



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 as under 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 in temperate 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.

b. The danger of dehydration is as prevalent in cold regions as it is in hot, dry areas. The difference is that in hot weather the soldier is aware that his body loses liquids and salt through perspiration. In cold weather, when a soldier is bundled up in many layers of clothing, he has difficulty knowing this condition exists since perspiration is rapidly absorbed by heavy clothing or evaporated by the air—it is rarely visible on the skin.

c. Salt in food compensates for the daily salt requirement. Additional intake of salt should be under the direction and supervision of a physician or physician's assistant.

d. If pure water is not available, water in canteens can be treated by adding water purification tablets. (*See FM 21-10 for methods of purifying water.*)

e. If the unit is forced to traverse a contaminated area (NBC) due to the tactical situation, water consumption increases and forced hydration becomes necessary. Leaders at all levels must try to prevent heat injuries brought on by physical activity in an NBC environment.

2-5. ACCLIMATIZATION PROCEDURES

Soldiers must be physically and mentally conditioned to effectively participate in foot marches.

a. The many types of terrain and climate throughout the world require different acclimatization procedures for successful operations. Ideally, troops should be trained to operate in all areas with a minimum of preparation; however, each area has specific requirements that must be met before operating in it. For example, troops scheduled for operations in mountains would normally participate in high-altitude training for 10 to 14 days before engaging in full-scale mountain marches.

b. Psychological adjustment eliminates preconceived notions and fears about specific locations and climates. Training conducted logically and realistically causes most soldiers to lose previously held fears of height, cold, or isolation. The adjustment is facilitated by educational programs that gradually introduce

soldiers to unfamiliar terrain features or climates. During this program, soldiers are encouraged to develop confidence until they can operate in these areas with ease and assurance.

c. Self-confidence in each soldier is a direct result of effective psychological adjustment. Therefore, soldiers can benefit from training since they believe in their abilities. Self-confidence in foot marching is developed by strong leadership and progressive training. As soldiers become stronger and as marching techniques are learned and applied, a soldier's self-confidence and pride increases. Leaders can also stimulate pride by building unit spirit and by instilling a determination to succeed. A well-planned and well-conducted march is an excellent way to develop and demonstrate the many attributes of a good soldier, a good leader, and a good unit.

NOTE: Specific adjustment factors and techniques are discussed in field manuals that relate to arctic, mountain, desert, and jungle operations.

2-6. MORALE

Morale can greatly affect the marching effectiveness of troops. Low morale can be contagious and magnifies any discomfort soldiers might experience. Leaders can improve morale by applying proper march and leadership techniques, some of which are discussed herein.

a. Provide advance warning of a march to the unit so troops can prepare adequately—more time should be allowed during early training.

b. Do not form the unit too early. Hold formation early enough to allow time for inspecting troops and for performing last-minute checks.

c. During the march, avoid delays that keep soldiers standing. Delays can increase fatigue and cause legs to stiffen, making it more difficult to resume the march. A route reconnaissance before the march provides information on conditions that could cause delays - advance action can prevent them.

d. Prescribe and maintain a steady rate of march—too rapid or too slow a rate induces fatigue.

e. During the march, hold passing vehicles to a reasonable speed to promote safety and to prevent dust, rocks, or mud from being thrown on soldiers. If dust conditions are offensive, move troops to the upwind side of the road.

f. Do not allow trucks to overtake the column that are used to transport stragglers or march casualties unless it is unavoidable.

g. Ensure soldiers to the rear of the formation receive a full breaktime.

h. Ensure leaders at all echelons march with their soldiers throughout the duration of the march. Soldiers quickly detect the presence or absence of their leaders in a foot march.

i. Encourage unit leadership to walk the length of the marching unit periodically to spotcheck soldier performance and well being, and to ensure command presence is observed.

j. Ensure availability of adequate water at rest stops and throughout the march.

2-7. INDIVIDUAL LOAD

To prevent an individual load from hindering a marching soldier's mobility and combat readiness, commanders must reduce the carried load to the minimum mission-essential and survival equipment.

a. The individual's combat load is that mission-essential equipment as determined by the commander, which is required for the soldier to fight and survive immediate combat operations. The load can be divided into an approach march load and fighting load. The fighting load should not exceed 48 pounds, and the approach march load (which includes the fighting load) should be less than 72 pounds, based upon individual abilities.

b. The primary consideration is not how much a soldier can carry, but how much he can carry without impaired combat effectiveness—mentally or physically. The combat strength of a

unit cannot be counted solely by the number of soldiers but must be counted by the number of willing and physically able soldiers.

(1) Soldiers become exhausted quickly when under the stress of combat. Therefore, they must be required to carry less into battle than they are conditioned to carry during training. Soldiers should be conditioned for carrying heavy loads but should be equipped in combat to move swiftly.

(2) The individual load must not be based on the gear and supplies needed to meet every contingency. The commander should not expect his soldiers to carry enough gear for all possible combat situations. Instead, items to be contained in the load must be based on realistic expectations.

(3) The commander is responsible for obtaining the means to carry additional gear. Usually a rifle company or smaller-size unit requires one truck and one trailer in support to carry additional gear. In cold weather, or during other conditions where personal gear increases, the requirement increases.

(4) The commander must ensure that the supply system provides the balance of essential supplies and equipment that are not carried by the unit. *Soldiers must feel confident that their needs will be met.*

(5) In training, commanders must instill pride in their soldiers when operating under austere conditions. Soldiers should be trained in field craft techniques and the use of caches and field expedients. However, the commander must set the standards.

NOTE: See Chapter 5 for a detailed discussion on soldier's load management.