

## MOBILITY

## Preface

### PURPOSE

Field Manual (FM) 5-100 prescribes the engineer doctrine for support of United States (US) forces engaged in combat. The contents of FM 5-100 are based on the concepts of US Army tactical doctrine in FM 100-5. As the engineer keystone manual, FM 5-100 describes how engineers provide battlefield support within the framework of Army AirLand battle doctrine in five mission areas:

- Mobility.
- Countermobility.
- Survivability.
- General engineering.
- Topographic engineering.

This manual, FM 5-101, contains the doctrine and procedures for the first of these mission areas, mobility.

### SCOPE

Mobility is defined as those activities that enable a force to move personnel and equipment on the battlefield without delays due to terrain or obstacles. The purpose of this manual is to describe the effects of natural and other restrictions to this movement and present methods of counteracting these restrictions. The contents of this manual include discussions of the following six areas of engineering support of mobility:

- Detection, bypass, marking, and breaching (neutralization) of minefield.
- Detection, bypass, marking, and reduction of obstacles other than minefield.
- Gap crossing.
- Construction and maintenance of combat roads and trails.
- Expedient construction necessary to support Army aviation and Air Force ground facility requirements—forward aviation combat engineering (FACE).

- Determination of the effects of terrain and weather on ground vehicle mobility.

All Army combat and combat support units must be capable of countermine and counterobstacle activities. Engineer support of force mobility is necessary when the nature of the terrain or obstacle exceeds the maneuver unit's capability, when the enemy or operational situation dictate, or when speed and timeliness are essential. Engineer combat organizations have the mission and capability to perform the more difficult mobility tasks.

## **INTENDED AUDIENCE**

FM 5-101 was developed for the following reader audience:

- Engineer unit commanders, staff, and personnel who must analyze, plan, and execute engineer support to preserve the combined arms team's ability to maneuver in combat.
- Maneuver unit commanders and staff who will use engineer mobility support.

Users of this manual must adapt the guidance to fit the weapons and equipment found in their organizations. The term "engineer unit" refers to any type of engineer element tasked to provide mobility support.

## **INTERNATIONAL AGREEMENTS**

The provisions of this publication are the subject of the following International Standardization Agreements (STANAGs): STANAG 2010 (Military Load Classification Markings); STANAG 2021 (Computation of Bridge, Raft, and Vehicle Classifications); STANAG 2036 (Land Minefield Laying, Recording, Reporting and Marking Procedures); STANAG 2096 (Reporting Engineer Information in the Field); and STANAG 2889 (Marking of Hazardous Areas and Routes Through Them).

## **USER INFORMATION**

The proponent of this publication is the US Army Engineer School. Submit changes for improving this publication on DA Form 2028 (Recommended Changes to Publications and Blank Forms). Arrange comments in sequence by manuscript page, indicating exactly how a portion should be reworded with a brief reason for the change. Send comments to Commandant, US Army Engineer School, ATTN: ATZA-TD-P, Fort Belvoir, VA 22060-5291.