

## CHAPTER 2

### EXPLANATION OF THE TERMINOLOGY AND AFCS DATA

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#### 2-1. Army Facilities Components System (AFCS)

The AFCS is a tool used to assist military planners, supply agencies, and construction personnel at all levels that have a role in Army construction in theaters of operations. The AFCS uses a building block concept to permit maximum flexibility. The building blocks are items, subfacilities, facilities, and installations.

**2-2. Building Blocks** TM 5-304 provides a complete discussion of the building block concept and explains other terminology in the AFCS system. The building blocks are discussed briefly below:

a. **Item.** An item is any construction material or equipment that makes up a larger product. Each item has an associated National Stock Number, description, unit of issue, and quantity. The quantities used include an allowance for material wastage and loss.

b. **Facility and Subfacility.** A facility is a group of items designed to provide a service. Users should therefore carefully read the facility descriptions to ensure that all components necessary to build the desired structure are ordered. A Subfacility differs from a facility only in its use in TM 5-303. The purpose of a Subfacility is to reduce the repetitive listing of a facility's construction materials. Users should also be aware that components of some facilities (roads, hardstands and bridges) are separated into two Subfacility groupings to widen the selections in meeting actual field conditions.

c. **Installation.** An installation is a group of facilities designed to provide a specific service or support to some military function in a TO.

d. **Component.** "Component" is a generic term sometimes used to refer to any facility or installation contained in the AFCS.

**2-3. Planning Table** "Planning Table" is a term that is used to refer to the printed installations as explained in Chapter 3.

#### 2-4. Design Criteria

a. Design criteria are shown on the construction drawings in TM 5-302 when considered beneficial in adapting AFCS designs to actual

site conditions. Also, Chapter 2 or TM 5-302 provides additional design and construction considerations.

b. The facilities in the system are designed to operate in one or more of four climatic zones. The four climatic zones are:

(1) *Temperate Zone.* The geographical areas in which mean annual temperatures are between + 30°F and + 70°F as identified by isothermal lines.

(2) *Frigid Zone.* The geographical areas in which mean annual temperatures are lower than + 30°F as identified by isothermal lines.

(3) *Tropical Zone.* The geographical areas in which mean annual temperatures are higher than + 70°F as identified by isothermal lines.

(4) *Desert Zone.* The geographical areas which are arid and without vegetation.

#### 2-5. Construction Standards

Standards of construction are identified for the purpose of managing construction resources. The availability of resources, the operational plans and the using unit's mission will dictate the standards of construction to be used in theaters of operation. JCS Publication No. 3 sets forth the standards of construction that are applicable in a theater of operation. The standards are based primarily on the duration of the contingency and previously were defined as follows: initial (INT)-06 months, intermediate (ITR)6 to 24 months, and temporary (TPR)-24 to 60 months. Current JCS Publication No. 3 doctrine refines the construction standards as initial (06 months) and temporary (6-24 months). The 24 to 60 months standard has been deleted. Installations and some facilities listed in the AFCS are identified by a corresponding construction standard. In most cases, facilities contained in the AFCS fall into the temporary standards. The nature of materials used in construction of the AFCS facilities and the structural aspects of the designs are such that the life of facilities will normally exceed 2 years when appropriate maintenance is performed.

#### 2-6. Building Structures

The AFCS views building structures as being composed of three basic types: disposable (woodframe, block, concrete or any other construction material that is formed on the site,

and which has little or no salvage value); preengineered relocatable (panelized buildings, tents or any other structure that has an 85 percent recoverability); and mobile (containerized buildings or any other structure that can be moved and erected frequently with little construction effort required, i.e., the MUST Hospital). The AFCS allows for the range of these basic types to permit commanders the option of selecting the facility that best suits available construction effort, mission requirements, and availability of materials. Few mobile facilities other than tents are presently contained in AFCS; however, priority for future designs has been given to the initial mobile-type facilities where feasible.

**2-7. Construction Effort**

The construction effort in man-hours required for engineer troop units to erect or construct

each facility and installation has been estimated and is shown in this manual. The construction estimates are based on the use of standard construction practices and procedures. The estimates include neither effort of administration, mobilization, and planning, nor effort lost because of weather delays. Estimates of actual working time required for the task was obtained by assuming the use of skilled personnel in the temperate zone. Estimates for other climatic zones were obtained by applying the following adjustment factors:

Tropical .....	1.45
Desert.....	1.25
Frigid .....	2.41

Additional information on labor categories, operational conditions and engineer unit capabilities is provided in TM 5-304.