

## SHOULDERS

10-15. The shoulders should assume a neutral posture, neither rounded forward nor forcefully arched backward. Rounding the shoulders forward is the most common fault in everyday posture while walking and running. The problem is usually associated with tightness of the chest and shoulder muscles. Another problem occurs when the shoulders start to rise with fatigue or increased effort. This position not only wastes energy, but can also adversely affect breathing.

## ARMS

10-16. Throughout the arm swing, the elbows should stay at roughly a 90-degree bend. The wrists stay straight and the hands remain loosely cupped. The arm swing should be free of tension, but do not allow the hands to cross the midline of the body.

## TRUNK AND PELVIS

10-17. The trunk should remain over its base of support, the pelvis. A common problem with fatigue is allowing the trunk to lean forward of the legs and pelvis. This forces the lower back muscles to expend too much energy resisting further trunk lean to the front.

## LEGS

10-18. For distance running, much of the power is generated from below the knee. Energy is wasted as the knees come higher and the large muscles of the hips and thighs are engaged. Practice getting a strong push-off from the ankle of the back leg. This helps to lengthen the stride naturally. Lengthening the stride by reaching forward with the front leg will be counterproductive.

## FEET

10-19. The feet should be pointed directly forward while running. With fatigue and certain muscle imbalances, the legs and feet may start to rotate outward. This may hinder performance and create abnormal stresses that contribute to injury.

## BREATHING

10-20. Breathing should be rhythmic in nature and coordinated with the running stride.

## MILITARY MOVEMENT DRILL 1

10-21. The purpose of MMD1 in the toughening phase (Figure 10-3) is to enhance running form, dynamically prepare the body for more vigorous running activities, and develop motor efficiency. Military movement drill 1 is conducted following preparation and the HSD prior to running activities during the PRT session. Any level area of adequate size is appropriate for conducting MMD1. Beware of hazards such as holes, uneven terrain and rocks. Use caution when conducting MMD1 on wet terrain. This drill is conducted using the extended rectangular formation (covered) and performed by rank. Military movement drill 1 consists of exercises performed at 25-yard intervals: verticals, laterals, and the shuttle sprint. Refer to Table 10-2 for endurance and mobility activities, prescriptions of intensity, duration, and volume within the toughening and sustaining phases. In addition, Chapter 5, Planning Considerations, provides the template for commanders and PRT leaders to implement endurance and mobility activities into their PRT programs.

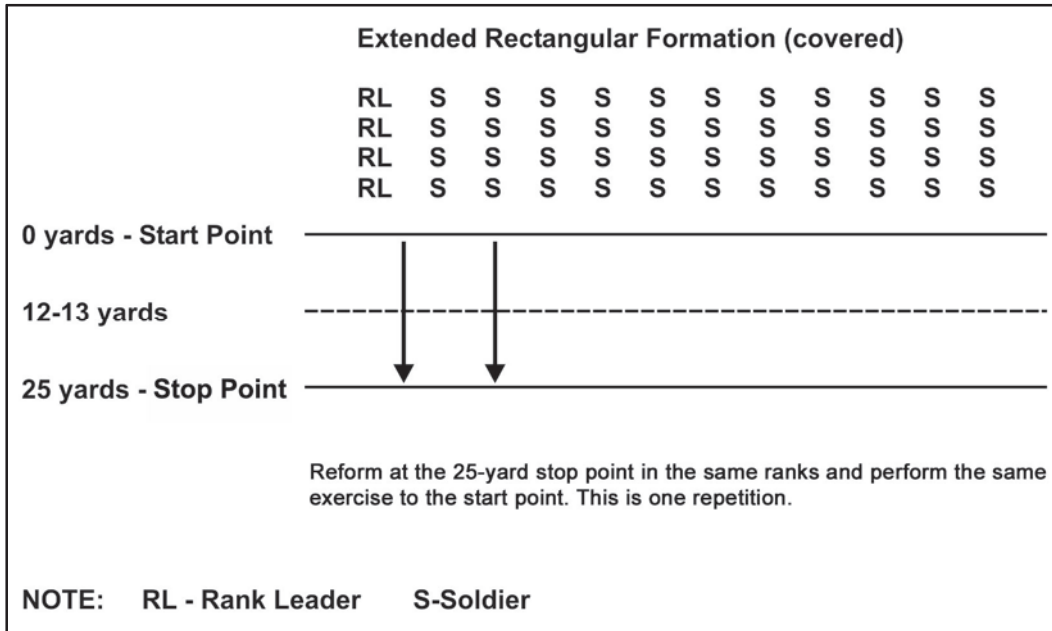


Figure 10-3. Military movement drill 1

## MILITARY MOVEMENT DRILL 1

### EXERCISE 1: VERTICALS

**Purpose:** This exercise helps to develop proper running form (Figure 10-4).

**Starting Position:** Staggered stance with the right foot forward. The right heel is even with the toes of the left foot. The right arm is to the rear with the elbow slightly bent and the left arm is forward. The head is up, looking straight ahead, and the knees are slightly bent.

**Movement:** Bring the hips quickly to 90-degrees of bend without raising the knees above waist level. Ground contact should be primarily with the balls of the feet. When the left leg is forward, the right arm swings forward and the left arm swings to the rear. When the right leg is forward, the left arm swings forward and the right arm swings to the rear.

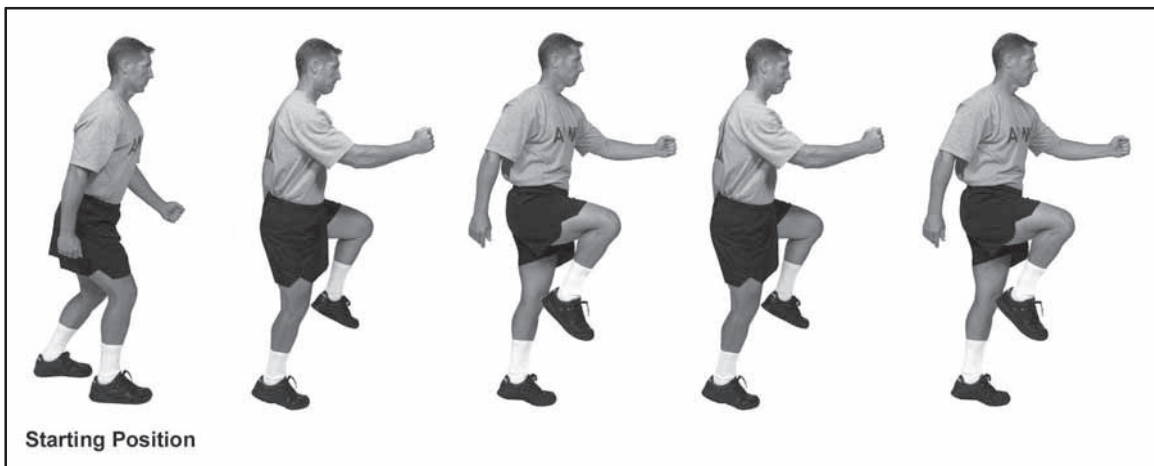


Figure 10-4. Verticals

**Check Points:**

- Arm swing is strong and smooth with the forward arm at 90-degrees and the rearward arm relatively straight.
- Arm swing is from front to rear, not side to side, with the upper part of the forward arm reaching parallel to the ground as it swings to the front.
- Keep a tall stance with a stable, upright trunk. The back remains perpendicular to the ground. There should not be any back swing of the legs.

**Precaution:** N/A

## MILITARY MOVEMENT DRILL 1

### EXERCISE 2: LATERALS

**Purpose:** This exercise develops the ability to move laterally (Figure 10-5).

**Starting Position:** Straddle stance, slightly crouched, with the back straight, arms at the side with elbows bent at 90-degrees and palms facing forward. Face perpendicular to the direction of movement.

**Movement:** Step out with the lead leg and then bring the trail leg up and toward the lead leg. The Soldier always faces the same direction so that for the first 25-yards he is moving to the left and for the second 25-yards he is moving to the right.

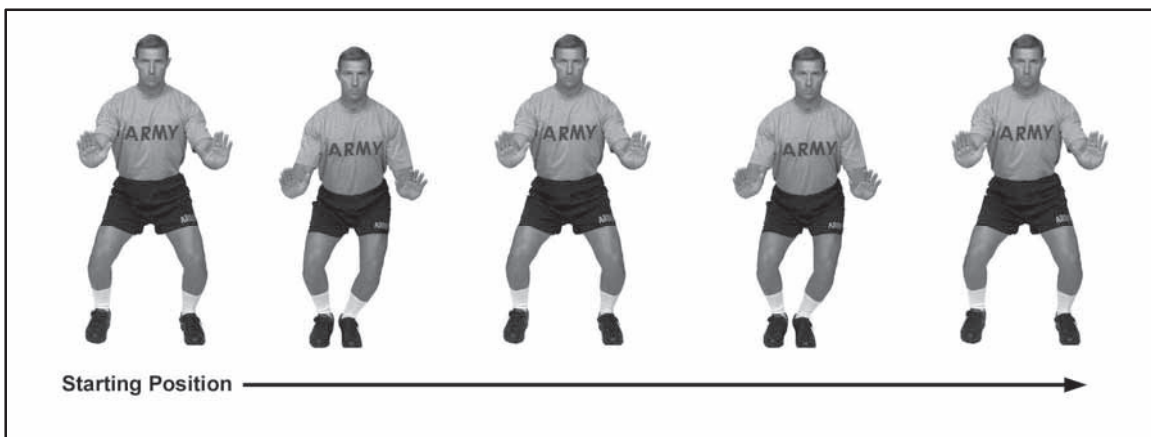


Figure 10-5. Laterals

**Check Points:**

- Pick the feet up with each step. Avoid dragging the feet along the ground.
- Crouch slightly while keeping the back straight.
- Avoid hitting the feet and ankles together on each step.
- Rank leaders will face their rank throughout the exercise.

**Precaution:** N/A

## MILITARY MOVEMENT DRILL 1

### EXERCISE 3: SHUTTLE SPRINT

**Purpose:** This exercise develops anaerobic endurance, leg speed, and agility (Figure 10-6).

**Starting Position:** Staggered stance with the right foot forward. The right heel is even with the toes of the left foot. The right arm is to the rear with the elbow slightly bent and the left arm is forward. The head is up looking straight ahead and the knees are slightly bent.

**Movement:** Run quickly to the 25-yard mark (as arrow 1 in the following exercise illustration shows). Turn clockwise while planting the left foot and bending and squatting to touch the ground with the left hand. Run quickly back to the starting line (arrow 2) and plant the right foot, then turn counterclockwise and touch the ground with the right hand. Run back to the 25-yard mark (arrow 3) accelerating to near maximum speed.

**Check Points:**

- Soldiers should slow their movement before planting feet and changing direction.
- Soldiers should squat while bending the trunk when reaching to touch the ground as they change direction.
- Soldiers touch the ground with their left hand on the first turn, then with their right hand on the second turn.
- Accelerate to near maximum speed during the last 25-yard interval.

**Precaution:** Soldiers should use caution when performing this exercise on wet terrain.

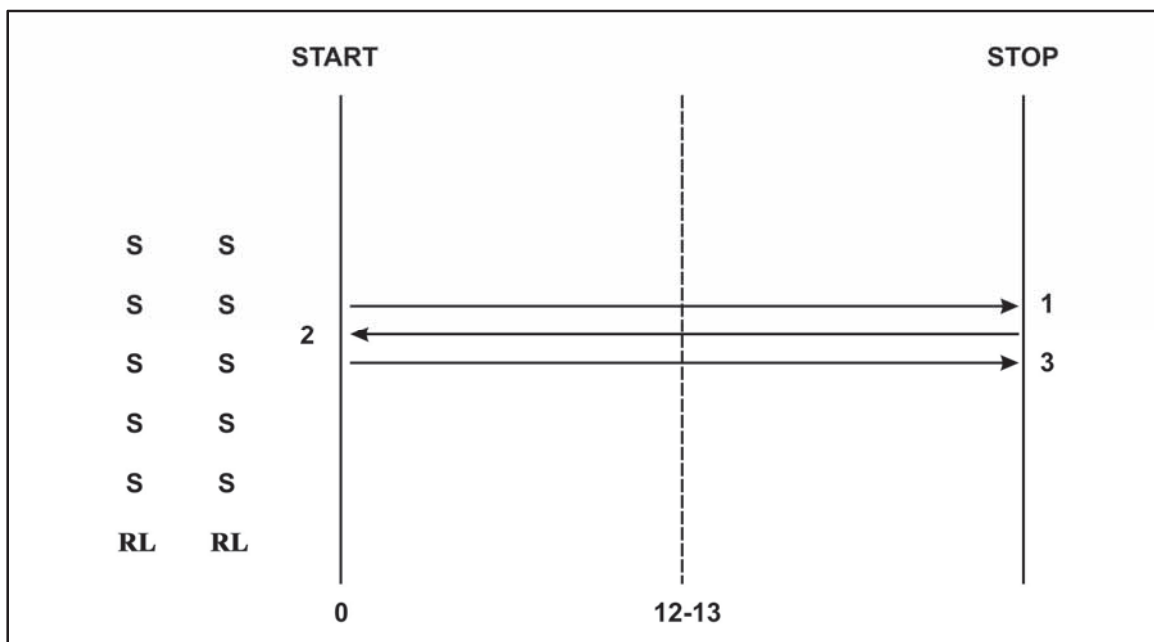


Figure 10-6. Shuttle sprint