The Army Facilities Components System

By Edward Scott

During World War II, it became apparent that the Army needed an improved emergency construction-support system to enhance planning and execution of the construction missions in the theater of operations. The goal was to develop standard designs and provide a common base for planning, logistics support, and construction.

In 1951, the Office of the Chief of Engineers developed a system to facilitate planning and to serve as a construction guide to engineer field units. The system, the Engineer Functional Components System—later called the Army Facilities Components System (AFCS)—was established as a set of standard facility designs, managed and supported at the U.S. Army Corps of Engineers headquarters.

The AFCS design-and-support mission transferred to the U.S. Army Engineering and Support Center in Huntsville, Alabama, in 1978. Program management remains at the Corps's headquarters. The AFCS is an engineering construction-support program for Army mission construction in a theater of operations and for other OCONUS requirements. It also supports emergency construction during disaster relief in any area when required and also supports worldwide humanitarian-relief efforts.

The system was used in support of Operations Restore Hope in Somalia, Uphold Democracy in Haiti, Joint Endeavor/Joint Guard in Bosnia, and Allied Force in Kosovo. The AFCS provides planning guidance, construction drawings, bills of material, and labor and equipment estimates. The Huntsville Center's mission is to maintain and modernize the information contained in the system and to distribute it to all military engineer units on the distribution list or that request the system (see article, page 16). Although the AFCS is updated continuously, the system is sent to engineers annually.

Until 1995, a series of 11 Army technical manuals provided AFCS designs and related information to military engineers. All the information from these technical manuals is now available on a compact disk that can be used on common office computer equipment. This user system is the Theater Construction Management System (TCMS) (see sidebar, page 17).

In addition to the AFCS design drawings and related data, the TCMS includes commercial software and government-developed programming to facilitate planning, logistics coordination, design, site adaptation, communication, construction management, and reporting. The AFCS includes construction drawings and computerized information for about 4,400 facility designs and 750 installation designs. Some of the designs included in the system are troop camps, hospitals, bridges, marine terminals, and ammunition storage facilities.



A soldier uses the TCMS to locate plans for a construction project.

This system not only eliminates the time it normally would take to design a facility but also provides soldiers with a wealth of information.

Among the Huntsville Center's AFCS responsibilities are to—

- Develop budgets.
- Prepare and conduct industrial advancements in technology.
- Plan projects and programs.
- Arrange and monitor periodic exercises of the system.
- Develop and coordinate scopes of work.
- Negotiate and award design contracts.
- Prepare designs, bills of material, and labor and equipment estimates.
- Review designs for technical and functional adequacy.
- Provide automation support for AFCS and TCMS programs.
- Coordinate work with the Corps's labs.

For more information about the Army Facilities Components System, contact Edward Scott at (256) 895-1781.

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