**★ FM 21-18** 

FIELD MANUAL NO. 21-18 HEADQUARTERS DEPARTMENT OF THE ARMY Washington, DC, 1 June 1990

# FOOT MARCHES

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

★ This publication supersedes FM 21-18, 29 January 1971.

# **CONTENTS**

			Page
Preface	***********		vi
CHAPTER 1.	INTRO	DUCTION TO FOOT MARCHES	
	1-1.	Historical Examples	1-1
	1-2.	Fundamentals	1-2
	1-3.	March Mission	1-3
	1-4.	Classification of Movements	1-3
	1-5.	Types of Marches	1-5
CHAPTER 2.	FACTO	RS AFFECTING FOOT MARCHES	
	2-1.	Tactical Considerations	2-1
	2-2.	Effects of Weather and Terrain	2-3
	2-3.	March Discipline	2-4
	2-4.	Water Discipline	2-4
	2-5.	Acclimatization Procedures	2-5
	2-6.	Morale	2-6
	2-7.	Individual Load	2-7
CHAPTER 3.	MOVEN	MENT PLANNING FOR FOOT MARC	HES
	3-1.	Planning	3-1
	3-2.	Time-Distance Terms and Factors	3-8

		Page	
3-3.	March Computations	3-12	
3-4.	Road Movement Table	3-16	
3-5.	Strip Map	3-18	
CHAPTER 4. <b>EXECU</b>	TION OF FOOT MARCHES		
Section I. Conduc	ct of the March	4-1	
4-1.	Organization for the March	4-1	
4-2.	Security	4-4	
4-3.	Reaction to Enemy Contact	4-5	
4-4.	Communications	4-7	
4-5.	Halts	4-8	
4-6.	Accordion Effect	4-9	
4-7.	Distance Between Units	4-10	
4-8.	Nuclear, Biological, Chemical	4-11	
Section II. Persor	Section II. Personnel Duties		
4-9.	Company Commander	4-12	
4-10.	Company Executive Officer	4-14	
4-11.	Company First Sergeant	4-14	
4-12.	Platoon Leader	4-14	
4-13.	Platoon Sergeant	4-15	
4-14.	Squad Leader	4-16	
4-15.	Company Medical Aidman	4-17	
4-16.	Guides	4-17	
4-17.	Road Guards	4-18	
4-18.	Pace Setter	4-18	

			Page
Section III.	Special	March Operations	4-20
	4-19.	Limited Visibility Marches	4-20
	4-20.	Forced Marches	4-22
CHAPTER 5. S		'S LOAD MANAGEMENT AND NG FOR FOOT MARCHES	
Section I.	Transpo	ort Responsibility	5-2
	5-1.	Size of Company Loads	5-2
	5-2.	Expedients for Extra Transportation	on5-3
Section II.	Factors	Affecting the Soldier's Load	5-3
	5-3.	Physical Limitations	5-4
	5-4.	Stress	5-6
	5-5.	Munitions and Equipment	5-6
Section III.	Echelo	ning and Load Tailoring	5-8
	5-6.	Combat Load	5-9
	5-7.	Tailoring Combat Load to METT-	Г5-10
	5-8.	Echeloning the Soldier's Load	5-15
	5-9.	Minimum-Load Concept	5-17
Section IV.	Trainin	g	5-18
	5-10.	Unit Characteristics	5-18
	5-11.	Physical Conditioning	5-18
	5-12.	Nutrition	5-20
	5-13.	Tactical Training	5-21
	5-14	Leader Training	5-21

			Page
	5-15.	Sustainment (Integrated) Training	5-21
	5-16.	Environmental Training	5-22
	5-17.	March Discipline	5-22
APPENDIX A.		ANDING OPERATING DURES FOR FOOT MARCHES	A-1
APPENDIX B.		LE OF A BATTALION IOVEMENT ORDER	B-1
APPENDIX C.	FOOT C	ARE	C-1
APPENDIX D.	ASSEME	BLY AREAS	D-1
GLOSSARY		Glos	ssary-1
REFERENCES	S	Refere	nces-1
INDEX			Index-1

# **PREFACE**

This manual is a guide for commanders and their staffs in the procedures and techniques of foot marches. It describes the march mission, characteristics and types of foot marches, and march training to include planning procedures, duties of commanders, march discipline, march hygiene, and march safety. The material herein applies to all levels of conflict without modification.

This manual is for use with other field manuals where modification of foot marching procedures and techniques for specific regions of the world is required. Details concerning operations in desert, jungle, northern, and mountain areas are contained in FM 90-3, FM 90-5, FM 31-71, and FM 90-6, respectively. Tactical foot marches are discussed in FMs 7-10 and 7-20.

The provisions of this publication are the subject of the following international agreement:

# STANAG 2154 Regulations for Military Motor Vehicle Movement by Road

When amendment, revision, or cancellation of this manual is proposed, which will effect or violate the international agreement concerned, the preparing activity will take appropriate reconciliation action through international standardization channels to include the departmental standardization officer.

The term "company" as used herein can also mean battery or troop.

The proponent of this publication is HQ TRADOC. Submit changes for improving this publication on DA Form 2028 (Recommended Changes to Publications and Blank Forms), and forward it to Commandant, US Army Infantry School, ATTN: ATSH-ATD, Fort Benning, GA 31905-5410.

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



#### CHAPTER 1

# Introduction to FOOT MARCHES

Foot marches are the movement of troops and equipment mainly by foot with limited support by vehicles. They are characterized by combat readiness, ease of control, adaptability to terrain, slow rate of movement, and increased personnel fatigue. Foot marches do not depend on the existence of roads.

#### 1-1. HISTORICAL EXAMPLES

Many examples of successful marches exist throughout the history of warfare.

a. A good example of a successful march occurred during World War II. It was the grueling foot march during the Sicilian campaign from 20 to 21 July 1943. The 3d Battalion, 30th Infantry Regiment, 3d Infantry Division performed this march. The battalion was directed to move on foot across mountains from Aragona to San Stefano to enter into a coordinated attack on enemy forces in San Stefano. The battalion made this record-breaking, 54-mile, cross-country march in only 33 hours due to continuous marching. Two hours after arrival, the battalion was committed in the attack on San Stefano, which resulted in its capture.

b. A second example was the movement of large elements of the 3d US Army during the battle of Ardennes in 1944 to stop. the enemy counteroffensive. On 16 December 1944, while the 3d US Army was preparing to attack the Siegfried line in Germany, the Battle of the Bulge commenced. By 19 December, the German attack had reached such large proportions that the 3d US Army was directed to cease its attack to the east and to turn north. The 3d US Army shifted its troops from the Saarlautern-Saarbrucken area to the Luxemburg-Belgium area, a distance of 100-road miles. The III Corps launched the new attack at 0600 on 22 December 1944.

- (1) The size of this operation is indicated by the statistics. Eight divisions were moved from the eastern to the northern sectors, and two divisions were brought in from the rear areas. This shifted about 250,000 men and 25,000 vehicles. Units moved distances varying from 50 to 150 miles. From 18 to 31 December 1944, the trucks of the 3d US Army traveled a total of 1,254,042 miles. From 17 to 23 December 1944, nearly 42,000 tons of supplies were moved north. In the same week, seven traffic control stations in the area checked through 133,178 vehicles. The weather was damp and cold, and the ground was covered with snow and ice. However, foot soldiers marched to entrucking and from the detrucking locations to their new battle areas.
- (2) This decisive movement of an entire army was possible since smaller units could move themselves. The units of the 3d US Army were well trained in movement. Their SOP and experience tables had been tested and proved. When the job was placed upon them, they succeeded, knowing the importance of combat readiness.

# 1-2. FUNDAMENTALS

Troop movement is the transporting of troops from one place to another by any available means. This is inherent in all military operations. A successful move places troops and equipment at their destination at the proper time ready for combat. Troop movement is conducted by foot or motor marches, by rail, by air, or by water, or by various combinations of these methods.

- a. Detailed plans are required for effective troop movement. However, units must be notified early of an impending move to allow for effective planning.
- b. A successful troop movement also depends on effective control of units during movement. Such control is accomplished through the chain of command, and by proper supervision and organization of the force.

## 1-3. MARCH MISSION

A successful foot march is when troops arrive at their destination at the prescribed time. They are also physically able to execute their tactical mission.

- a. Troops must execute the mission immediately upon completing the march. Normally, this is done through conditioning and acclimatization of troops to the area of operations. This includes physiological and psychological adjustment by the individual soldier.
- b. Commanders must ensure that the amount and type of equipment carried, the rate of march, and the length and number of rests equates with the physical endurance of the men. Good planning and command leadership are required to move troops to the right place at the right time. The commander also ensures troops arrive in good condition to accomplish their mission.

#### 1-4. CLASSIFICATION OF MOVEMENTS

Troop movements can be tactical or administrative. Both classifications apply in most movements but one is normally dominant.

a. **Tactical.** Tactical movements are conducted in the combat zone to emphasize tactical considerations such as security and the use of combat-ready formations. They reemphasize efficiency and ease of movement, and they anticipate ground contact with the enemy en route or after arriving at the destination. Movements may be conducted over unsecure routes if there are no friendly forces between the foremost elements of the moving force and the enemy (Figure 1-1).

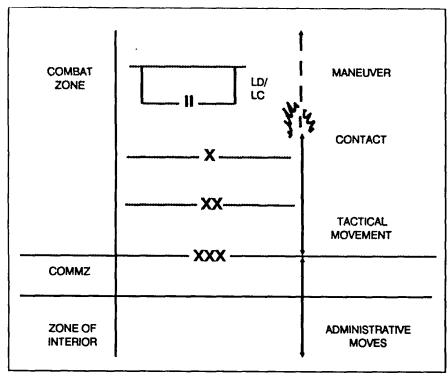


Figure 1-1. Movement.

- (1) When relocating in the combat zone, the unit conducts tactical foot and motor marches in the division and corps rears. This occurs before hostilities begin or when a forward defense has been established. Speed is vital, and security requirements are minimal.
- (2) Units move by tactical foot or motor marches to an assembly area where they prepare to conduct combat operations. During tactical movements, the commander must be prepared to maneuver against an enemy force.
- (3) Once a unit is deployed in its assigned zone or sector, it normally moves using the proper techniques for the assigned mission. When contact is made, tactical movement becomes maneuver.

b. Administrative. Administrative movements are conducted in the COMMZ and zone of the interior. They emphasize the best method of movement and reemphasize tactical considerations. Administrative movements are based on likely ground contact with the enemy being remote, both en route and soon after arrival at the destination. They are normally conducted over secure routes if friendly forces are between the foremost elements of the moving force and the enemy. When conducting administrative movements, units should maintain integrity and practice security techniques that pertain to tactical road marches.

## 1-5. TYPES OF MARCHES

Each type of march has its own purpose and application. Those discussed herein are common to both administrative and tactical marches.

- a. **Day Marches.** In the absence of enemy threats, day marches are preferred. They permit faster movement and are less tiring for troops. They are characterized by dispersed formations, ease of control and reconnaissance, and increased vulnerability to enemy observation and air attack.
- b. Limited Visibility Marches. Limited visibility marches are characterized by closed formations, difficult command and control and reconnaissance, slow rate of march, and good concealment from hostile observation and air attack. Night marches also exploit darkness to gain surprise and help units avoid extreme heat common to day marches. Control of the march requires detailed planning, stringent control measures, thorough training, and march, light, and communication disciplines.
- (1) If concealment is required, movement before dark is restricted to small detachments. Also, the march should be completed by daybreak with troops in concealed positions. When movement is near the enemy, noise suppression must be considered. To conceal operations from the enemy and to

prevent him from gaining information about the march, measures to maintain security must be enforced. The use of navigational aids, such as ground surveillance radar, thermal sights, and night vision devices, can prevent many command and control problems encountered during night movements.

- (2) Limited visibility marches must be carefully planned. This includes reconnoitering of routes and assembly areas. Special precautions ensure direction and contact within the column. Therefore, guides and file formations are needed.
- c. **Forced Marches.** Forced marches require speed, exertion, and more hours marched. They are normally accomplished by increasing the marching hours for each day rather than the rate of march. Forced marches are employed only when needed since they decrease the effect of units. Troops should be told the reason for a forced march to ensure maximum effort.
- d. **Shuttle Marches**. Shuttle marches alternate riding and marching in a troop movement. This is normally due to lack of enough vehicles to carry the entire unit. Shuttling requires transporting troops, equipment, and supplies by a series of round-trips with the same vehicles. It can be performed by hauling a load an entire distance and then returning for another. It may also be performed by carrying successive parts of a load for short distances while the remaining parts continue on foot.



#### **CHAPTER 2**

# Factors Affecting FOOT MARCHES

Factors that greatly influence the conduct of the march are the location of enemy forces, the nature of the terrain and weather, and the activity of enemy aviation. Contact with the enemy should be expected from any direction that is not protected by friendly forces or terrain barriers. Other factors that commonly affect the conduct of a march include the distance to be marched; planning effectiveness; march discipline and supervision; time available; and physical condition, training status, and attitude of the soldier.

### 2-1. TACTICAL CONSIDERATIONS

Soldiers should not be required to walk until they enter battle. From that point on, they should be required to carry only what they wear, weapons, ammunition, water, and minimal rations.

- a. A moving force protects itself against enemy action by the use of all-round security elements, which must be employed during all types of movements. These security forces provide early warning of enemy threats, and are organized and arranged IAW the mission and enemy capabilities.
- (1) As ground contact with the enemy becomes imminent, large units are normally preceded by a covering force, operating directly under the senior commander. The covering force is a self-contained tactical unit that develops the situation, seizes key

terrain features, and defeats enemy resistance. Typically, divisions and larger units establish a covering force.

- (2) Each column commander, even if preceded by a covering force, also establishes an advance guard with the mission of protecting the main body from surprise, ensuring its uninterrupted advance. Flank and rearguards, operating directly under the column commander, protect unsecured flanks and rear.
- b. Before beginning the march, routes should be reconnoitered and marked, bridge capacities indicated, and dimensions of underpasses compared to vehicle dimensions (if the tactical situation permits). Timely measures are enforced for the reduction of obstacles and other possible causes of delay.
- c. Combat support assets are located in the column for quick availability to their units. Those not immediately required can be held to the rear and sent forward when the situation dictates. Sustainment loads not immediately needed for combat can be left in the old area and moved forward after the movement of troops, essential equipment, and supplies has been completed. Each grouping for movement corresponds with the organization for combat to include weapons, ammunition, and rations needed for combat at the destination.
- d. Shuttle marches aid movement and conserve energy when there are insufficient vehicles to move the entire force at one time. Foot troops to be transported by vehicle in a later echelon can march to an intermediate point where they are met and picked up by vehicles returning from an earlier echelon, or foot troops transported in an earlier echelon can disembark short of their destination and march the rest of the distance while vehicles return for a later echelon. Plans for combined foot and motor movement must be flexible since circumstances in forward areas can easily disrupt the time schedule.
- e. When marching to occupy an assembly area, the commander can consider conducting the march by infiltration; that is, marching in vehicles or on foot by small groups extended

over time to give the impression of casual traffic. This technique is used to provide secrecy, deception, and dispersion in areas where enemy observation or attack is likely, but it requires more time, more detailed planning, and greater decentralization of control.

- f. When the possibility of contact with enemy ground forces is remote, the principal objects are to facilitate and expedite movement, and to conserve the energy of troops. Columns consist of units having the same rate of movement. Those having different rates of movement are assigned separate routes, or their movements are staggered along the same routes.
- g. When an unforeseen crossing of two columns occurs and no control personnel from a higher headquarters are present, the senior commander regulates the crossing, based on the situation and the missions of the two columns.

## 2-2. EFFECTS OF WEATHER AND TERRAIN

The varying types of terrain over which troops must march present different problems for commanders, depending on the specific area of operations. Weather conditions combined with terrain affect the mobility of marching troops.

- a. Foot marching under adverse climatic conditions follows the same principles asunder normal conditions. The differences depend on the physical limitations imposed by adverse conditions and the use of special equipment to overcome them.
- b. Restrictions imposed by weather extremes and terrain constitute the major change from operations intemperate areas. These restrictions can present major obstacles to the successful conduct of operations unless proper provisions are established.
- c. Movement in many areas of the world must be calculated in terms of time and distance. The problems are how much time troops need to go from one place to the other and the distance between them. This applies mainly in arctic, mountain, or jungle areas where trails are either limited or nonexistent, and where cross-country movement can be slow and arduous.

## 2-3. MARCH DISCIPLINE

March discipline includes observing and enforcing the rules and instructions that govern a unit on a march, which include formation, distances between elements, speed, and the effective use of concealment and cover. It must also include specific controls and restrictions such as water, light, noise, and communication disciplines. March discipline is the culmination of effective training, which results in enthusiastic teamwork among all soldiers of the unit.

## 2-4. WATER DISCIPLINE

Water discipline must be observed by all unit members to ensure best health and marching efficiency. The following rules must be adhered to:

- Drink plenty of water before each march to aid sustainment during movement.
- Drink only treated water from approved sources.
- Drink water often. Water should be consumed before, during, and after the march.
- Drink small quantities of water rather than gulping or rapid intake.
- Drink water even when not thirsty.
- Drink water slowly to prevent cramps or nausea.
- Avoid spilling water.
- Refill canteens at every opportunity.
- a. The human body does not operate efficiently without adequate liquid intake. When soldiers are engaged in strenuous activities, excessive amounts of water and electrolytes are lost through perspiration. More water is lost through normal body functions such as respiration and urination, which can create a liquid imbalance in the body. As a result, dehydration could occur unless this loss is immediately replaced and soldiers rest before continuing their activities. Deficient liquid and salt intake during hot weather can also result in heat injuries.

# Thank You for previewing this eBook

You can read the full version of this eBook in different formats:

- HTML (Free /Available to everyone)
- PDF / TXT (Available to V.I.P. members. Free Standard members can access up to 5 PDF/TXT eBooks per month each month)
- > Epub & Mobipocket (Exclusive to V.I.P. members)

To download this full book, simply select the format you desire below

