

Terrain Analysis

Preface

SCOPE

Terrain analysis, an integral part of the intelligence preparation of the battlefield (IPB), plays a key role in any military operation. During peacetime, terrain analysts build extensive data bases for each potential area of operations. They provide a base for all intelligence operations, tactical decisions, and tactical operations. They also support the planning and execution of most other battlefield functions. Because terrain features continually undergo change on the earth's surface, data bases must be continuously revised and updated.

PURPOSE

This field manual prescribes basic doctrine and is intended to serve as a primary source of the most current available information on terrain analysis procedures for all personnel who plan, supervise, and conduct terrain analysis. The manual discusses the impact of the terrain and the weather on operations.

USER INFORMATION

The proponent of this publication is the US Army Engineer School. Submit changes for improving the publication on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commandant, Directorate of Training and Doctrine, US Army Engineer School, ATTN: ATSE-TDM-P, Ft. Leonard Wood, MO 65473-6500.

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Unless otherwise stated, whenever the masculine gender is used, both men and women are included.

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Introduction

Throughout history, the knowledge and physical effects of terrain have played a dominant role in the development of society during both peace and war. Terrain is a portion of the earth's surface that includes man-made and natural features. Terrain analysis is the process of analyzing and interpreting these features and the influence of weather and climate on them. Terrain data (or information) is raw data in any form about a segment of terrain. Knowledge of the battlefield terrain is extremely important during all phases and levels of military planning.

Analysis is the process of interpreting natural and man-made features of a geographic area to determine their effects on military operations. Terrain analysis support during battle provides the combat commander with expedient, tailored, and updated products. Expedient responses, especially at division level, are necessary to properly and adequately inform commanders of the impact of terrain on the battle at hand.

Terrain intelligence is thus one aspect of operational intelligence. Terrain analysts produce terrain intelligence for use at the tactical and strategic levels of operation. Operational intelligence, however, is important at all levels, so commanders at higher headquarters may use products produced at lower levels.

Terrain analysis is still important during the postbattle stage. The battle will significantly alter the terrain, requiring updating of previously performed terrain analysis. The terrain analyst may also need to update completed products that have potential value for the next battle.

RESPONSIBILITIES

Analysts

Data base assembly

All terrain teams get as much terrain data as possible for their respective areas of interest. The Defense Mapping Agency (DMA) is responsible for producing the standard planning terrain analysis data base (PTADB) and the tactical terrain analysis data base (TTADB) used by the terrain analysts to support the maneuver commander's needs. In those areas of the world where coverage is not available, the terrain analysis team must