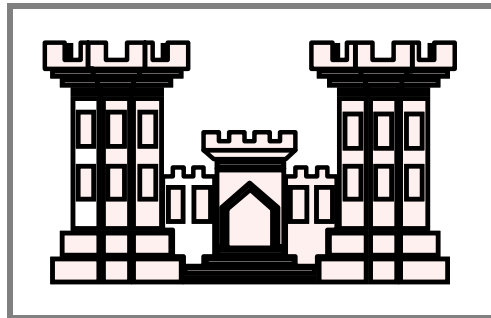


**FM 5-116**

# **Engineer Operations: Echelons Above Corps**



Headquarters,  
Department of the Army

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## Preface

Field Manual (FM) 5-116 provides doctrine to commanders and staffs concerning the employment of engineer units at echelons above corps (EAC). These units will be required to complement or expand the combat capabilities of divisional engineer assets as well as construct, maintain, and rehabilitate the logistics infrastructure needed for operational sustainment of the combat forces. Some EAC engineer units may operate as far forward as the brigade's rear area, but generally most will operate in the communications zone (COMMZ).

The EAC engineer structure varies depending on the size of the combat force being supported, the type of action undertaken (offense, defense, stability, and support), the maturity of the theater, the availability of host-nation support (HNS), and the intensity of the conflict. Engineer EAC missions change as the theater expands and must be accomplished in nuclear, biological, chemical (NBC) and electronic warfare environments.

This manual addresses specific actions EAC engineer units must plan and conduct. The doctrine presented is applicable to combined, joint, and contingency operations.

The proponent for this publication is HQ, TRADOC. Send comments and recommendations on Department of the Army (DA) Form 2028 directly to Commandant, United States Army Engineer School (USAES), ATTN: ATSE-TD-D, Fort Leonard Wood, Missouri, 65473-6650.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

## Chapter 1

# Operational Challenges to Army Engineers

*Engineering in the theater of operations (TO) builds the foundation for decisive operations, reconstitution of the force, and development of conditions favorable for early withdrawal of United States (US) forces. When military forces of the US are called upon to support our national interests, we must have the capability to project elements of power from the continental United States (CONUS) or from overseas bases into the area of operations (AOs). Projecting and building up forces require such infrastructure as airfields, ports, roads and bridges, water sources, electrical power, and much more. The buildup of forces requires either adequate preexisting infrastructure, upgrading existing infrastructure, or construction of new facilities.*

— *Mr. James Stewart*  
*Military Engineer Development Analyst*

## THE NATURE OF ENGINEER INVOLVEMENT

The Army faces a wide range of potential enemies; it is prepared to fight under diverse conditions, climate, and intensity levels with its sister services and its coalition partners. The range of military operations that are neither precise, clearly defined, nor exclusive of themselves includes the diverse environments of peacetime, conflict, and war. A distinct and/or unique point in time or geography does not exist to mark the separation of one category of conflict from the next. Recent challenges to national security interests showed that the Army employed engineers on the full range of military operations. *Figure 1-1, page 1-2, shows the relationships of the range of military operations.*

## PATTERNS OF OPERATIONS

From initial mission receipt through deployment, operations, and transition to follow-on operations, engineers will execute their missions through a deliberate set of patterns of operations. These patterns are not phases, nor are they sequential. They serve to focus the many tasks that the armies have always performed in war and other military operations. The patterns of operations are—

- Project the force. Deploy tailored forces directly into operations.
- Protect the force. Incorporate organizational, material, and procedural solutions to protect soldiers, information, and equipment across the full spectrum of operating environments.