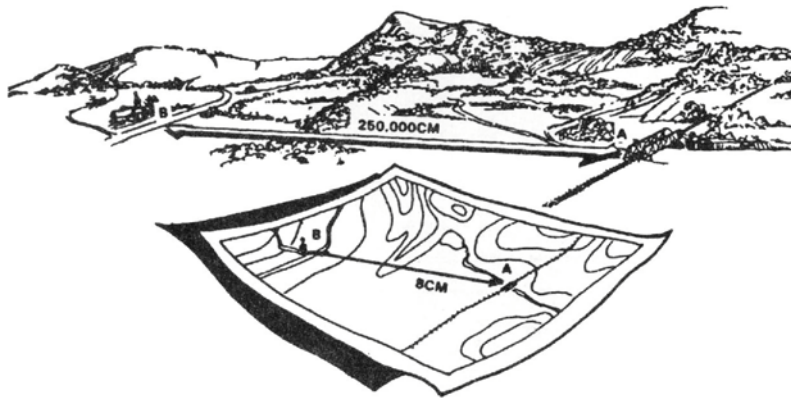


# MAP READING AND LAND NAVIGATION



# MAP READING AND LAND NAVIGATION

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## PREFACE

The purpose of this field manual is to provide a standardized source document for Armywide reference on *map reading* and *land navigation*. This manual applies to every soldier in the Army regardless of service branch, MOS, or rank. This manual also contains both doctrine and training guidance on these subjects. Part One addresses map reading and Part Two, land navigation. The appendixes include a list of exportable training materials, a matrix of land navigation tasks, an introduction to orienteering, and a discussion of several devices that can assist the soldier in land navigation.

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

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PART ONE  
**MAP READING**

CHAPTER 1  
**TRAINING STRATEGY**

*This manual is in response to an Armywide need for a new map reading and land navigation training strategy based on updated doctrine. This chapter describes and illustrates this approach to teaching these skills.*

**1-1. BUILDING-BLOCK APPROACH**

Institution courses are designed to prepare the soldier for a more advanced duty position in his unit. The critical soldiering skills of move, shoot, and communicate must be trained, practiced, and sustained at every level in the schools as well as in the unit. The map reading and land navigation skills taught at each level are critical to the soldiering skills of the duty position for which he is being school-trained. Therefore, they are also a prerequisite for a critical skill at a more advanced level.

a. A soldier completing initial-entry training must be prepared to become a team member. He must be proficient in the basic map reading and dead reckoning skills.

b. After completing the Primary Leadership Development Course (PLDC), a soldier should be ready to be a team leader. This duty position requires expertise in the skills of map reading, dead reckoning, and terrain association.

c. A soldier completing the Basic NCO Course (BNCOC) has been trained for the squad leader position. Map reading and land navigation at skill level 3 requires development of problem-solving skills; for example, route selection and squad tactical movement.

d. At skill level 4, the soldier completing the Advanced NCO Course (ANCOC) is prepared to assume the duty position of platoon sergeant or operations NCO. Planning tactical movements, developing unit sustainment, and making decisions are the important land navigation skills at this level.

e. Officers follow similar progression. A new second lieutenant must have mastered map reading and land navigation skills, and have an aptitude for dead reckoning and terrain association.

(1) After completing the Officer Basic Course, the officer must be prepared to assume the duties and responsibilities of a platoon leader. He is required to execute the orders and operations of his commander. Map reading and land navigation at this level require development of the problem-solving skills of route selection and tactical movement.

(2) After completing the Officer Advanced Course, the officer is prepared to assume the duties and responsibilities of a company commander or primary staff officer. The commander must plan and execute operations with full consideration to all aspects of navigation. The staff officer must recommend battlefield placement of all administrative, logistical, and personnel resources. These recommendations cannot be tactically sound unless the estimate process includes a detailed analysis of the area of operations. This ability requires expertise in all map reading and navigation skills to include the use of nonmilitary maps, aerial photographs, and terrain analysis with respect to both friendly and enemy

forces. The commander/staff officer must plan and execute a program to develop the unit's train-the-trainer program for land navigation.

f. A program of demonstrated proficiency of all the preceding skill levels to the specified conditions and standards is a prerequisite to the successful implementation of a building-block training approach. This approach reflects duty position responsibilities in map reading and land navigation. An understanding of the fundamental techniques of dead reckoning or field-expedient methods is a basic survival skill that each soldier must develop at the initial-entry level. This skill provides a support foundation for more interpretive analysis at intermediate skill levels 2 and 3, with final progression to level 4. Mastery of all map reading and land navigation tasks required in previous duty positions is essential for the sequential development of increasingly difficult abilities. This building-block approach is supported by scope statements. It is part of the training doctrine at each level in the institutional training environment of each course.

g. Exportable training and instructor support/certification packages are being developed based upon the updated map reading and land navigation field manual. Innovative training devices and materials are being developed for use in the institution, ROTC regions, and the field. (See Appendixes E and H.)

### **1-2. ARMYWIDE IMPLEMENTATION**

A mandatory core of critical map reading and land navigation tasks and a list of electives will be provided to each TRADOC service school and FORSCOM professional development school. Standardization is achieved through the mandatory core. Exportable training material is made available to support Armywide implementation.

### **1-3. SAFETY**

Unit leaders plan to brief and enforce all safety regulations established by local range control. They coordinate the mode of evacuation of casualties through the appropriate channels. They review all installation safety regulations. Unit leaders must complete a thorough terrain reconnaissance before using an area for land navigation training. They should look for dangerous terrain, heavy trafficked roads, water obstacles, wildlife, and training debris.