

## CECOM LCMC — Past, Present, and Future Sights Fixed on Soldiers

Timothy L. Rider

**I**n late June 1917, Camp Little Silver, NJ, consisted only of pup tents and tent pegs. The First and Second Reserve Telegraph Battalions were training Soldiers on telegraph technology and, before long, more battalions arrived at the camp. At the end of 1917, 2,416 enlisted men and 448 officers would arrive at or pass through the U.S. Army Signal Corps training post on their way to the “Great War.” Here also, the Signal Corps Radio Laboratory would begin devising means to communicate with the Army’s newest flying machines and to meet other specialized communication needs.

Warfighters depend on CECOM LCMC to develop, acquire, field, and sustain the C4ISR systems that keep them operational. Here, CPT Chad Foster, 1st Battalion, 66th Armor Regiment, 1st Brigade Combat Team (BCT), 4th Infantry Division (4ID), delivers a situation report during an air assault raid on suspected insurgent sanctuaries in Mushahda, Iraq. (U.S. Army photo by PO1 Michael Larson, U.S. Navy.)

From this fast-paced start, the installation that was officially renamed Fort Monmouth in 1925 began a tradition of superb service to the Nation. In the 90 years that followed, the post would shrink and grow at intervals as missions formed and changed. An array of organizations carrying varied and changing banners would pass through before the mission of training Signal Corps Soldiers would pass to another installation. The fast pace, however, continued well into the 21st century because of the sustained focus on Army command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) technologies.

Among the many technological contributions here were numerous milestones in the development of

radar. Vanguard I, the Army's initial foray into satellite communications, was developed at Fort Monmouth in the 1950s with the pioneering use of solar power and is still in use today. Fort Monmouth is where the first artificial quartz crystals were developed, leading to the design of the first portable "walkie-talkie" radio. It is where the Army built the first mobile, digital computer, and much to the dismay of lead-footed drivers, the world's first hand-held radar was built here. Engineers here also made significant contributions to telephone switching system, laser rangefinder, and night vision technologies. "If you were to remove the historic technological contributions to the modern world made by Fort Monmouth, this would be a much less advanced and much less enlightened world," said MG Dennis L.

Via, Commanding General (CG), U.S. Army Communications-Electronics Command (CECOM) Life Cycle Management Command (LCMC).

### **Today — Engineering the Integrated Army Enterprise**

The bottom line for CECOM is the warfighter. "The capabilities we bring to the warfighter are about more than just technology because they must be incorporated into warfighting doctrine," said Via. "Those capabilities achieve their greatest value when they're integrated into a cohesive whole, Soldiers are trained on the new technology, and the systems are sustained and adapted in the warfighting environment. If a Soldier sees, hears, communicates, commands, or protects the force with it, then you know it's a CECOM LCMC product," added Via.

Today, Fort Monmouth hosts a diverse group of organizations collectively responsible for maximizing C4ISR capabilities for our Nation's warfighters. This team is known as Army Team C4ISR and includes CECOM; Program Executive Office (PEO) Command, Control, and Communications Tactical (C3T); PEO Intelligence, Electronic Warfare, and Sensors (IEW&S); PEO Enterprise Information Systems (EIS); and the Communications-Electronics Research, Development, and Engineering Center (CERDEC).

At the heart of the Army Team C4ISR is the CECOM LCMC. "The CECOM LCMC works with all the Army Team C4ISR organizations looking at capabilities and programs from a total enterprise perspective for the Army," said Edward Thomas, CECOM LCMC Deputy to the CG. "In our case we would call that Army LandWarNet."

The CECOM LCMC comprises three functional support centers — the Logistics and Readiness Center (LRC), the Software Engineering Center (SEC), and the Acquisition Center — as well as three separate brigade elements: Tobyhanna Army Depot (TAD), Tobyhanna, PA; the U.S. Army Information Systems Engineering Command (USAISEC), Fort

Huachuca, AZ; the Central Technical Support Facility (CTSF), Fort Hood, TX, and its two partner PEOs (C3T and IEW&S).

"While PEOs and PMs [project managers] have life-cycle responsibility for individual systems, there is a critical necessity for the various C4ISR systems to interoperate — to work as one — in a network-centric environment. Someone must perform the integrating function as it becomes necessary," said Thomas. "That's our primary role. We have an important mission in support of the Army's EIS, meaning those information or management systems that the institutional Army uses to conduct its business."

In addition to the general support provided by CECOM LCMC, TAD has the specific mission to support the PMs for the fielding and sustainment of the Logistics Modernization Program, the new enterprise resource

planning technology system that is helping the Army manage all of its inventory and maintenance programs from the national level down to the tactical, installation, or retail levels. "CECOM LCMC is also responsible for supporting PEO EIS in its role

of providing the new financial accounting system for the Army," said Thomas.

In July 2008, the CECOM LCMC established operational control of the CTSF, a facility that is ensuring systems interoperability Armywide. "Any Army system that has a requirement to exchange information must go to the CTSF for testing in a system-of-systems or enterprise environment,"

said Thomas. "While CECOM supports the Army by providing interoperability certification, it also supports PEOs and PMs with all the technical and functional support they need to manage their programs, get them fielded, and ultimately sustain them."

For example, while PEO EIS is charged with management responsibility across the Information Infrastructure Modernization Program life cycle, all the engineering support to EIS comes from the USAISEC, whose engineers will plan, design, and install the information infrastructure backbone for a post, camp, or station.

The CECOM LCMC also provides PM offices with matrix support personnel who reside within the offices. "The matrix support efforts that take place across Army Team C4ISR are critical because our people are our

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SGT Joseph Kesner, C Co., 148th Infantry Battalion, 37th Infantry BCT, and Ernest Chaney, CECOM LCMC Senior Command Representative, discuss the C4ISR systems carried onboard the High-Mobility Multipurpose Wheeled Vehicle at Camp Arifjan, Kuwait, on July 14, 2008. Chaney is an Army civilian volunteer deployed to SWA from CECOM-Europe, Mannheim, Germany, and is the single point of contact in SWA for all Army Team C4ISR-related matters. (U.S. Army photo by Jim Hinnant, 401st Army Field Support Brigade.)

greatest asset. Over the course of their careers, they develop very specialized C4ISR knowledge,” said Via.

The CECOM LCMC Acquisition Center provides support to PMs and activities across Army Team C4ISR. “The CECOM Acquisition Center will transition and become part of the newly established U.S. Army Contracting Command [ACC], but it will remain collocated with us and in direct support to the CECOM LCMC CG,” said Thomas. “The standup of the ACC should positively impact us because the Army is putting additional emphasis on resourcing the contracting community.”

### Sustainment and Readiness for Current Operations

The CECOM LCMC supports the new Army Force Generation (ARFORGEN) process through integrating activities with the U.S. Army Sustainment Command (ASC), the U.S. Army Materiel Command’s lead element for ARFORGEN. The ASC’s Army Field Support Battalions (AFSBns) cut across all of the different commodities, from vehicles to aircraft to C4ISR systems to Soldier equipment and more.

The primary representatives of the CECOM LCMC to the AFSBn commanders are the CECOM senior command representatives. These personnel are located at key power projection platforms such as Fort Lewis, WA; Fort Bragg, NC; and Fort Hood. Three are in Southwest Asia (SWA), and others are located in Germany, Korea, and Rock Island Arsenal, IL.

“We’re the command responsible for fielding new equipment, for resetting C4ISR equipment to bring it back to operational standards, and [for] training Soldiers on that new equipment in



Technicians test a digital switching unit at a tactical operations center (TOC) at TAD. The testing is part of CECOM LCMC’s global field service representative support for 4ID, 1st Cavalry Division, Stryker brigades as well as the TOC reset mission for 4ID. (U.S. Army photo.)

time to have individual Soldiers and, ultimately, units and brigades ready to deploy,” said Thomas.

With operations in SWA as a major focus, the CECOM LCMC continues to support combatant commanders worldwide, including the 30,000 troops on the Korean peninsula as well as those involved in drug interdiction missions in South America and in continuing operations in Kosovo.

The LRC’s logistics assistance representatives and the SEC’s field software engineers, along with TAD’s forward-deployed maintenance experts, conduct a wide range of activities with deployed units to keep C4ISR systems operating. The LRC concentrates on repairs, spares, and maintenance of hardware or physical parts, and the SEC concentrates on software and performing post-deployment software support, which includes maintenance — fixing latent defects or bugs — and updating information assurance to deal with the changing threat environment. The CECOM LCMC’s TAD provides depot support to deployed units in the form of forward repair activities. “Tobyhanna has really transformed itself into an expeditionary capability,” said Dave Sharman, LRC Director.

The CECOM LCMC experts — whether based at a unit’s home station, in a forward center such as the Camp Arifjan Electronic Sustainment Support Center, or embedded in a unit — can diagnose problems and communicate back to the command headquarters. “If it’s a systemic issue that needs some engineering and design work, those same experts can communicate and translate those field problems to our engineers back here in the U.S.,” said Thomas. “Engineers in our labs will duplicate the problem, develop alternatives, and ultimately, through coordination with the field, test different alternatives and come up with solutions.”

“Our personnel are integrated into the units,” said COL Ray Montford, CECOM LCMC Chief of Staff. “They train with Soldiers, deploy with them, and know the systems inside and out, so they know what’s required. When those systems and units re-deploy back to the States, they know exactly what’s required so they can get those systems reset.”

CECOM LCMC has a robust ARFORGEN and unit set fielding integrated process team that includes members from all elements of the LCMC — PEOs, LRC, SEC, TAD, and CERDEC — who manage all of the support needed to ensure combat

brigades are ready for deployment and are supported during deployment and afterward. At any point in time, hundreds of CECOM LCMC personnel are forward deployed in support of Army troops.

### A New Chapter Begins

On March 17, 2008, Assistant Secretary of the Army for Installations and Environment Keith Eastin; then-U.S. Army Materiel Command CG GEN Benjamin S. Griffin; CECOM LCMC CG Via; and U.S. Army Research, Development, and Engineering Command CG MG Fred D. Robinson, along with various dignitaries and Army Team C4ISR representatives, gathered at a ceremony to mark a new chapter in the tradition of service and excellence that began at Camp Little Silver more than 90 years ago.

The groundbreaking ceremony at Aberdeen Proving Ground (APG), MD, marked the start of phase one construction of Army Team C4ISR's campus there — a \$477 million project to include five administration and laboratory buildings, a secure shop and warehouse, an auditorium, and a 1.5 million square-foot training facility. Phase two is slated to begin in 2009 with the construction of three more

buildings and renovations of existing buildings. The two phases of construction will create an Army C4ISR Center of Excellence at APG.

As a result of a 2005 Base Realignment and Closure (BRAC) decision, Fort Monmouth will close in September 2011 and CECOM LCMC and most of its Army Team C4ISR partners will relocate their headquarters to APG. "We intend to leverage BRAC as a catalyst for change," said Via. "The Army is making a once-in-a-generation investment in a Land-WarNet, C4ISR, and Battle Command Center of Excellence at APG. Along with state-of-the-art facilities, our personnel who relocate or are hired at APG will have an unprecedented opportunity to innovate and reshape our processes and organizational structures. We're going to build our organization for 2015 and beyond, determining what we need to support the Future Force and its capabilities and requirements."

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intern program," said Via. "CECOM LCMC has an extensive program of intern professional development and has established an Intern Advisory Council to bring the professional concerns of our many interns to the attention of our senior leadership."

The command has implemented significant training programs for mid- and senior-level management, including the Army Team C4ISR

Civilian Leader Development Program and an Executive Development Program. Since 2005, CECOM LCMC has sponsored more than 650 training lectures, programs, and courses for its personnel to attend. The command has also implemented innovative recruitment methods, including ef-

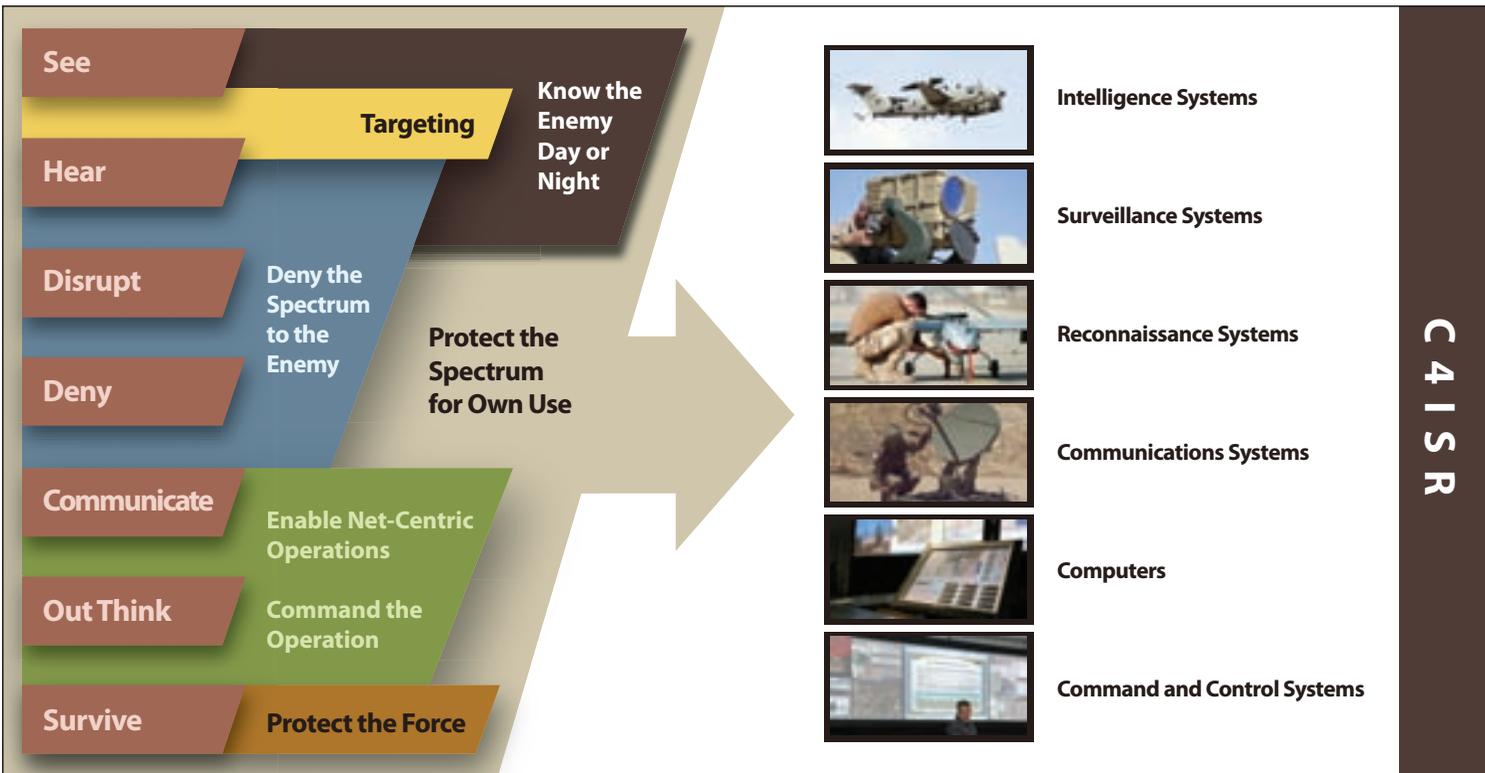
forts at college recruitment fairs, and it has reached out to attract and hire transitioning Soldiers and to facilitate spousal employment.

Positive strategic communications and knowledge capture will also contribute to the successful phased relocation of the workforce as will the architectural vision for the C4ISR Center of Excellence at APG. "We'll have a campus environment sufficient to locate all of our employees within easy walking distance of one another, and within those buildings we're going to collocate people by the domains in which they work," said Thomas. "For example, all of the people working in the satellite communications area — whether they're R&D [research and development] engineers, systems engineers, software engineers, logisticians, or PM personnel — are going to be located together."

In reconstituting the command in its new location at APG, one of the CG's top priorities will be to take care of the CECOM LCMC personnel who are critical to the commander's success. "One of the catalysts for building CECOM 2015 and for growing our future Army civilian leaders is an emphasis on our command's



SSG Stephen Achee and SSG Elizabeth Engstedt, Combat Service Support (CSS) Automated Management Office, Headquarters Support Co., 449th Aviation Support Battalion, Texas Army National Guard, maintain the CSS Very Small Aperture Terminal satellite at Logistical Support Area Anaconda, Baghdad Province, Iraq. (U.S. Army photo by SGT Huey Kehl.)



C4ISR

C4ISR provides indispensable capabilities to the warfighter in support of information operations.

Mission personnel, who are currently spread across 40 to 50 widely separated buildings at Fort Monmouth, will occupy a much smaller 16-building complex at APG. “There’s going to be a building for communications systems, a building for command and control, and a building for ISR. Buildings for all of the different disciplines from cradle to grave will be located together, and we think that is going to be a terrific improvement for us,” said Thomas.

The relocation of Army Team C4ISR is already happening as an initial presence of early move volunteers and new hires is being formed at APG. “We’ve begun moving our people down there in phases. Approximately 300 positions have already moved and are being housed in interim building spaces,” said Thomas. “Next year, we’ll move about 500 to 600 people. If we’re successful, and we think we will be, by the time the first phase of the Army Team C4ISR campus is ready in 2010, we’ll already have about

1,000 people down there with our core management structure and many of our core capabilities in place. We’ll be able to round out our organization there through 2010 and 2011,” said Thomas. Via added that over half of the CECOM LCMC worldwide workforce is not affected by the move of the headquarters to APG and will remain stable.

In his first philosophy of command briefing to the workforce after assuming command, Via commented, “Throughout my entire career as a Signal Corps officer, I’ve been a customer of this command, so I have a direct appreciation of what CECOM brings to the table for the warfighter. And since my arrival, I’ve gained an even greater appreciation of the critical role CECOM LCMC plays every day in support of our deployed Soldiers. Our warfighters depend on the technological edge our systems provide, and they depend on us to develop, acquire, field, and sustain these C4ISR systems and keep

them operational. We will never let them down.”

Via said that since taking command 1 year ago, he has traveled extensively throughout the command’s worldwide footprint and has also visited with warfighters in theater, preparing to deploy, and returning from theater. “I consistently receive accolades about the great work Army Team C4ISR does,” he said. “We have a very powerful team with all of our components creating an incredible force that delivers powerful capabilities to the warfighter every day. At the end of the day it’s all about the Soldier.”

*(Author’s Note: Elina Tsaturyan of the CECOM LCMC G-3 contributed to this article.)*

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