. Steven G. Drake said.

“With the resources and experience available to us,” he added, “the CTSF has the potential to be of even greater service to our Army, to joint commands, to the Department of Defense and the nation.”



{ IT-Forward Support Base contractors instructing Explosive Ordnance Demolition Soldiers on the SIPR/NIPR Access Point (SNAP) terminal for secret and non-classified router networks. }

## The LRC: Providing global logistics support for C4ISR systems Aberdeen Proving Ground, Md.

By LRC

CECOM's **Logistics and Readiness Center** is headquartered at Aberdeen Proving Ground, Md., and has personnel and activities located at Fort Monmouth, N.J.; Fort Huachuca, Ariz.; Fort Belvoir, Va.; Fort Hood, Texas; and Logistics Assistance Representatives stationed in eight countries.

Providing global logistics support for command, control, communications, computers, intelligence, surveillance and reconnaissance systems for warfighters, the LRC prepares and sustains them for combat and Resets our forces for combat readiness following deployment. This mission is accomplished through rapid acquisition, maintenance, production, fielding,

new equipment training, operation and sustainment of C4ISR equipment, according to David Sharman, LRC director.

"Our primary objective is to work with project managers to intelligently plan the logistics in the early stages of system development so as to reduce life cycle costs and increase operational readiness of these systems when fielded," he said.

Products and services of the LRC are used wherever military operations need C4ISR capabilities. Worldwide, the LRC conducts missions in areas including: total package fielding; new equipment training; security assistance program management and foreign military sales; integrated data systems; production and industrial base engineering; and integrated logistics plans and development.

*(continued...)*



“Our success will be measured on how well we can integrate evolving technologies and capabilities into our enduring sustainment infrastructure quickly, efficiently and effectively,” Sharman said. Besides supporting warfighters in overseas contingency operations in Southwest Asia, LRC products and people, including Logistics Assistance Representatives deploying with troops, have provided a decisive advantage to U.S. and Allied forces in such places as Bosnia, Somalia, Haiti, Yugoslavia, and the Middle East, Sharman said.

The LRC’s directorates and activities include: Logistics and Engineering Operations; Intelligence, Electronic Warfare and Sensors; Communications Security Logistics; Readiness; Rapid Response Contractor Provided Equipment and Services; Enterprise, Soldier Aviation; Power and Environmental; Communications and Security Assistance Management.



## Did you know?

C4ISR stands for command, control, communications, computers, intelligence, surveillance and reconnaissance.



# The SEC: Providing life-cycle software solutions and services to the warfighter

## Aberdeen Proving Ground, Md.

By Cassandra Tomarchio, SEC

A commander in a Tactical Operations Center issues orders. A food service sergeant at a forward operating base needs rations. A harbor master patrols a wharf for security threats. In doing so, each turns to the computer screen.

Today's Army increasingly relies on computer systems and software to help meet mission-critical information needs. In the field, especially in combat, getting the right information at the right time makes a world of difference for today's warfighters.

The CECOM **Software Engineering Center** provides much of the software expertise needed to support command, control, communications, computers, intelligence, surveillance, and reconnaissance systems in the modern digital environment.

The SEC mission is to provide life-cycle software solutions to enable warfighting superiority and information dominance.

"From the business office to the battle space, the SEC delivers software products and services to support and protect America's warfighters," said SEC Director Ned Keeler. "We're unique in that as a member of the C4ISR Materiel Enterprise team, we provide software support and solutions across the full spectrum of the Army."



{ Ronald Grovell and Paul Jasanovsky work in the Warfighter Information Network - Tactical Lab for the Software Engineering Center }

Program managers choose the SEC because it's the Army's foremost organization with the enterprise vision of the military services, the Department of Defense and the federal government, Keeler said. This stature as an organization and this vision ensures that cost-effective software systems will meet today's architectural and interoperability requirements for tomorrow's changing needs.

"If you mention (the) SEC to a senior officer or program manager within the Army, they may not recognize the name right away. But if you talk about any number of systems our organization supports, you'll see instant recognition," said Steve Kovacs, deputy director of the SEC.

With an annual budget exceeding one billion dollars, the SEC currently supports 410 systems including battlespace systems that provide capabilities to support command and control; to gather and analyze intel-

*(continued...)*

"From the business office to the battle space, SEC delivers software products and services to support and protect America's Warfighters."  
— Ned Keeler, SEC Director



{ In an undisclosed location, sits the Software Engineering Center's Testing Command post of future interoperability. }

ligence; to communicate across the battlefield and to keep warfighters safe while doing so. In addition, the SEC develops and maintains software business applications to ensure our Soldiers are fed, housed, moved and supplied.

These systems are currently in use by Soldiers, Sailors, Airmen, Marines and DoD civilian employees both in garrison and forward deployed to Iraq and Afghanistan.

"As people learn what software can do to help them get information, gain efficiencies and streamline processes, our funding and customer base has been steadily increased," said Keeler. "The need for sustainable software solutions is growing."

Those growing needs have helped shape the SEC during the past 27 years. The organization started in 1983 at Fort Monmouth, N.J., as the Software Development Support Center with two operating locations and minimal staff. Given greater demand, the group was reorganized in 1996 into its current incarnation. Now, supported by a workforce of more than 3,900 Department of Army civilians and contractors worldwide, the SEC is headquartered in Aberdeen Proving Ground, Md., and operates in more than 300 locations within and beyond the continental U.S.

## Did you know?

The Philadelphia District of the Army Corps of Engineers managed the \$800 million, 2.5 million square-foot construction project, now known as the C4ISR Center for Excellence.

## **TYAD:** **Depot provides world-class sustainment for high-tech systems**

By Kevin M. Toolan, TYAD

**Tobyhanna Army Depot** is the Defense Department's premier sustainment center for critical C4ISR systems, including the design, manufacture, repair and overhaul of hundreds of systems.

From night vision devices to strategic satellite terminals, Tobyhanna meets the high-tech requirements of the Armed Forces, providing communications, defeating the threat of Improvised Explosive Devices, protecting warfighters with weapons-detecting radars, and rapidly designing and manufacturing kits and components that provide more reliable equipment and improved situational awareness on the battlefield.

"We have a critical mission to perform in support of our warfighters," said Col. Charles Gibson, depot commander. "And we do it very well, thanks to a world-class workforce with a passion for what they do every day. They set the standard when it comes to providing outstanding support to military members stationed around the world."

Systems supported by Tobyhanna span the electromagnetic spectrum from hand held radios to strategic satellite terminals; from man-portable radar systems to large air defense radars and artillery locating systems; from electro-optics and night-vision devices to anti-intrusion and airborne surveillance equipment; and from navigational instruments and electronic warfare systems to guidance and missiles. The depot's core competencies are in five major areas: repair and overhaul, sustainment support, systems integration, manufacturing and expeditionary logistics.

"The breadth and depth of C4ISR maintenance and sustainment capabilities are not replicated anywhere else within DoD or the private sector," said Frank Zardecki, the depot's deputy commander.

A key mission is Resetting equipment for units training in preparation for deployment. Since 2003, Tobyhanna

has Reset more than 154,000 items in more than 1,270 programs. This includes secure communications equipment, tactical operations centers, aircraft countermeasures systems, microwave and satellite communications systems, Firefinder artillery locating radars, battlefield computer systems, and smaller items of communications and electronics equipment.

Tobyhanna's communications electronics evaluation repair teams, CEER-T, are rapidly deployable groups of technicians who help speed the Reset of equipment such as night vision devices and Single Channel Ground and Airborne Radio System, or SINCARS, equipment used in the combat zone.

*(continued . . .)*



{ **Dan Nawrocki**, an electronics mechanic at Tobyhanna Army Depot, connects test cables to feed points on an MST-T1 (a) Multiple Threat Emitter System antenna wave guide system. Tobyhanna employees overhaul, repair and align the Air Force AN/MST-T1(a) multiple threat emitter system (MUTES) and AN/MST-T1(v) mini-MUTES transmitters. (U.S. Army photo) }



{ Photos, left to right: **Robert Tambasco**, an electronics mechanic at Tobyhanna Army Depot, guides a taped bundle of wire through a braiding machine. (U.S. Army photo by Tony Medici) • **Charlene Nicholson**, an electronics technician at Tobyhanna Army Depot, uses a Cirris table top cable tester to test a cable used in various Blue Force Tracking Kits. (U.S. Army photo by Steve Grzezdinski) }

Tobyhanna's joint missions have earned it twin designations as the Army's Center of Industrial and Technical Excellence for C4ISR and Electronics, Avionics and Missile Guidance and Control and as the Air Force's Technology Repair Center for Command, Control, Communications and Intelligence.

Established in 1953, Tobyhanna has evolved into a global enterprise, providing worldwide support through a network of more than 70 Forward Repair Activities, including more than 20 in Southwest Asia. On an average day, more than 700 personnel are providing technical assistance in the field, including more than 200 directly supporting warfighters in Southwest Asia.

With its large engineering staff and integration and manufacturing capabilities, Tobyhanna can undertake a variety of design, prototype and production projects serving warfighters—such as designing and fabricating Blue Force Tracking installation kits and producing more than 900,000 helmet brackets for night vision devices.

Tobyhanna also has designed and produced a number of components to protect vehicles and warfighters from IEDs, including brackets for roller kits mounted on Strykers and a pull-down antenna for a number of vehicles.

The depot fabricates, assembles and ships thousands of pull-down kits to protect the Counter Radio Controlled Improvised Explosive Device Electronic Warfare, CREW, antenna system from being damaged while Soldiers traverse war zones in military vehicles.

Tobyhanna engineers use the most-advanced computer-aided engineering software and employ an advanced visualization system to help deliver design and manufac-

turing solutions in real-time, reducing the need to build prototypes and speeding product development. These types of capabilities have made the depot a leader in technology insertion, reverse engineering and downsizing of systems.

A 1,300-acre installation with more than 140 buildings and more than 2.1 million square feet of electronics maintenance and industrial operations floor space, the depot includes numerous radar test ranges, anechoic chambers and unique facilities such as an Elevated Burn Facility for Firefinder radars and a live-fire simulator for testing the Lightweight Counter Mortar radar system.

Next year, Tobyhanna will add a \$15 million C4ISR Finishing Center for processing large shelters and vans housing a variety of systems. A recent addition is the Depot Maintenance of the Future Facility, a working laboratory to evaluate new tools, equipment and facilities

Finally, the tools of Lean and Six Sigma remain a foundation for continuous improvement to ensure Tobyhanna's future competitiveness. The depot is accomplishing its unprecedented workload growth through the effective application of lean business practices, freeing up capacity to complete increased workload and take on new missions.

The synergy of a well-trained and motivated work force, modern facilities, advanced technology and a global presence is enabling Tobyhanna to attain its vision of being "The DoD C4ISR Logistics Support Center of Choice for Warfighter Readiness and Transformation."

"The reason Tobyhanna exists is to support the warfighter – period," said Gibson. "Every mission we execute has an impact on the warfighter, either as he or she is in the Reset, training, or ready-to-deploy phase, or in the fight."



# USAISEC: U.S. Army Information Systems Engineering Command: The honest broker Fort Huachuca, Ariz.

By Delle C. Lambert, USAISEC

The **U.S. Army Information Systems Engineering Command**, a highly technical organization providing communications and information technology engineering services for numerous organizations supporting warfighters, continues to bolster its reputation as the Army's premier systems engineer.

Col. Sylvester Cotton, USAISEC commander, stresses that customers will not find any other Army organization that offers the type of capabilities or qualifications his organization boasts.

"We have long been referred to as the 'honest broker' for the Army," said USAISEC Technical Director Albert Rivera. "Customers continue to rely on our engineers and IT specialists to provide quality engineering, evaluation, installation and testing of IT solutions."


The USAISEC staff is made up of approximately 620 civilians, 8 Soldiers and 680 contractors. Nearly 80 percent of its personnel have extensive technical experience or at the very least possess an engineering or computer science-related bachelor's degree. This makes for an extremely capable and talented workforce who can rapidly provide valuable services to customers worldwide, according to Cotton.

The USAISEC can trace its origins back to 1943 to what was then called the Army's Plant Engineering Agency. Since its beginning in World War II, the command has gone through several major organizational changes. One of the most notable occurred in 1968 when the command was designated as the Army Communications Engineering and Installation Agency. The command changed names

*(continued ...)*



{ **Carmody Rauch** (seated), U.S. Army Information Systems Engineering Command wireless lead engineer and **Rodney Hom**, IT engineer, conduct Unified Capabilities Approved Product List (UCAPL) tests in the wireless lab at Fort Huachuca, Ariz. }



“We have long been referred to as the ‘honest broker’ for the Army. Customers continue to rely on our engineers and IT specialists to provide quality engineering, evaluation, installation and testing of IT solutions.”

– *Albert Rivera,*  
*USAISEC Technical Director*



{ Eric Sundius, USAISEC IT engineer, removes old CATS and fiber optic cabling at Fort Huachuca, Ariz. }

several times during the 1980s and ultimately became the USAISEC in 1985.

The agency and command were always aligned with the Army Signal Command until 1996 when it became part of CECOM.

The USAISEC mission includes systems engineering, installation, integration, implementation and evaluation support for communications and IT systems worldwide. It provides capabilities to a wide variety of customers including Army organizations, combatant commanders, and Department of Defense and Federal agencies in support of warfighters.

Throughout the Army community, it's well known that every phone call, e-mail and official message transmitted or received on an Army installation travels on a system or network that USAISEC designed, engineered, installed or upgraded. Over the past year, the demand for USAISEC's services has increased dramatically, Rivera said. The command executes nearly 100 work plans and produces thousands of deliverables. In addition, the command maintains a continuing presence in the Southwest Asia Theater of operations. There were more than 120 personnel on the road at any given time during the past year.

The USAISEC is constantly upgrading and improving its core competencies to stay relevant and on the cutting edge in the fast-paced world of IT, Rivera said.

# USAISEC Core Competencies

Systems engineering services that provide complete engineering solutions for unsecure and secure data networks, voice, audio/visual, and satellite systems. This includes a wide range of engineering support from requirements generation and management through detailed engineering design required to build state-of-the-art information technology systems.

Systems integration including a comprehensive synchronization of efforts between information systems. The USAISEC also serves as the principal engineering element for complete integration of the Army's posts, camps, and stations.

Systems implementation - the execution phase of the systems engineering process; this includes design verification and validation, installation of IT-related equipment and the requisite testing to ensure compatibility and compliance.

Test and evaluation on IT product capabilities and system performance for a variety of clients within DoD and private industry. The USAISEC serves as the Army's critical enabling agent for infusing information technologies into total IT solutions as well as for verifying and validating vendor claims.

Full service information assurance, security engineering, certification, and accreditation support to the Army. This core competency includes all aspects of systems security engineering; network, infrastructure, and organizational security engineering; security certification, accreditation and testing; Public Key Infrastructure; and secure communication.





## Command's top priorities: Support overseas missions, sustain troops, relocate headquarters

By Henry Kearney, CECOM HQ

Maj. Gen. Randolph P. Strong, CECOM commanding general, has stressed support to overseas contingency operations as the command's top priority throughout the past year. Also on the priority list are CECOM's Reset and sustainment efforts in support of the warfighter and planning and implementing the command's relocation to Aberdeen Proving Ground, Md.

### Overseas Contingency Operations

"Our overseas contingencies mission is all about supporting our nation and our deployed warfighters and falls into three major lines of effort—the drawdown of our troops and resources in Iraq, the on-going buildup in Afghanistan and our foreign military sales programs," Strong said.

In mid-summer 2010, more than 2,300 military, civilian and contractor personnel of CECOM and its C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) partner organizations were deployed to Iraq in support of the drawdown there. So far this year the CECOM Drawdown Special Projects Office, charged with retrograding C4ISR assets out of theater, has removed and repaired more than 30,000 pieces of Army equipment, (...) "an all-important process in getting systems back to warfighters in top condition," he noted.

More than 1,000 contractor field service representatives and nearly 100 civilian personnel of the CECOM Logistics and Readiness Center Directorate for Readiness were deployed mainly in Iraq and Afghanistan as well as in other areas of Southwest Asia this summer. The majority of the Directorate's Army civilians in Iraq are Logistics

Assistance Representatives, or LARs. "We're very proud of our LARs who are our frontline presence in providing operations and field level maintenance support; they work directly with Soldiers and live with them at their unit deployment locations," Strong said.

He pointed out that other significant contributors to CECOM's Southwest Asia efforts are Electronic Sustainment Support Center and Regional Support Center managers and others directing contractor field service representatives who provide sustainment maintenance support for systems such as high-frequency radios, Counter RCIED (remote control improvised explosive device) electronic warfare systems and tactical biometrics systems (used for security at forward operating bases).

"We also even have contractors supporting the Afghan National Army in maintaining and sustaining HF (high-frequency) radio communications," Strong said.

Another CECOM overseas contingency operations mission is supporting coalition partners in Afghanistan buildup operations, he explained. LRC officials projected that in fiscal year 2010 CECOM foreign military sales, or FMS, would include a total of 19 FMS cases and 65,000 assets at a total value of more than \$330 million. The Security Assistance Management Directorate of the LRC has been providing security assistance on ultra high-frequency and high-frequency radios; and single-channel tactical satellite and vehicle radios continue to be pushed to allied forces.

Yet another major component of the Afghanistan buildup involves CECOM's Tobyhanna Army Depot's service to troops—installing installation kits and providing other types of expert assistance and support on a wide range

(continued...)

of C4ISR systems, including weapons-detecting radars and counter-IED systems, Strong said. On any given day, between 185 and 200 Tobyhanna Army Depot personnel are deployed throughout the Southwest Asia theater—in Iraq and Kuwait as well as in Afghanistan.

## Reset

“My second big priority is our Reset mission,” Strong noted, “which is really all about supporting warfighter units that have just spent a year or 15 months in deployment.”

Following organizational property book and Army Reset procedures, equipment Reset requirements are identified 120 days before a brigade leaves theater, he said. Regional Army Force Generation Synchronization Conferences are also held involving CECOM LRC representatives and brigade leaders both before and after a particular brigade redeploys to their home station.

“These conferences identify all equipment requirements and plan the workloading of different sources of repair,” Strong explained. “We then collaborate with various Army program executive office personnel as well as with project and program managers of weapons systems and with brigade commanders and their command staffs to arrange for hand-off of equipment to units and any required training. Our efforts in this process continue throughout mission rehearsal exercises and other events to ensure brigade combat team systems and personnel are ready to deploy and to engage in full spectrum operations.”

During this year, it’s projected that CECOM will support more than 1,100 returning units, including sustainment level (depot) and field level (home station) missions. At the sustainment level that’s expected to amount to a Reset of more than 33,000 assets and at field level more than 106,000, he said.

Strong noted that the totals include Reset of more than 21,000 Communications Security assets and the installation of C4ISR packages in more than 9,000 vehicles.

“Our Communications-Electronics Evaluation and Repair Team is expected to perform 72 missions this year, resetting more than 144,000 critical communications and night vision assets to 10/20 mission capable standards,” he added.

## Moving South to Maryland

The third priority for CECOM is the final phase of the command’s relocation to APG, marked by color-casing and uncasing ceremonies at Fort Monmouth and APG, representing and symbolizing the move of the command headquarters.

“More than 2,500 of our CECOM and C4ISR partner organizations’ military, civilian and contractor personnel are already on the ground in our new headquarters home at APG and by next summer about 4,700 more CECOM and C4ISR positions will follow,” Strong said. “We received an estimate a few months ago from our move contractor that it will take an equivalent of 1,437 moving van loads to relocate our command organizations from Fort Monmouth to APG between 2010 and 2011.”

Ensuring effective personnel recruitment, retention and taking care of people while maintaining mission continuity are important aspects of the relocation, said Strong.

“When BRAC relocation planning started back in 2005, it was estimated that about 30 percent of the CECOM and C4ISR civilian workforce would agree to make the move to APG with their positions,” Strong said. “But thanks to our efforts to keep them informed about professional and quality of life opportunities in the APG region, we’re now anticipating that as many as 50 percent of our personnel will make the move.”

CECOM has implemented an aggressive recruitment and hiring program.

During FY 2009, a total of 444 CECOM employees were hired at APG and a total of 595 more were projected to be hired there by the end of FY 2010. CECOM officials project that an estimated 1,400 vacancies will be filled at APG between FY 2011 and FY 2013. To meet these goals, CECOM is participating in career fairs for entry- and mid-level career job candidates.

“Another important component of this relocation is being sensitive to the emotional changes our personnel and their families are enduring as they face difficult personal and professional decisions,” Strong said. “We are sensitive to the adjustments our personnel are making and we’ve supported our workforce through a variety of tools and information assets such as frequent town hall meetings, relocation fairs, career counseling services and many other programs.”

## Special Project Office leads drawdown in Iraq

By Henry Kearney, CECOM HQ

To lead the Operation New Dawn drawdown effort, the CECOM Logistics and Readiness Center stood up a Drawdown Special Projects Office in the summer of 2009, said LRC Associate Director of Operations Mike Carter.

The Drawdown SPO reports directly to his office, Carter said, and is led by Col. Colleen Martin in theater and Patrick Shaw at the LRC headquarters at Aberdeen Proving Ground. The SPO team consists of more than 130 LRC, Tobyhanna Army Depot and contractor personnel throughout Southwest Asia (Iraq, Afghanistan and Kuwait) and stateside.

According to Carter, the Drawdown SPO serves as the Army command, control, communications, computers, intelligence, surveillance and reconnaissance materiel enterprise lead for planning and executing the drawdown from Iraq of all relevant C4ISR product lines. It also serves as the lead to the AMC Responsible Reset Task Force in conjunction with Assistant Secretary of the Army for Acquisition, Logistics and Technology Program Executive Offices and is the focal point for DA, AMC, the Army Sustainment Command and supporting Army Field Support Brigades.

"In Iraq and Kuwait our CECOM Drawdown teams are providing logistics support to the 402nd Army Field Support Brigade and to redeploying units," Carter said. "This includes inventory and movement support at eight Redistribution Property Accountability Team locations and at forward operating bases."

The massive effort involves inventorying, packaging and shipping intensively managed item systems as well as non-standard equipment, equipment provided in theater, and non-mission essential equipment to stateside repair sites, including Tobyhanna Army Depot, he said.

In Afghanistan, Drawdown SPO teams are supporting the 401st AFSB and redeploying units with inventory and movement support at Central Receiving and Shipping Points, Carter added.

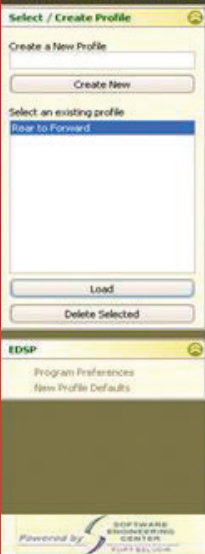
Once equipment is moved out of theater, it's repaired and Reset for requirements of units deploying to Afghanistan and for potential use in other theaters and in the U.S., he said.



{ IT-Forward Support Base contractor instructor reviews Tactical Operations Center, or TOC, power training at a site in Iraq. }



{ CECOM DrawDown Special Projects Office inventories unit at a joint base in Iraq. }



{ Enterprise Directory Services - Provisioning system for the Network Enterprise Technology Command. The EDS-P system provides support to users, machines and accounts from generating force to deployed force locations with little or no disruption in overall service to Soldiers. }

## System enables warfighters to “hit the ground running”

By Tim Dzyacky, SEC

Warfighters today are highly mobile and require seamless information technology connectivity. That’s why quick access to training, to briefings and to subject matter experts located across the globe is essential.

However, getting computer services and data from one location to another far too often can be cumbersome, error-prone and time-consuming. That’s why the CECOM Software Engineering Center has developed the Enterprise Directory Services-Provisioning system for the Network Enterprise Technology Command. The EDS-P system addresses this challenge by providing support to users, machines and accounts from generating force to deployed force locations with little or no disruption in overall service to Soldiers, said Ned Keeler, SEC director.

Previously, work Soldiers had performed or recorded in one location – emails, calendars or access to training modules – could be and sometimes was lost when they relocated. Solving that problem, EDS-P seamlessly brings all of that content with warfighters no matter where they’re located, Keeler said, enabling them to hit the ground running and guaranteeing network connectivity to access the Web and send and receive emails to colleagues and family.

*(continued...)*

In addition to email messaging, EDS-P also addresses key processes related to security management, account management (managing specific attributes for users, machines and email) and systems management (managing inventory and control of IT assets).

“However, in contrast to currently available commercial off-the-shelf products, EDS-P uses a more streamlined process with an intuitive graphical user interface, greatly simplifying tasks for system administrators and is government owned software eliminating licensing fees,” Keeler explained.

He pointed out as examples of less streamlined processes that some commercial off-the-shelf provisioning products require system administrators to be familiar with proprietary software command instructions while others require system administrators to generate multiple files and ensure that numerous command switches are in place. “Some even demand that administrators install and configure multiple interfaces and products; but with EDS-P, Army system administrators benefit from an easy-to-use system with everything in one place,” Keeler said.

Another obstacle to the easy provisioning of data and services involves the use of trusts, which combine software and hardware components to make sure the system’s security

policy is followed. Several prominent commercial products require the use of trusts between the generating force and deployed force.

“These trusts not only pose security risks for the Department of Defense, they often require four to six weeks of paperwork and processes to become a reality,” he noted. “With EDS-P, no trusts are required. System administrators can do all of the provisioning over secure channels between the generating force and deployed force.”

The EDS-P system debuted for Army use in May 2009 and has proved to be an asset to the Chief Information Officer/G6 community. “In fact, due to the automated capabilities of EDS-P, virtually no time is required to provision data services, freeing up system administrators’ time to focus on mission-critical support services,” Keeler said.

The SEC team at Fort Belvoir is now working with NETCOM and the Department of the Army Chief Information Office/G6 staff to develop an enterprise version of EDS-P. This version will leverage service-oriented architecture—enabling provisioning over the Internet in an ad-hoc, self-service manner, using authoritative data for each individual such as that found in the Army’s Knowledge Online portal.

“Our people are stationed globally, on the front lines, embedded with the Soldiers. They (SEC personnel) do more than just set up systems or troubleshoot issues; they consider themselves part of the units they are attached to and that gives them unique insight into what Soldiers really need.”

— Steve Kovacs, SEC Deputy Director





{ The U.S. Air Force staffed the Joint Network Control Center }

## Joint interoperability lab and exercise close communications gaps

By James Hayes & Tim Dzyacky, SEC

Achieving real-time situational awareness for warfighter customers is a top priority for Army Team Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance. Sustaining and supporting C4ISR systems is CECOM's mission. In light of the vast array of new and emerging technologies, Software Engineering Center works to find solutions to ensure a coordinated plan is in place for software support and integration for U.S. military forces while also addressing the integration of NATO and coalition forces.

The SEC provides two key capabilities to meet these needs and challenges: the Joint On-Demand Interoperability Network, or JOIN, Lab; and the annual Joint Users Interoperability Communications Exercise, often referred to as JUICE. Both capabilities play key roles in accelerating vital processes for achieving interoperability.

The JOIN Lab is the SEC's flagship network that is available to all joint user communities, on a no-cost 24/7/365, basis for experimentation and assessments. The JUICE is an annual event to evaluate new and emerging technologies in a joint task force operational environment.

Together, they provide the acquisition, technical, test and operational communities with venues in which to examine and test potential solutions to close gaps in the communications infrastructure. This enables the SEC action office for the Executive Agent-Theater Joint Tactical Network, or EA-TJTN, to rapidly develop effective joint tactics, techniques and procedures at the tactical edge—the critical interface where Soldiers must access infrastructure to complete their missions.

"JUICE and JOIN are two strategic tools we use for developing synergies and building relationships between the tactical and strategic communities," said John Kahler, EA-TJTN action officer. "Deployed forces are on the tactical edge of the network and they need to connect to the strategic network in a secure way. JUICE and JOIN are designed to integrate military and industry initiatives so that the boots on the ground are better able to achieve their objectives."

*(continued...)*



"JUICE encourages all joint communities, DoD and non-DoD, to participate in the development and implementation of a representative JTF (Joint Task Force) network," explained John Caruso, chief, EA-TJTN. "Participants can see how their solutions achieve stated objectives and optimize end-to-end connectivity among joint forces, the Defense Information System Network and commercial infrastructures."

With more than 1,000 test objectives, JUICE 2010 focused on joint interoperability and providing substantial improvements to existing operational capabilities. Two major events during JUICE 2010 dealt with DoD working in conjunction with other agencies.

The first saw active shooter and weapons of mass destruction scenarios in conjunction with the FBI, the Department of Justice, the National Guard, Monmouth and Drexel Universities, local fire, police and industry partners. The second involved Civil Air Patrol aircraft equipped with newly upgraded very high-frequency radios successfully testing their interface into the DoD network. The Civil Air Patrol flew sorties over bridges, tunnels and nuclear facilities using spectral imaging to capture data points and then transferred the images to Maxwell Air Force Base over dedicated satellite bandwidth, providing internet accessibility.

International partners also played an important role this year, with the Coalition Interoperability Communications Exercise being an integral part of JUICE 2010. The objective was to initiate both secure and non-secure calls between the six coalition participants (Canada, Finland, Sweden, United Kingdom, Netherlands, and Germany) using an Interoperability Point or gateway conforming to new NATO Standardization Agreements. The Interoperability Point worked well, proving to be an expedient way to communicate across national boundaries and that currently available resources can be used to communicate with partner nations.

#### Standards and infrastructure

Today's communications networks, comprised of multiple technologies, capabilities and devices, continue to evolve. Finding effective solutions, testing them and

developing tactics, techniques and procedures are key JUICE and JOIN objectives.

This year, the Air Force staffed a Joint NETOPS Coordination Center, JNCC, to oversee all JUICE activities while validating tactics, techniques and procedures for the JNCC. A Unified Capabilities tactical pilot was conducted with elements of the Rhode Island Air National Guard's Joint Incident Site Communications Capability, the Marine Corps, Warfighter Information Network-Tactical, Joint Communications Support Element and Air Force components at Robbins and Tinker Air Force Bases.

The CECOM SEC's EA-TJTN office, which oversees JUICE and JOIN, maintains close ties with the Unified Capability working group of the Office of the Secretary of Defense. The group is responsible for analyzing and developing many of the technical standards needed to deliver secure/assured communications services to users at the tactical edge of the network. The EA-TJTN office is responsible for developing the tactical requirements set for unified capabilities.

"Most networking gear is designed for strategic applications," explained, Bill Stapleton, EA-TJTN's chief of the Joint Network Division, "so the challenge becomes moving the software logic of the network elements from one place to another. But JOIN has helped greatly by enabling us to address issues from an enterprise perspective. Before JOIN, we used to get calls from the field, one at a time, from the Army, the Navy, the Air Force, and the Marine Corps, all asking to help resolve issues. Now we're using an enterprise approach."

JOIN has become the hub for a unique, one-of-kind Software Development Integration Network with both tactical and fixed strategic elements. The JOIN Lab has established connectivity between various test sites throughout DoD, including CECOM's Central Technical Support Facility. This enables developers to test "concept to combat" initiatives and validate interoperability in near-real-world, operational scenarios. By providing the lab and network needed to represent current military service configuration, JUICE and JOIN have become key resources in advancing C4ISR capabilities across DoD.

## Reset teams spearhead sustainment

By Scott Marcle, LRC

The U.S. Army in exceeding its objectives must be efficient during wartime. Gen. Dwight D. Eisenhower stated, "You will not find it difficult to prove that battles, campaigns, and even wars have been won or lost primarily because of logistics."

As a result of the U.S. conflicts in Iraq and Afghanistan, the CECOM Logistics and Readiness Center Communications-Electronics Evaluation Repair Team, or CEER-T, was established in September 2007. The CEER-T is one of many logistical wartime advances made at the request of the Army Materiel Command and Army Sustainment Command.

The team's purpose is the Reset/repair of communications-electronics systems to include - Single Channel Ground and Airborne Radio System, or SINCGARS, radios and Night Vision devices owned by re-deploying Army Brigade Combat Teams, said Kimberly Goodwin, CEER-T team lead, CEER-T Integration Branch, LRC Logistics and Engineering Operations Directorate.

Entirely self-sustaining, the CEER-T provides all Class IX parts, mobile repair capabilities and management and maintenance personnel to various missions at posts throughout the U.S. and overseas, Goodwin said. The team consists of representatives from the LRC, Tobyhanna Army Depot and ITT – a government contractor.

The CEER-T performs equipment maintenance to 10/20 "fully mission capable" standards – testing the equipment's functionality via test equipment and replacing defective parts, Goodwin said. This ensures BCTs and separate units have the ability to both train and fight, with fully operational equipment sets, she said.

The CEER-T repairs more than 3,000 night vision devices and more than 2,500 SINCGARS on average for each BCT, said Kevin Grimm, CEER-T transportation manager and equipment specialist. Equipment is Reset by the CEER-T within a 40-to-60-day timeline after its receipt, allowing units to train with their equipment year round, he explained.

To date, the CEER-T has supported Reset and repair for more than 95 BCTs (including National Guard and Special Forces

*(continued...)*



{ A self-contained deployable shop used by the CECOM Communications Electronics Evaluation and Repair - Team (CEER-T). }



{ Staging at C4ISR RSC, Joint Base Lewis-McChord, of AN/TSQ-226 (Trojan Spirit Lite) systems for operational testing and repair. }

Groups), totaling more than 172,000 Night Vision devices and more than 130,000 SINCGARS at both stateside and overseas locations.

Units Reset by the CEER-T include the 1st and 2nd Stryker Brigade Combat Teams; the 3rd, 10th Mountain and 25th Infantry Divisions; the 1st Armored Division, 1st Cavalry Division, 82nd Airborne Division, 101st Airborne Division and many additional units. The teams have also performed overseas Reset missions for several brigade combat teams including the 173rd Airborne Brigade Combat Team at U.S. Army Garrison Bamberg, Germany, and at U.S. Army Garrison Vicenza, Italy.

This specialized team concept has proved so successful that the Army Special Forces Command Airborne with the assistance of CEER-T Operations has established a Memorandum of Agreement specific to missions supporting Special Forces Groups, Goodwin said. The CEER-T has been

named as the source of repair choice to support its unique Reset timelines and mission requirements, she added.

“During October 2008, as a testament to the team’s success, the Army Materiel Command mandated (the) CEER-T as the Army’s primary source of repair for SINCGARS and Night Vision devices accompanying re-deploying U.S. Army units,” said Goodwin.

The CEER-T’s scope and mission capabilities are continuing to expand with the team recently establishing an enduring CEER-T site at Fort Hood, Texas, supporting the SINCGARS and Night Vision device Reset requirements of the 407th Army Field Support Brigade. In addition to this role, the CEER-T will also repair SINCGARS “theater provided equipment” from Operation New Dawn at its facilities at Fort Hood; and the repaired SINCGARS radios will be fielded to Army line units.

“The key to success (is) how we work with the returning units to integrate the brigades’ long-range planning calendar through the Reset window.”

– David Sharman, LRC Director

## Elite force takes fix to fight, aids warfighters around world

By Jacqueline R. Boucher, TYAD

Warfighters rely on an elite team of professionals who take the fix to the fight repairing battle-damaged equipment in the combat zone.

Tobyhanna's electronics repair network stretches around the globe; hundreds of Command, Control and Computers, C3/Avionics Directorate employees work at 57 of the depot's 74 Forward Repair Activity locations.

The FRA concept replaced an outdated repair process that was complex, time consuming and costly. Working alongside warfighters, on-site technicians are also able to show operators how to use the equipment as well as field it. The majority of the FRA workload is performed by personnel assigned to the C3/Avionics FRA Division's four branches. Other FRA support includes Firefinder, Counter Radio Controlled Improvised Explosive Device Electronic Warfare, Guardrail and Communications Systems.

"Instead of shipping critical equipment to the depot for repair, our personnel can perform on-site repairs with a much quicker turnaround time," said George Bellas, director of the C3/Avionics Directorate. "Our employees are the best at what they do. They maintain the highest standards of electronics repair supporting warfighters in the states and overseas."

FRA can operate from the frontlines or a unit's home station. Charged with the same overall mission as the C3/Avionics Directorate—repairing and overhauling electronics equipment—they are located in 18 states and several locations in Europe and Southwest Asia.

Forward repair employees are capable of fixing electronics equipment to a certain level of repair. Anything above that is accomplished at the depot. In some cases repairs may include component level work, but most involve line replaceable units or circuit cards. Items that are under contract support are pulled for a direct exchange swap.

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{ Electronics Technician **Gerald Gaglio**, left, and Electronics Worker **Stephen Froncek** test an AN/TSQ-243 Command Center System and Large Screen Display System while deployed to Fort Indiantown Gap. The systems are used to display visual battlefield information for commanders in the field. (Photos by Matt Jones) }

"I enjoy being side by side with the warfighter and meeting so many different people," said Robert Hagenbaugh, an equipment specialist at Tobyhanna's FRA in Vicenza, Italy. "I have worked with some of the most highly motivated and intelligent people."

Directorate supported systems include Standard Army Management Information Systems, or STAMIS; Air Defense/Air Management; Cell equipment; Army Airborne Command and Control System, A2C2S; Common Ground Station, CGS; Automated Data Processing Equipment; Very Small Aperture Terminal; and Command Post System & Integration, or CPS&I.

FRA employees perform similar tasks on a multitude of systems.

In Iraq, technicians help improve battlefield communications by transforming Army helicopters into high-tech command and control platforms by installing the A2C2S on select UH-60 Black Hawk helicopters. At Fort Hood, employees repair more than 60 pieces of electronics or computer equipment each week. The specialists repair peripheral items such as printers and laptop computers the military uses, including original equipment manufacturer warranty support for commercial companies. At Fort Carson, employees participate in field exercises with Soldiers to provide over-the-shoulder training and maintenance support for systems such as the Tactical Airspace Integration System, which is a mobile communications and digitized battlefield automated system for airspace management.

It's been nearly 20 years since the first forward-deployed repair activity was established at Fort Hood, Texas. Over the years, the depot's presence has expanded to meet the needs of the Armed Forces. In the mid 1990s, FRAs were located in three countries and two Army installations. Years later the depot's support of the Global War on Terrorism and Operation Iraqi Freedom resulted in a 40 percent workload increase.

"Initially, FRAs were started to provide computer repair for STAMIS—basic computers," Bucklaw said. "The mission has grown considerably since then based on requirements to support other systems."



{ Electronics Mechanic **Robert Nolan**, left, and Air Conditioning Equipment Mechanic **Robert Williams** conduct TOCNET Tactical Operations Intercommunication System checks on the AN/TSQ-232 Tactical Command System at Fort Indiantown Gap. TOCNET systems provide intercom, voice and data during tactical operations. U.S. Army photo. }

The division's largest workload today is CPS&I (formerly known as TOCs), according to Bucklaw.

In 2009, a biometrics system requirement was added to the FRAs workload when a team was tasked to provide training, troubleshooting and upgrade for the Handheld Interagency Identification Detection Equipment, or HIIDE, program. The portable devices combine iris, fingerprint and face biometrics to help determine an individual's identity.

Future endeavors include adding the next generation CGS to the schedule, he said.

The C3/Avionics Directorate manages an all-volunteer force of maintenance technicians, site chiefs, regional support center managers and field service representatives. Personnel with an electronics background and sense of adventure are recruited to fill myriad FRA positions posted worldwide.

"Our employees feel good about their jobs whether assigned to an FRA in the states or overseas," Bellas said. "The work is exciting and the possibilities for change and growth are endless. The FRA concept will grow, because it is the right thing to do for the warfighter," Bellas said.



## C4ISR Center of Excellence has emerged at APG

By Andricka Thomas, CECOM HQ

Just five years ago Congress passed the 2005 Base Realignment and Closure Law to relocate the Army's command, control, communications, computers, intelligence, surveillance and reconnaissance Materiel Enterprise.

Now, five of the six members of the C4ISR Materiel Enterprise have relocated from various places, mainly Fort Monmouth, N.J., to make up the C4ISR Center of Excellence. Joining the Aberdeen Proving Ground family, the Enterprise will help further establish the installation as the home to Army Technology. The C4ISR Center of Excellence will be one of many technological organizations that call APG home.

The C4ISR Materiel Enterprise is a subset of the Army's Materiel Enterprise; one of four Army Enterprises, which also include: Human Capital; Readiness; and Services and Infrastructure. The Materiel Enterprise is co-chaired by the Army Materiel Command and the Assistant Secretary of the Army for Acquisition, Logistics and Technology, commonly referred to as ASA/ALT.

Comprised of six primary organizations, the C4ISR Materiel Enterprise, includes three organizations from AMC and three from ASA/ALT. AMC organizations include: U.S. Army Communications-Electronics Command; the U.S. Army Communications-Electronics Research, Development and Engineering Center; and the CECOM Contracting Center.

ASA/ALT provides three Program Executive Offices to the team including: PEO for Command, Control, Communications-Tactical; PEO for Intelligence, Electronic Warfare and Sensors; and PEO for Enterprise Information Systems.

"The C4ISR Materiel Enterprise will optimize support for warfighters and other customers by synchronizing materiel life-cycle functions in support of ARFORGEN

(Army Force Generation)," Strong explained.

Together, these organizations develop, acquire, provide, field and sustain C4ISR systems and battle command capabilities for the joint warfighter. While providing C4ISR support for the nation's defense, each of these organizations have navigated themselves through this historic migration south to implement the 2005 BRAC law. This move, according to Strong, is and will continue to be accomplished while simultaneously providing uninterrupted services to the warfighter.

"There will be no degradation to our mission as we continue to move and reconstitute the team to APG," said Strong. With well over 2,500 C4ISR Materiel Enterprise members already on the ground at APG as of mid-September, the BRAC move is nearing its final implementation phases. CECOM's Logistics and Readiness Center personnel were the first to move into the new C4ISR Center of Excellence campus August 2. Strong officially cased the CECOM flag at Fort Monmouth, N.J., September 10, 2010, and will then uncased the flag at APG in October. The flag's arrival at APG marks CECOM Headquarters' official arrival at APG.

### Domains

The C4ISR Center of Excellence has space for more than 7,200 personnel in the \$800M complex. The campus was designed around the domain concept, where personnel belonging to different organizations will be co-located according to the functional areas to which they belong. This organization is meant to encourage collaborative innovations and streamline services, according to Michael Vetter, CECOM director for Logistics and Engineering.

"The idea is to create synergy among the organizations by centrally locating them with other organizations with similar functions," said Vetter. "The leadership saw the move to APG as not only an opportunity to configure new buildings for maximum efficiency, but to maximize organization synergy as well".

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The intent is to position functional areas, or 'domains,' together to better track products through their entire life-cycles, from concept to combat, Vetter said. There are 13 domains total, covering the full-spectrum of C4ISR support.

"For example, we positioned all personnel who work with sensors together so the 'sustainers' can have dialogue with the 'R&D experts,'" Vetter continued. "That will provide better communication avenues between the organizations and ultimately deliver a better product to the warfighter faster."

Workforce quality of life and energy efficiency were considered in the planning of this campus. Comprised of more than 2.5 million square feet on campus, the Philadelphia District of the U.S. Army Corps of Engineers, agent responsible for overseeing all of the C4ISR Campus construction, planned space for break rooms, courtyard area and food services for personnel, all while staying on schedule for delivery of the massive project.

"The objective was to meet all organizational requirements for facilities while incorporating a good quality of life aspect in the workplace," explained Vetter.

With the Philadelphia Corps of Engineers as the managers of this project, the new campus facilities were made with energy efficient 'green' features to help reduce energy consumption on the campus by an estimated 50 percent, according to Stan Wojciechowski, design manager for the Philadelphia District of the Army Corps of Engineers.

### C4ISR Center of Excellence Goes 'Green'

- » **Campus Auditorium Living Rooftop:** Covered with vegetation specifically chosen to prevent erosion, absorb rainwater, provide insulation, lower surrounding outside air temperatures and create a habitat for area wildlife.
- » **Building Placements:** The buildings in phase one of the campus were positioned to maximize the use of sunlight during each season, maximizing heat absorption in the winter while reducing heat absorption in the summer.
- » **Exterior Window Fins and Internal Light Shelves:** The exterior window fins restrict incoming sunlight in the summer to reduce heat gain. The interior light shelves distribute sunlight throughout the interior spaces to reduce interior lighting requirements. Interior lighting in the administration areas along the windows are provided

with automatic dimmers which dim or brighten the light fixtures as a result of the amount of sunlight entering the building. The interior lighting controls are programmed to turn interior lights off and on at the end of the day and on the following morning to reduce energy consumption over night.

- » **The Mission Training Facility** uses a geothermal heating and cooling system, which the Philadelphia District Corps of Engineers expects to save an estimated 40 percent a year at current utility rates. It uses water-based, thermal transfer media, rather than traditional area-based systems.
- » **Green Screen:** The green screens are located on the outside windows of select campus buildings. These screens are populated with leafy vine foliage and will provide shading during the summer months as well as promote plant growth around the facilities.
- » **Restriction hardware:** Toilets are designed to reduce wasteful water consumption by providing a flush choice for liquids and solids. Sink faucets include automatic faucets to control water consumption.
- » **Runoff water:** Water from the building is recycled back into the subterranean watershed.

### 13 Domains Include:

1. Command and Control Systems
2. Communications Systems/Network Transport
3. Navigation
4. Force Protection/Survivability
5. Night Vision
6. Ground-Based Radars
7. Multi-Intel
8. Sensors (manned and unmanned)
9. Fabrication
10. Power and Cooling
11. Future Systems Integration
12. Business Enterprise Systems
13. Headquarters Business and Enterprise Support



{ Mike Sobrino, DISA BRAC Lead, USAISEC-ESED, explains IT connectivity to Jonathan Minor, Audio-Visual Engineer, inside ESED's conference room in Fort Huachuca, Ariz. }

## USAISEC assists with BRAC relocations

By Todd Pruden, USAISEC

These days, if you talk to anyone who works for the United States Army Information Systems Engineering Command, they'll tell you they are extremely busy. In most cases, that is a normal response in the workplace. But to the folks who are working in BRAC, that line is an understatement.

USAISEC is hard at work assisting with the relocation of several headquarters facilities around the Army. They are doing this because in 2005, Congress passed the Base Relocation resolution which mandated that certain military installations be closed in order to consolidate military assets to reduce expenditures.

"We're supporting the whole effort to upgrade the infrastructure, which will allow the Warfighters to do their job better by having better communications when they need it, where they need it," said David Lease, group leader, Enterprise Systems Engineering Directorate.

USAISEC's role in BRAC is to relocate key components of communication technologies. They are currently in the process of relocating the systems of ten separate commands.

*(continued . . .)*

**“When I joined the Army, the network extended to the brigade. Today, it must reach down to the squad level, and often to the individual Soldier level.”**

*– Maj. Gen. Randolph P. Strong,  
CECOM Commander*

“Really the best way to think about it is you’ve got the headquarters command in one place and it’s being transferred to another,” said Rob Cass, ESED Army Base Closure and Realignment integrated product team lead. For many BRAC affected organizations, this is an opportunity to infuse technology at their new site.

“It should help the commands that are being relocated,” said Cass. “They’ll have new and improved systems so they’ll be able to perform their mission more efficiently.”

The Information Technology systems that USAISEC is engineering and installing, includes a combination of audio and visual systems, data networks, and voice systems.

Cass said that these audio/visual systems are placed in command centers and conference rooms within the headquarters facility.

“These new command centers have dozens of conference rooms,” Cass said. It is up to USAISEC to ensure they have fully-functioning solutions so they can perform their mission.

Lease said that BRAC has not transformed what USAISEC does as far as its major functions; however, he did say that these new relocation efforts have definitely increased the number of tasks at hand.

“It definitely changes the workload, but what we do hasn’t changed,” said Lease.

Cass said the deadline to have all of these relocations complete is Sept. 15, 2011, and that with the looming deadline and an increased workload, the directorate has had to rely on extra help.

“We have an aggressive schedule to meet,” Cass said. “We’ve had to rely on our contract partners and are getting fabulous support. We’re getting it done.”

Lease said that he is pleased to assist in this historic transition and that the impact of what the directorate has made will carry on.

“It feels good to be a part of it; making a difference by being at the ground floor to install these new systems and lay the ground work for the Army of the future.”

## CTSF helps solve battlefield data flow issue in Afghanistan

Story and photos by David G. Landmann, CTSF

When the Central Technical Support Facility's Robert Boerjan set up a lab in early May of this year to begin testing and streamlining of the Afghan Mission Network, or AMN, solving a real-time in-theater problem wasn't exactly on his to-do list.

That, however, is exactly what happened just weeks after his Coalition Test and Evaluation Environment, or CTE2, lab went online on the CTSF test floor, in conjunction with similar test facilities in Canada, Great Britain and several NATO member nations.

For security reasons, Boerjan, the CTSF's capability set coordinator, couldn't name the specific coalition member experiencing the battlefield issue, but he explained what happened like this:

"One of our coalition partners received a report from Afghanistan that they had issues in-theater," Boerjan recalled.

Apparently a battlefield commander noticed that it was taking too long to get digital information from forward positions to operations centers.

"The flow of information was slow," Boerjan said, "and because it was slow, it was old."

Boerjan, and his counterparts in North America, Great Britain and Europe agreed that something had to be done.

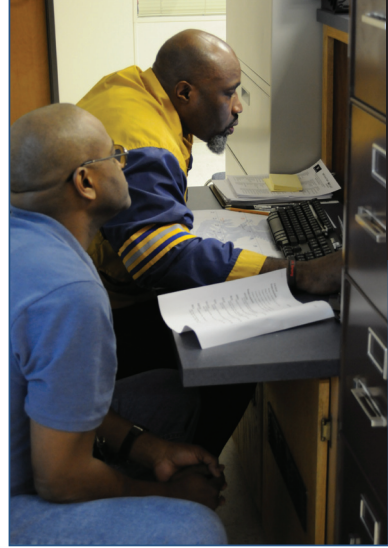
So heads – some at the CTSF, some at coalition partner locations, and some on the battlefield – were put together to see what could be done.

"Finally, one of our coalition partners (not on this continent) war-gamed a solution, and diagrammed it on a white board," Boerjan said.

To make sure that information was disseminated to all of the participating AMN labs, someone took a picture of the whiteboard with a cell phone camera, and e-mailed the cell phone photo to test locations literally halfway around the world.

"The CTSF took that information, and, along with other sites in our Coalition Interoperability Assurance and Validation Working Group (the labs working on the Afghan network), we reconfigured

*(continued . . .)*



{ CTSF Test Operator **Bill Kirkland**, and fellow operator **Tony Wilson** ponder a new set of test cases during a Software Block 2 Army Interoperability Certification (AIC) test recently. }



{ CTSF logistics specialist **Maryland Harvey** removes packing material from a chair she is assembling. Harvey and her fellow logistics workers play a key role in supporting test efforts at the CTSF. }



**"In the end, it's all about the people—the generations of engineers and scientists, logisticians, contracting professionals, and staff who have worked here over the years... and the great leaders that we've been so fortunate to have, and who inspired us everyday to do whatever was necessary to support our bottom line: the Soldier."**

*— Edward C. Thomas, CECOM Deputy to the Commander*



{ Photos left to right: CTSF workers unload a rack containing hardware for one of the many LandWarNet systems undergoing development, integration and eventual Army • **Staff Sgt. Kevin Giver**, 11th Signal Brigade satellite communications operations noncommissioned officer, conducts 'field expedient' tactical signal channel satellite terminal training for the 62nd Expeditionary Signal Battalion tactical operations center, radio telephone operator and select personnel during Photo Credit: Spc. Danielle Ferrer • CTSF test operators (from left) **Matt Garcia, Donna Bryant, and Pat Price** rig test floor equipment for an upcoming Army Interoperability test event. The CTSF test floors can be configured to fit virtually any architecture. }

our systems to validate a (necessary) new data flow for the warfighters," Boerjan said.

Although some work remained to put the Afghan battlefield data flow issue to rest, Boerjan and his CTSF team, as well as his colleagues representing coalition member nations, were confident they were on the right track.

"The bottom line here is that we were able to collect the information we needed to recommend a better architecture, to ensure information gets from one point on the battlefield to another within appropriate time limits," Boerjan said.

CTSF Director Col. Steven G. Drake said the efforts of Boerjan's team in the AMN lab underscore what he termed the "real mission" of the facility.

"This is just one example of the fact that we're here to support the warfighter," he said. "Supporting the warfighter is the reason we are here."

Borjean's work continues with his current international partners.

"In the next phase of (AMN) testing, we'll involve Italy and Norway," he said.

Borjean added that the work his lab is turning out is a team effort at the local level as well.

"We have twenty systems represented in this lab at the present time, systems representing a U.S. Army division in a coalition regional command," he said. "The program managers' representatives for all of those systems have played an integral role in making our work a success," he said.

The AMN laboratory takes up one small area of the 40,000 square-foot test floor at the CTSF, and, according to Drake, represents only a small segment of the CTSF's ongoing test effort to provide warfighters with the best digital tools available on the battlefield.



CECOM Highlights features a program, capability or technology from each CECOM organization that demonstrates the work our command does for the benefit of our nation's warfighters.

**"CECOM is embedded with the Soldier. They know who we are, and when I speak with our nation's warfighters, I always ask one question: 'Is there anything we can do better for you out there in the field?'"**

*– Command Sgt. Maj. Tyrone Johnson,  
CECOM Command Sergeant Major*



**ONE MISSION, ONE VISION – THE WARFIGHTER**

## CTSF: Achieving Interoperability

The Central Technical Support Facility offers system of systems integration, training, interoperability testing, and configuration management to the Army and Command, Control, Communications, Computers, Intelligence, or C4I, providers.

CTSF plays a vital part in the efforts toward establishing the Afghanistan Mission Network. CTSF's major role in the AMN endeavor is to provide the Army information technology environment to support this all-in-one system.

System of systems integration provides engineering support to program managers as they work to achieve success in interoperability testing conducted at the CTSF. Achieving interoperability to enable joint military forces to communicate effectively is essential to increase joint and coalition interaction and security to counter emerging threats, according to David McClung, CTSF technical director.

"We want our customer base to know that we will help them achieve interoperability success by providing engineering support to integrate systems and by following through with interoperability testing, certification and fielding," said Col. Steven Drake, CTSF director.

*(continued...)*



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## SEC: Total Life Cycle Software Engineering

The Life Cycle Software Engineering process starts by determining initial software requirements through analysis, design, implementation and maintenance. Software Engineering Center experts help clients formulate, extract, and manage software requirements ranging from ordering rations more efficiently to defeating improvised explosive devices on the battlefield. This process includes a review of software architectures and designs; identifies issues

and proposes resolutions and modifications to meet the ever-changing dynamics in today's asymmetrical battlefield.

The SEC engineering process provides state-of-the-art software development and testing facilities to support system development, testing and exercises. SEC engineering support helps to fortify systems' software against poor software design, programming defects, and computer cyber-attacks. SEC's Embedded Field Software Engineers deploy with Soldiers and systems to provide immediate and direct support to units to ensure both system and mission success.

"We are there through the whole process," says Ned Keeler, SEC director. "We know each system inside and out so that when it is fielded, our field support representatives can train and troubleshoot on the ground while supporting the necessary operation tempo, 24/7."

This commitment throughout the life-cycle gives SEC a unique insight into how to best support today's Warfighter. SEC's approach not only catches and resolves potential problems early but more importantly; it delivers a quality system to meet Warfighter's operational needs and support them in the field. This approach sets SEC apart as the Army's software business leader and ensures our Armed Forces have dominance in information and operational systems over their adversaries.



*(continued...)*



## LRC: Rapid Response Office

“The CECOM Rapid Response Project Office recently awarded its third generation contract, valued at \$16.4 billion to span the next five years,” said Helen Kimball, Rapid Response, or R2 Business Development and Special Projects Office. The R2 Project Office provides flexible acquisition and technical expertise, capable of rapidly implementing solutions at the request of customers.

The R2 office enables the capability for the Army to respond quickly to immediate needs out in the field by streamlining the acquisition process, according to Kimball. For example, with the drawdown in Iraq ongoing, the R2 Office has been fulfilling a need to recover ‘left behind equipment’. This includes recovery of equipment ranging from aircraft maintenance tools to vehicles and also includes refurbishing of existing equipment, according to Kimball.

Customers that come to R2 can have their requirements on task order sometimes in as short a time as 45 days, from start to finish. Contractors bidding on particular jobs must submit their proposals in seven days, compared to the typically longer timelines of 30 days or more. The R2 Office is organized with the Logistics and Readiness Center.

## TYAD: Rapid Prototyping, MARCS

Tobyhanna Army Depot showcased their Mobility Air Reporting and Communications Shelter, or MARCS, program. The Depot designed, engineered and overhauled the shelter in 43 days, making a tight 45-day suspense for completion. The product was completed, transported and fielded in 120 days, from start to finish, in collaboration with the U.S. Air Force and contract support.

“This is just one example of Tobyhanna’s rapid prototyping capability,” said Rob Glowacki, Tobyhanna logistics management specialist. The Depot also collaborates with a variety of CECOM organizations, such as the Logistics and Readiness Center’s Communications Security Logistics Activity located at Fort Huachuca, Ariz.

As do the other four CECOM centers, Tobyhanna Army Depot provides support to and works with CECOM entities to provide support service to a multi-service and organizational customer base. During the creation of the MARCS program, Tobyhanna teamed up with the USAISEC to ensure all rules and regulations were observed in the fabrication of the new equipment shelters.





# CECOM ALIGNED FOR THE WARFIGHTER

**“Each of CECOM’s organizations are aligned and work in concert to provide seamless C4ISR services and support.”**

*– Maj. Gen. Randolph P. Strong, CECOM Commander*

*(continued...)*

# CECOM ALIGNED FOR THE WARFIGHTER

## USAISEC & TYAD

The U.S. Army Information Systems Engineering Command provides extensive baseband engineering and implementation for the Defense Satellite Communications System, or DSCS, program. ISEC engineers work cohesively with CECOM's Tobyhanna Army Depot in this project area. The ISEC provides site-survey, system design planning, installation and engineering validation and Tobyhanna furnishes the equipment and prefabricated cables for the effort. Tobyhanna installs DSCS antennas; the ISEC provides the remaining key elements of antenna installation including installation and testing of antenna electronic suites. The testing includes on-site acceptance testing and certification testing.

## LRC & SEC

The Logistics and Readiness Center and the Software Engineering Center share the sustainment mission for C4ISR systems. The LRC handles hardware and the SEC handles software, both of which must be compatible. Along with Tobyhanna Army Depot, both organizations have significant forward presence and coordinate efforts under the Army Field Support Brigade umbrella.

## SEC & CTSF

The Software Engineering Center helps with configuration management of the joint messaging standards used by the Central Technical Support Facility. The CTSF uses a suite of test tools that the SEC designed and built. The SEC provides the CTSF technical support on binary messaging standards issues, and provides on-site support for geospatial services and software replication and distribution.

## TYAD & LRC

Tobyhanna Army Depot supports the Logistics and Readiness Center by providing total system sustainment through design, manufacture, repair and overhaul services for electronic systems to include satellite terminals, radio and radar systems, telephones, electro-optics, night vision and anti-intrusion devices, airborne surveillance equipment, navigational instruments, electronic warfare, and guidance and control systems for tactical missiles.

## CTSF & SEC

The Central Technical Support Facility works with the Software Engineering Center to ensure that SEC-developed software and support services are compatible to meet the C4ISR communications needs of the Army. The CTSF helps the SEC and other organizations achieve interoperability success by providing engineering support to integrate systems through interoperability testing, certification and fielding.

## USAISEC teams up with Tobyhanna to accomplish missions

By Todd Pruden, USAISEC

For years, two major subordinate commands of the U.S. Communications-Electronics Command have retained a close working relationship in order to complete missions impacting the Warfighter.

The Transmission Systems Directorate, or TSD, a Directorate of the U.S. Army Information Systems Engineering Command, has worked together with Tobyhanna Army Depot to engineer and install various communication systems in support of peacetime, contingency and wartime operations.

"I'm very excited about this relationship. It has the potential to give, us together, a capability that's greater than some of our individual parts," said Robert Lorentsen, Director, TSD. "It's a great teaming arrangement. We provide highly technical engineering support. They provide the capability for quality installation on a site."

The USAISEC's mission is to design, engineer, install and test satellite earth terminals, microwave systems and the associated signal processing equipment which impacts everyday communications for Army and Department of Defense elements worldwide. Tobyhanna works closely with the USAISEC to actually build the components for these communication systems.

"From a depot point of view, they actually build a lot of the equipment cabinets and cabling that the Defense Satellite Communications System group installs," said Brian P. Caldwell, TSD, senior systems engineer. "They help engineer, design, and test it at the depot and then

ship the products out and then we install, test, and bring them on line."

The Defense Satellite Communications Systems are the main focus of the alliance between the USAISEC and Tobyhanna Army Depot. These systems provide various communications to military members around the globe.

However, a new project has recently brought the two entities together for another mission. The fiber cable installation supporting the interconnection of the Fort Bragg, N.C., Regional Hub Node, RHN, with the installation's networks was completed because of this alliance. This marks the first time the USAISEC used Tobyhanna Army Depot as the primary installation team for a project manager supported effort.

"ISEC was tasked to do a full turn-key mission in terms of installing this equipment," said Lorentsen. "But we also wanted to establish a meaningful working relationship with our partners under CECOM. When I realized that Tobyhanna has this capability, I thought they would be a perfect element to provide this support and partner with us in the execution of this task."

The RHN is one of the Army's four types of Warfighter Information Network – Tactical. The RHN is capable of transporting numerous commercial satellite links in support of expeditionary operations. The RHN moves critical battle command information (data, voice, and video) from major headquarters across the joint battle space and down to the maneuver battalions. This provides critical


*(continued...)*



{ **Bryan Kleese and Jeff Sleuter** of USAISEC inspect fiber connections to an ATM switch at the Heidelberg Technical Control Facility. — Photo courtesy of USAISEC }



{ An **11th Signal Brigade soldier** works with the USAISEC TROJAN Spirit engineering team on the testing of a new AN/TSQ-226(V) at Fort Huachuca, Ariz. — Photo courtesy of USAISEC }




battle command information to commanders, allowing them situational awareness, information dominance, and common operational picture for decisive engagement and defeat of the enemy.

Loretsen said that quick turn-around was essential in completing the RHN installation at Fort Bragg. He said the partnership between the USAISEC and Tobyhanna was the reason for this.

“This provides us with a capability to provide installation type support to quick react customers, especially at the Warfighting edge,” said Loretsen. “And then together, we can do turn-key rapid reaction type support to the Warfighter.”

According to Loretsen, the alliance among the USAISEC and Tobyhanna Army Depot is critical to the mission success of the Warfighters around the globe. He also said the partnership will help the nation and the Department of Defense as a whole.

“Simply put, I’m just very excited about this relationship and I think it will go a great distance,” said Loretsen. “It helps us to help the Warfighter, get boots on the ground quickly, expeditiously, and of course, Tobyhanna is a very professional and talented organization that does great work, this partnership ensures our mission success.”



**“ISEC has a 67-year history of providing world-class Information Systems Engineering in support of warfighters worldwide. No other Army organization can match our capabilities.”**

— Col. Sylvester Cotton, USAISEC Commander

"The reason Tobyhanna exists is to support the warfighter – period. Every mission we execute has an impact on the warfighter, either as he or she is in the Reset, training, or ready-to-deploy phase, or in the fight."

— Col. Charles Gibson,  
Tobyhanna Army Depot Commander

## Depot and Center partner for CEER-T missions

By Anthony J. Ricchiesi, TAD

Tobyhanna Army Depot and the CECOM Logistics and Readiness Center have joined together to rapidly repair thousands of night vision systems and Single Channel Ground and Airborne Radio System radios, here and overseas.

The Communications-Electronics Evaluation and Repair Team, or CEER-T, supports the rapid test and repair mission (called Reset) of night vision systems and SINGARS radios used in Southwest Asia.

The CEER-T was established in response to fulfilling individual U.S. Army unit maintenance requirements, said Kimberly Gombin, team lead, CEER-T Integration Branch, LRE Logistics and Engineering Operations River Gate. These requirements provide that Brigade Combat Team level night vision devices and SINGARS be Reset to the "M20 Army maintenance standard of repair.

Technicians also test and repair the radios to the standard for technical inspection and repair, which ensures Army equipment is able to perform its wartime mission, said Rich Quinn, CEER-T project lead, Production Management River Gate, Tobyhanna Army Depot.

"Originally, the CEER-T was designed to assist the DOLs (Directorates of Logistics) with the night vision and SINGARS workload," Gombin said. "However, the increased volume of equipment needing service resulted in the DOLs' inability to meet Army Force Generation Reset time-line requirements, creating frequent 'beyond hour' Reset manning requests. Due to the CEER-T's ability to repair unit equipment on or before deadlines established during pre-mission planning, the special repair team was designated to perform the standardized Reset repair process throughout the Army."

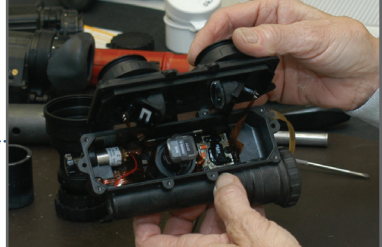
On Oct. 1, 2008, the CEER-T was named the sole source of repair for all Reset of night vision devices and SINGARS equipment, she said.

As of July 2010, the CEER-T had completed 725 missions resulting in over 310,000 night vision and SINGARS systems being Reset since the overall mission started in December 2007.

Tobyhanna Army Depot CEER-Ts have deployed to 15 U.S. and 12 overseas locations, including Fort Drum, N.Y.; Fort Richardson, Alaska; Fort Bliss, Texas; Fort Bragg, N.C., and Schofield Barracks, Hawaii.

"All mission requests go through (CECOM LRE) CEER-T personnel," Gombin said. "Once we have information pertaining to which RET we will be assisting and what their densities are for both night vision devices and SINGARS... [the LRE] contacts Michael Quinn at Tobyhanna to develop the team sizes, date [continued...]





{ Left & Right: Night Vision Goggles, Center: **Joshua Tedesco**, a machine tool operator at Tobyhanna Army Depot, prepares the HAAS Horizontal Machining Center to do a pallet change while modifying helmet brackets to support enhanced hardware. Depot technicians are producing thousands of helmet brackets, which are used to mount night vision devices. – U.S. Army photo by Steve Grzezdziński }

range and number of test equipment that will be sent to that particular mission site.”

The LRC CEER-T site leads have overall management responsibility on the ground. They’re responsible for the entire mission, from site set up to tear down and all areas in between.

### Night Vision

“We repair AN/PVS-7A, B and D, and AN/PVS-14 night vision goggles in support of the CEER-T field Reset,” said Michael Wartella, electronics mechanic supervisor, Laser/Image Optics Branch, Electro Optics/Night Vision Division. The division is part of the depot’s Intelligence, Surveillance and Reconnaissance Directorate.

The AN/PVS-7A, AN/PVS-7B, and AN/PVS-7D are helmet-mounted binocular night vision goggles and the AN/PVS-14 is a monocular night vision goggle.

“We repair or replace parts, perform minimal cleaning..(and).., then the devices are sent back to the Soldiers,” Wartella said. “The teams have consistently completed missions ahead of schedule and are committed to ensuring our warfighters have the best product they can turn out.”

The LRC CEER-T lead works directly with Tobyhanna Army Depot leads to resolve any problems that may arise on the site, Goodwin said.

Although there may be anywhere from four to 12 technicians on the ground for any particular mission, all of them report to the designated Tobyhanna lead. The

Tobyhanna lead then coordinates with the LRC lead if any issues need to be addressed.

“Sometimes problems arise, but there has not been one time that an issue has been brought to light where it affected our overall mission,” Goodwin said.

### SINGGARS

Three to six SINGGARS technicians from the depot’s SINGGARS Branch support each CEER-T mission. Teams are deployed on an average of 45 days.

Radios are tested and repaired onsite, then returned to the units to be reinstalled into their vehicles. Components repaired include power amps, auxiliary amps, and radio transmitters.

“The feedback received from the BCTs has been positive,” Goodwin said. “In addition to having their assets returned normally ahead of schedule, we also offer over-the-shoulder training.

Over-the-shoulder training is accomplished onsite by Tobyhanna technicians with the technicians going over each asset as it is taken apart to help refresh Soldiers’ understanding of each component.

“When the training is requested, the tech leads from Tobyhanna will work with the BCT (points of contact) to set up a training schedule,” Goodwin said. “Besides giving the Soldiers a little more knowledge on these assets, the (LRC) lead will provide training certificates for each Soldier.”



## CTSF and SEC share more than two common letters

By David G. Landmann, CTSF

CECOM's Central Technical Support Facility and its Software Engineering Center share more than a couple of common letters in their acronyms.

Apart from the fact that the two technically-based entities are branches of the same CECOM tree, they are closely related in several other ways.

Just ask CTSF Configuration Management Branch Chief Sal Corpina.

Although Corpina is a full-time member of CTSF leadership, he is actually the most visible representative of what he termed "the strategic partnership between the SEC and the CTSF."

That partnership, Corpina explained, was formed as a result of the 2007 operational order that placed the CTSF under CECOM command, and took the CTSF's software replication and dissemination services, along with its geospatial services, and put them under the purview of the SEC.

"Since those services were already being performed here at the CTSF," Corpina, the SEC lead at the Fort Hood-based facility said, "it was decided they would be strategically placed here."

Several other SEC government civilians are also in full-time positions at the CTSF. They include Information Technology/Information Assurance Chief Kelly Corpina; and Information Technology Lead Jim Ball.

*(continued...)*

"The CTSF ensures the software that SEC develops and software services are compatible to meet communications needs of the Army. We (CECOM organizations) are constantly working together to provide C4ISR systems support."

— Col. Steven Drake, CTSF Director



“Our overall job, in peacetime or wartime, is to help the Soldier prepare for whatever may come their way. What we do on a day-to-day basis is work to sustain software systems that are out in the field today and will be tomorrow.”

— Ned Keeler, SEC Director

SEC also employs several civilian contractors who call the CTSF their home base. They include geospatial technicians John Seibert and Teresa Miller, and configuration management techs Karin Reimel and Robert Davis.

Not just a set names on the CTSF roster, the SEC contingent at the CTSF plays a key role in the daily operation of the central Texas facility, and has played a major role in the Army’s distributive testing initiative.

“For instance,” Corpina pointed out, “We did risk reduction and risk mitigation work with DCGS-A (Distributed Common Ground System-Army) conducted between the CTSF and Fort Monmouth.”

The project was conducted over the CTSF’s end of the Defense Research and Engineering Network, DREN, he explained, utilizing SEC’s System Development and Integration Network, SDIN, services to complete the links between DCGS-A developers, Fort Monmouth and the CTSF.

Corpina explained the SDIN works by using the Joint On-Demand Interoperability Network, or JOIN, to interconnect existing networks including the DREN. Point-to-point connectivity between, for instance, the CTSF and a government development lab, is also provided by SDIN services via satellite and several other types of transport mechanisms, he said.

“Because of the capabilities we have here at the CTSF, and because of the value-added services made available through SEC, we can get a lot accomplished. We do a lot of work, for example for Team C4ISR through these combined capabilities,” he said.

“The partnership between the CTSF and SEC just makes a lot of sense from a business standpoint,” Corpina added.

The CTSF operates under the command of Col. Steven G. Drake. The facility is the Army’s center of excellence for interoperability certification testing. The CTSF provides a unique environment in which it supports the Department of Defense’s net-enabled strategic vision by executing configuration management for the Army LandWarNet baseline and system-of-systems integration and interoperability for Army and Joint C4ISR providers.

{ Photos p. 43, left to right: (L) Test Officer **Gavin Smith**, and Test Operator **Jody Olson** check cables and equipment in preparation for a recent Software Block 2 interoperability certification test event. • (R) A tracked vehicle product manager and CTSF test officers discuss the work necessary to connect this armored Knight vehicle to one of the facility’s three test floors. • Photo p. 44 : A pair of CTSF workers labor to link one of several Bradley Fighting Vehicle configurations to one of the facility’s test floors during a recent round of Army Interoperability Testing. The Bradley filled the CTSF’s outdoor test pad to capacity. — CTSF Photos by David G. Landmann }



## Army Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Materiel Enterprise

The Army C4ISR Materiel Enterprise is comprised of six independent and inter-dependent organizations that are collectively responsible for the life-cycle of C4ISR systems.

The team originates from a partnership between the U.S. Army Materiel Command (AMC) and the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA/ALT). Together, these organizations develop, acquire, provide, field and sustain world-class C4ISR systems and battle command capabilities for the joint warfighter.

### Army C4ISR Materiel Enterprise Members:

#### AMC Team Members:

- U.S. Army Communications-Electronics Command (CECOM)
- U.S. Army Communications-Electronics Research, Development and Engineering Center (CERDEC)
- CECOM Contracting Center (CECOM-CC)

#### ASA/ALT Team Members:

- Program Executive Office for Command, Control, Communications – Tactical (PEO C3T)
- Program Executive Office for Intelligence, Electronic Warfare and Sensors (PEO IEW&S)
- Program Executive Office for Enterprise Information Systems (PEO EIS)



collaboration partnership full-spectrum C4ISR support services teamwork innovation rapid response  
battle-command capabilities collaboration partnership full-spectrum C4ISR support services teamwork  
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<http://www.sec.army.mil/secweb>

### **U.S. Army Information Systems Engineering Command**

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