

# TRAINING NOTES



## Drills

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One of the greatest challenges facing the platoon and squad leaders in our infantry companies today is in knowing how to conduct sound tactical training. To help these leaders meet this challenge, the U.S. Army Infantry School (USAIS) has developed for them a number of platoon level drills. They can use these drills to train their soldiers in critical collective, leader, and individual tasks to the proficiency necessary for their units to fight, survive, and win on the battlefield.

The drills developed by the School consist of actions that require rapid, spontaneous responses to an event, stimulus, or command with a minimum of direction from the leader. These actions can be trained to standard and executed repetitively.

Drills support the accomplishment of tactical missions and integrate critical individual and leader tasks into collective tasks. They can be used either separately or linked together in a situational training exercise (STX). As a training tool, drills provide a high payoff for obtaining and sustaining proficiency in collective tasks at small unit level.

Drills also reinforce the following proven training concepts:

- Provide the small unit leader with core collective tasks (drills) that can be

used in scheduled training or as "hip pocket" opportunity training.

- Build from the simple to the complex.

- Facilitate continuous coaching, evaluation, feedback, and teambuilding.

- Train the soldier to function aggressively and correctly amid the noise and confusion of the battlefield when detailed orders and instructions may be absent.

### BUILDING BLOCKS

Individual (MOS and common) tasks form the basic building blocks for training infantry units. It is only after a unit has successfully trained its soldiers in these tasks to the prescribed standards that it can engage in good drill or collective training, which starts at the squad level.

Likewise, squad and platoon drills are the key building blocks that support platoon missions. Another building block includes supplemental tasks, such as planning and controlling operations. These two groups of collective and leader tasks can be linked through a logical, tactical scenario to form a number of STXs.

An STX normally consists of from three to five drills connected in a

logical sequence to form a block of tactical training. Although an STX is mission oriented, one STX generally will not result in mission accomplishment. Normally, multiple STXs must be linked through a field training exercise (FTX) in order to train a unit to total mission proficiency. The resulting overall training program therefore takes on the shape of a pyramid (Figure 1).

In this figure each of eight critical mechanized infantry platoon missions is represented by a triangle. These missions are supported by FTXs and the FTXs by STXs. The STXs are supported by drills and supplemental tasks, which are supported by individual tasks. Although the missions stand alone, most of them have in common many individual soldier and leader tasks. And because many drills also appear in more than one mission, a unit training for a particular mission will also be training in many of the drills and tasks required for other missions. Changes in the conditions of METT-T (mission, enemy, terrain, troops, time) will cause remarkable differences, however, in the mix of collective tasks required to execute a given mission. The exact combination of drills and supplemental tasks, therefore, will vary with the factors of METT-T, but the standards for exe-

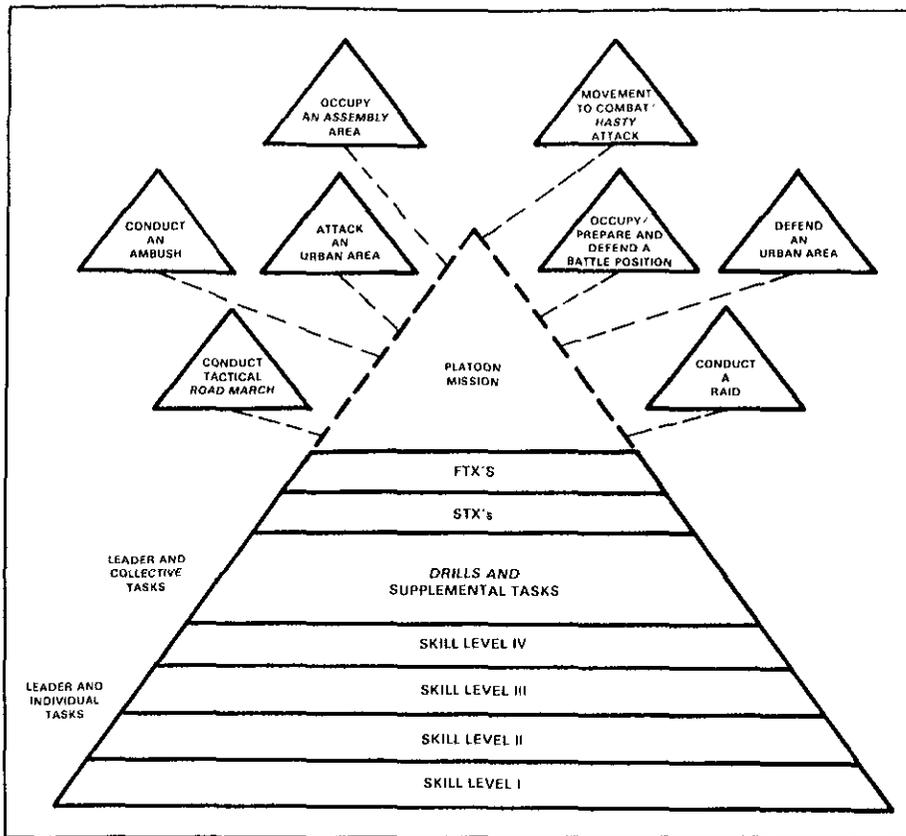


Figure 1. Overall Training Program.

cutting those drills or tasks will not change. Thus, drills provide for both flexibility in executing tactics and standardization in executing the tasks those tactics require.

### THE COMBAT DRILL

The overall mission of infantry units, of course, is to close with the enemy by means of fire and movement *in order to destroy, capture, or repel* his assault by fire, close combat, and counterattack. To accomplish this mission, infantry platoons spend a great deal of time aggressively moving on the battlefield seeking enemy contact.

To provide platoon and squad leaders with the tool they need to train their units to act rapidly, aggressively, and decisively to overcome enemy resistance (within their capability), the Infantry School has developed a critical kind of drill called the "combat drill."

The combat drill consists of a series of collective actions that are inte-

grated into sequential steps to reduce decisions to critical points and to cause the enemy to fight in two directions simultaneously.

It is vitally important to a unit's survivability and success in combat. The combat drill, therefore, must be perfected until a unit is confident in its ability to execute the drill automatically and aggressively upon enemy contact without stopping for long periods of time.

Versions of the combat drill have been developed for light infantry, infantry, and mechanized infantry platoons equipped with the Bradley fighting vehicle and with the M113. Squad versions have also been developed for all but BFV mechanized infantry units — Bradley infantry tactics are focused at platoon level. (Figure 2 illustrates the platoon combat drill for a mechanized infantry unit equipped with M113s.)

Seven sequential steps are normally followed in the conduct of drill training:

**Step 1.** First the leader identifies the critical drills on which his unit needs to

be trained. (Obviously, all the drills cannot be conducted at once.) The leader selects his drills from a menu of available drills based on training guidance, level of training proficiency, and the factors of METT-T.

**Step 2.** On the basis of his assessment of his unit's strengths and weaknesses, the leader next conducts all the prerequisite training on individual soldier and leader tasks. (The leaders must master the soldier skills themselves before they can train their soldiers to standard.) This is a critical step in the building block approach, because it establishes a sound foundation for the drill training.

**Step 3.** The leader must then establish conditions for each drill (in MOPP 4, at night, for example). The USAIS drill publications do not prescribe set conditions for the drills other than those that are implicit in the task itself. This allows the leader to be flexible in conducting training and to build in increasing complexity and challenges. It also guards against stereotyped thinking. Initial drill training, for example, might include very basic conditions until a firm baseline of proficiency is attained. Then more demanding conditions can be added to the drill. In short, a leader must use a crawl-walk-run method in building up to a drill conducted at full speed.

**Step 4.** In the crawl phase, a leader describes the standards and the roles of each individual who is to take part in the drill. He then identifies a triggering event, an initiating cue and/or a command which starts the drill and the key actions and standards within it. Finally, he conducts a demonstration and then has the soldiers and his subordinate leaders practice the drills by the numbers. Continuous correction is used as the leader coaches his soldiers through the drill.

**Step 5.** In the walk phase, the unit executes a drill at a slow pace, with the leader-trainer continuing to coach, critique, and correct individuals as they perform the drill. The unit then practices the drill until the soldiers can execute it to standard without being coached. This leads up to the run ph

**Step 6.** During the run phase, a drill is run at full speed and without coaching, and conditions are changed to increase the difficulty and realism. Opposing forces and the Multiple Integrated Laser Engagement System (MILES) are incorporated at this point to help provide performance feedback. As with any training exercise, an after-action review (AAR) should be conducted.

**Step 7.** Once the individual drills have been mastered, a unit can integrate them into an STX, in which drills are linked together through a logical sequence. Although STXs are mission-oriented, they normally do not lead to total mission proficiency. Instead, they train only a portion of a mission or a "chunk" of the battle as shown in Figure 3. It therefore takes several STXs to train a unit on all the tasks required to accomplish a mission.

Once platoons and squads can execute drills to the prescribed standard, the unit's soldiers will gain confidence in their own abilities and in the coordinated actions of the unit. This will allow the unit's leaders to use fewer and shorter orders to control their soldiers during the confusion and intensity of combat. In short, drills will enable squads and platoons to train the way they would fight.

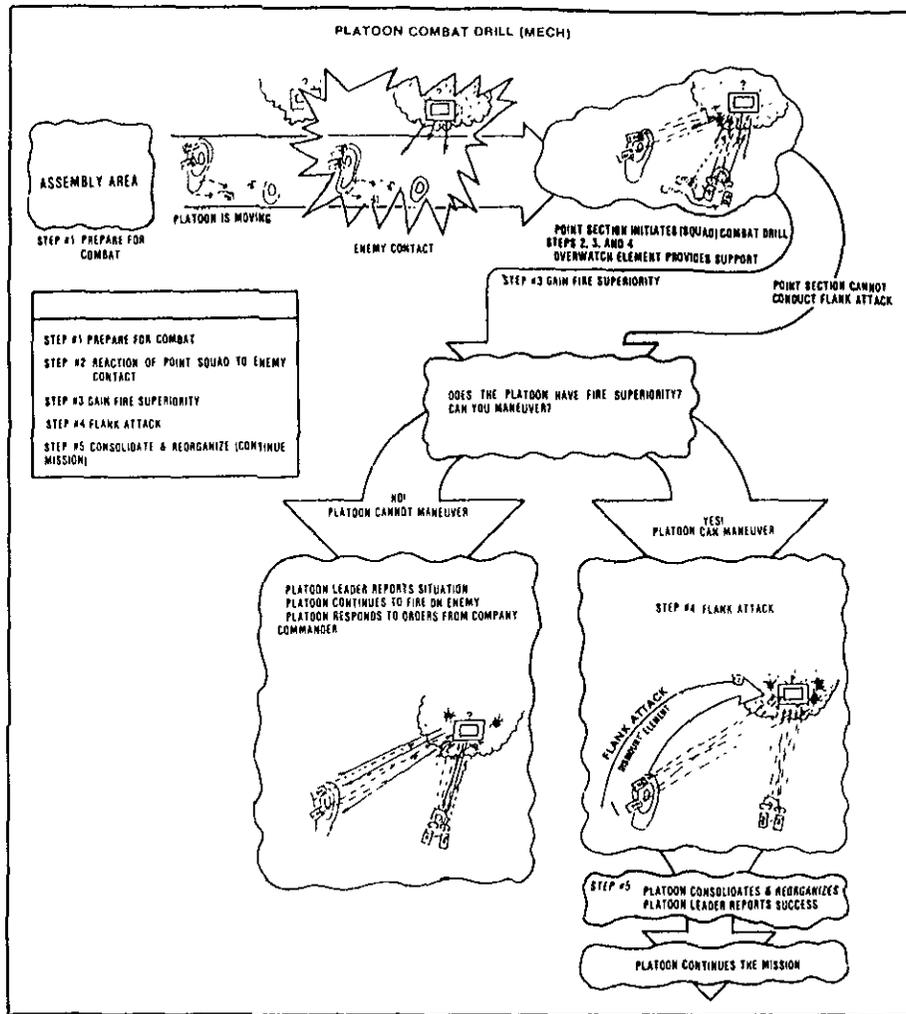
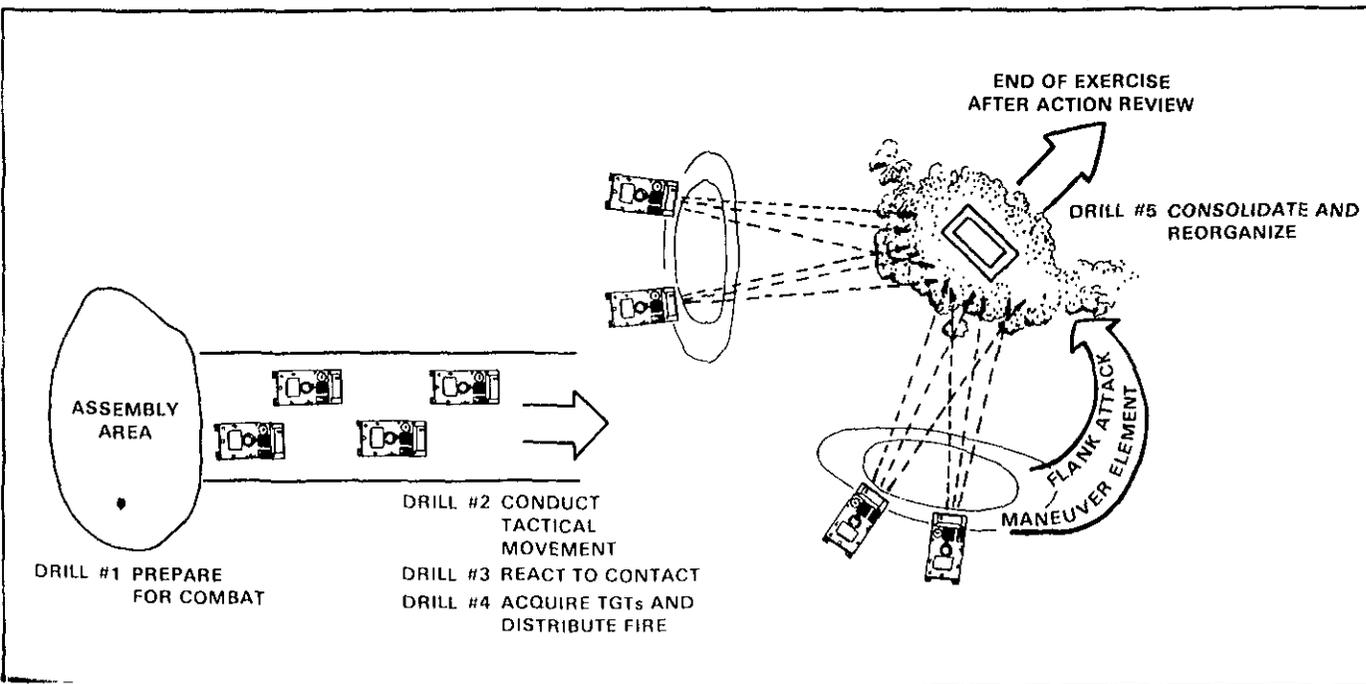


Figure 2. Mechanized Infantry Platoon Combat Drill.

Figure 3 (below). Sample Mechanized Infantry STX.



The preface to the School's drill field circulars compares drill training to football practice: Drills address individual tasks (blocking and tackling), leader tasks (skull sessions), and collective tasks (plays) before conducting ARTEP missions (scrimmages). Performing ARTEP mission training before drill training would be like scrimmaging on the first day of practice. Trying to react to METT-T conditions that require action without drills would be like formulating and calling out a play after the ball is snapped.

The final goal of training is to produce a ready unit that can respond rapidly and correctly to known or suspected enemy activity and defeat the enemy. Drill training is a key factor in achieving that goal.

The Infantry School has prepared and distributed four new field circu-

lars containing squad and platoon drills: FC 7-21 (M113), FC 7-21B (BFV), FC 7-22 (Infantry), and FC 7-15 (Light Infantry).

Instruction on drills is included in all the applicable resident courses taught at the School. In addition the School's New Equipment Training Team (NETT) presents drill instruction to CONUS-based units that are making the transition from the M113 to the Bradley fighting vehicle as part of the Doctrinal and Tactical Training (DTT) Program. (The 7th Army Training Command conducts the same training for USAREUR units converting to the Bradley.)

Users of the USAIS drill circulars are encouraged to submit any recommended changes or comments they may have. The School's objective is to standardize a core set of critical drills for all types of infantry as soon as

possible. Comments should be sent to the Commandant, USAIS, ATTN: ATSH-I-V-T-C, Fort Benning, GA 31905 (AUTOVON 835-4848/1317/4759).



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# Mortars: Able to Leap Tall Buildings

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In spite of the continuing spread of urban areas throughout the world, the U.S. Army has no current doctrinal techniques for placing indirect fires into built-up areas in such a way as to avoid or overcome the masking effects of buildings on those fires.

A mortarman doesn't have to work with mortars long, however, to observe that a mortar round's steep angle of fall is almost a mirror image of its steep angle of ascent. If he had a way of determining the angle of fall necessary to get a mortar round over buildings and onto a target in the street below, then he could compute the elevation necessary to produce that angle of fall.

Here is such a method, one that is as mathematically correct and reliable as the firing tables now in use. In fact, it is derived from those tables. Two main phases or procedures are involved in making the needed calculations.

To explain the first procedure, a new term must be introduced — "required angle of entry." The required angle of entry is the minimum angle at which an incoming mortar round must travel to avoid the masking effects of buildings along either side of a street and still fall on the street. This angle is described from the edge of a street to the top of a building on the opposite side of the street (Figure 1). In the

figure, Angle B is the required angle of entry for an incoming round.

Establishing a measure for this angle is remarkably simple, because the required angle of entry for any

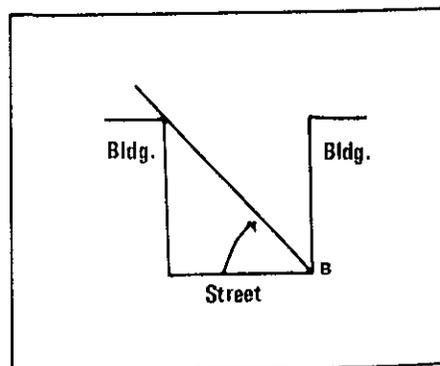


Figure 1