
COVER FEATURE

U.S. Army Communications-Electronics Command (CECOM): Bringing Command, Control, and Communications to the World Through Security Assistance

By

Patricia Devine



Main Gate: Fort Monmouth, New Jersey

Fort Monmouth is located in central New Jersey near the Atlantic Coast. Fortuitously situated between New York and Atlantic City, it is a must stop for visitors interested in what the United States Army has to offer. Its origin was a potato field which the U.S. Army purchased in 1917 to provide an area to develop a Signal Corps prior to the entry of U.S. forces in the First World War. At that time, the principal drawing card of this location was the proximity of the engineers at the nearby Marconi Wireless Telegraph Company. A squadron of biplanes was stationed there to test equipment developed in the radio laboratory during World War I. Meanwhile, General Pershing, Commander-in-Chief of U.S. Forces, also had a Carrier Pigeon Training School established there based on his belief in their effectiveness and his disdain for

aircraft. These modest beginnings presaged an extensive expansion program and numerous reorganizations that led to the facilities present in the area today.

The U.S. Army Communications-Electronics Command (CECOM) and Fort Monmouth develop and manage tactical command, control, and communications equipment for the U.S. Army. A major subordinate command of the U.S. Army Materiel Command (AMC), CECOM includes the Command, Control, Communications, and Intelligence Logistics and Readiness Center (C3I LRC), a Research, Development, and Engineering Center, and various staff and support directorates. All of these activities report to CECOM's Commander, Major General Alfred J. Mallette. In addition, a number of Program Executive Officers and their Program Managers are located at the Fort. Virtually all of these organizations are involved, to a greater or lesser extent, in the command's Security Assistance business.



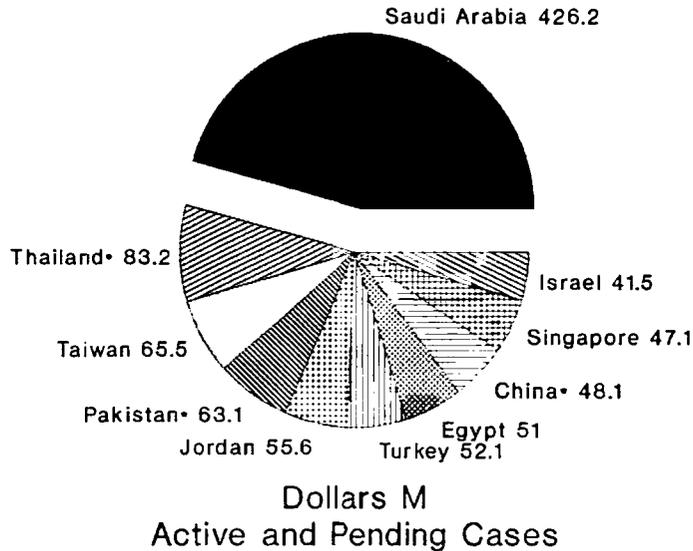
Communications-Electronics Command Building

The C3I LRC is headed by Mr. James Skurka and includes five Directorates for Materiel Management, Systems Management, Logistics and Maintenance, Readiness, and Security Assistance Management. Also under its purview are the CECOM Communications Security Logistics Activity at Fort Huachuca, AZ and the Intelligence Materiel Management Center at Vint Hill Farms Station, VA. The LRC is the primary conduit of CECOM managed equipment furnished to the U.S. Army, and through the activities of its Security Assistance Management Directorate (SAMD), to foreign militaries. And this business continues to flourish at CECOM.

The command's Security Assistance activities center on the Foreign Military Sales (FMS) Program and, in conjunction with direct commercial sales (DCS), on the providing of recommendations regarding technology releaseability. The Security Assistance Management Directorate (SAMD) currently manages over 600 active and pending FMS cases worth approximately \$1.3B. Another 336 cases managed by other AMC commands include lines valued at \$787M for CECOM equipment, bringing CECOM's total FMS volume to \$2.1B, almost double

what it was in March 1990. The equipment CECOM provides may not compare in cost to the big ticket systems sold by these other commands but it is nonetheless critical to the operation of the aircraft, vehicles, and missiles in which it is installed.

CECOM'S MAJOR CUSTOMERS



As of Mar 92

-Suspended

It comes as no surprise that Saudi Arabia, as shown above, is CECOM's biggest customer. Support for this major customer involves a whole new way of doing business. The Security Assistance community is long accustomed to providing a "Total Package Approach" (TPA) to foreign military sales, i.e., providing the purchaser everything he needs to operate, maintain, and repair equipment bought from the U.S. For a radio, this might mean providing spare parts, tools, test sets, manuals, and training. The new task is now to "outfit a signal company"—meaning TPA and then some! This involves analyzing the table of organization and equipment for a U.S. Army signal company, factoring in the customer's unique requirements, and developing a case for all of the end and support items. CECOM just prepared such a case for the Saudis. The volume and complexity of business with Saudi Arabia necessitates frequent travel to the Kingdom, and recruitment is underway for a CECOM expert to serve in the Major Systems Office in Riyadh.

While many organizations grapple with the difficult task of restructuring to accommodate decreasing requirements and corresponding dollar reductions, the SAMD recently adjusted its organization to manage its burgeoning business. The Security Assistance mission had been given directorate status in 1974. Before that, the Directorate for Materiel Management administered the program, first through a team, later a branch, and eventually, a division. Under the direction of Mr. Eugene Bennett and his deputy, Ms Mary Ruscavage, the directorate now includes 103 employees in four divisions. Employing the weapon systems concept established by General William Tuttle Jr., former AMC Commander, the Weapon Systems Support Division prepares and manages cases and equipment programs for avionics and such systems as the Battery Computer System, FIREFINDER, GUARDRAIL, Lightweight Integrated Tactical Command and Control System, and Mobile Subscriber Equipment.

The division, in its Customer Support Branch, prepares and manages major cases requiring intensive management and including program management lines. These cases (mostly for Saudi Arabia) and corresponding spaces have grown from six in FY 1991 and should double by the end of this year. Upcoming sales and increases to existing cases suggest continued growth in this arena.

The Program Management Division handles Special Defense Acquisition Fund and logistical plans for CECOM's "staples:" radios, installation harnesses, Patriot support items, interrogator sets, night vision equipment, global positioning systems, telephones, radar sets, batteries, teletypewriters, *et. al.* This division supports case writers in the Customer Support Branch and the Regional Operations Division. As its name implies, the Regional Operations Division prepares and manages cases by geographic area. Their cases are for items which do not lend themselves to the weapon systems concept.

Last, but not least, the Plans, Programs, and Resources Division handles special programs such as International Logistics Supply Delivery Plans, Cooperative Logistics Supply Support Arrangements, repair and return cases, and case closeouts. It also manages directorate resources including ADP support, develops and interprets policies and procedures, maintains statistics, and accomplishes administrative functions.

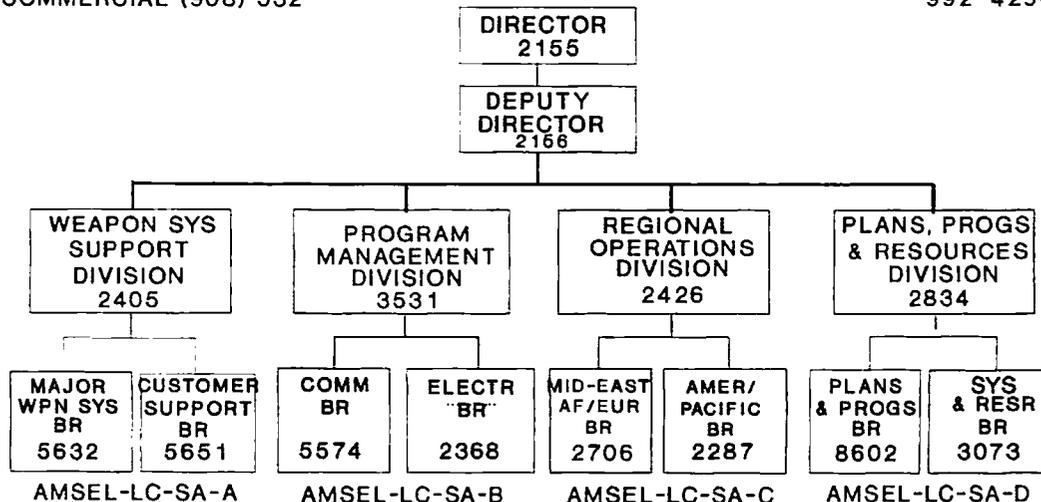
The U.S. Army Munitions Control Program is an important function of the Plans, Programs, and Resources Division. The purpose of the program is to develop an Army position on export license applications for the direct commercial sale of defense articles and services. A defense manufacturer submits its application for an export license to the State Department to export defense articles or services. State, in turn, staffs selected applications with the U.S. Army Security Assistance Command (USASAC). USASAC, as the executive agency for HQ Department of the Army, provides the Army recommendation to grant or deny the request for export. The USASAC response for communications and electronics items is based on recommendations from the CECOM community. In FY 1991 CECOM reviewed 1380 of 5645 export license requests staffed by the Army. The Plans, Programs and Resources Division must process the export license requests within 13 days of receipt from USASAC.

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FIREFINDER radars are the CECOM weapon systems which to date have the highest dollar value of foreign sales. The Artillery Locating Radar (AN/TPQ-37) and Mortar Locating Radar (AN/TPQ-36), enable friendly forces to locate and bring immediate fire upon enemy mortar, artillery, and rocket-launching positions, silencing them before they can adjust their fires on friendly units and positions. The world's first automatic hostile-weapon-locating systems, FIREFINDER radars use advanced phased array antenna techniques complete with computer-controlled signal processing. They function by spotting enemy projectiles in flight and mathematically backplotting their trajectory. FIREFINDER reports the position of the weapon in grid coordinates that can be fed automatically into artillery fire direction centers, enabling them to target the enemy weapons with guns, rockets, or other ordnance.



AN/TPQ FIREFINDER Radar

So far, CECOM has shipped 75 FIREFINDER radars worth \$460.6M to 11 countries. Another radar unit is scheduled for fielding in May 1992. Interest continues in this effective system, with one case pending for five radars, and other cases are possible based on recent interest shown by various countries.

Nonstandard, commercial equipment is garnering an increasing share of CECOM's foreign military sales. The program for Racal and Advanced Electronics Company Jaguar vehicle, manpack, and handheld radios totals over 8,000 radios valued at \$363M. Other commercial purchases include Ericsson (Norway) multichannel radios, Canadian Marconi UHF radios, Thomsen CSF (France) radios, Telemic (Germany) switchboards, Litton and Varo night vision goggles. These commercial and sometimes off-shore acquisitions present unique challenges to the CECOM community supporting the sales. Regulatory waivers of cost and pricing data, sole source procurements, and the engineering required to install nonstandard items in standard Army systems all complicate the process.



Aviator Night Vision Imaging System

A number of factors prompt these nonstandard sales. In many cases, countries have existing inventories of communications equipment and long-standing relationships with their contractors. They seek to integrate their equipment in the new U.S. Army tanks and missile systems they are buying. Also, restrictions on the release of standard U.S. Army items sometimes makes a commercial version the best alternative. The continued reliance of our customer countries on the U.S. Government to purchase these nonstandard, commercial items testifies to the effectiveness of the FMS process and reinforces the importance of the industry/U.S. Government team.

Just as important is the CECOM team which makes possible the sale of communications and electronics equipment. The program executive officers and program managers, the engineers and scientists of the Research, Development, and Engineering Center, the item managers, engineers, and security assistance experts of the C3I LRC, the contracting officers of the C3I Acquisition Center, and the resource managers are all vital to providing the quality support our FMS customers have come to expect. CECOM's SAMD welcomes comments and inquiries from throughout the security assistance community. The directorate's goal is to remain the command's focal point for providing quality communications and electronics equipment to foreign customers worldwide.

ABOUT THE AUTHOR

Mrs. Patricia Devine is Chief, Systems and Resources Branch, SAMD. She came to CECOM in April 1991 from the HQ U.S. Army Training and Doctrine Command where she was Deputy Director, International Army Programs. She has a BA in English from the University of Massachusetts.