

APPENDIX E

BASIC FORMATIONS AND MOVEMENT TECHNIQUES

The company uses a variety of mounted and dismounted formations and movement techniques to maneuver on the battlefield. This appendix gives examples of many of the basic formations and movement techniques the company commander could use. It is not designed to be all encompassing. For more information on these topics, see FMs 7-8, 5-34, and 71-1.

MOUNTED MOVEMENT TECHNIQUES

The mounted engineer company must be proficient in moving with its maneuver counterpart. In the following paragraphs, formations, movement techniques, and actions taken during movement for the mounted engineer company are discussed.

WEDGE

The engineer company almost always maneuvers as part of another larger formation. Normally, this will either be the parent engineer battalion or TF. Figure E-1, page E-2, shows the formation that the company is most likely to use. The company wedge provides the most defensible formation with the easiest C^2 . Ordinarily, the company follows a maneuver company. The company might lead if it is part of the engineer battalion formation. In either case, the wedge is the best formation to use if enemy contact is likely.

The company will also have organic, and possibly task-organized, support equipment. These could include the ACE, CEV, or tank or infantry platoons from other companies/teams. These additional vehicles can strain the company's C^2 capability. All of the heavy support vehicles are tethered to individual engineer platoons. Each platoon leader has the responsibility of assisting with the C^2 of a heavy equipment asset. This improves the company's C^2 and provides each heavy asset with a security element as it moves across

the battlefield. Any vehicles that are not METT-T required to complete a mission will fall under the control of the engineer company XO/ISG.

Figure E-2, page E-3, shows a company wedge formation. Note where the key leaders in the company are. While the platoon sergeant is forward, his M998 should move with the engineer company XO/ISG but be prepared to move forward to support changing mission requirements.

COLUMN

Figure E-3, page E-4, depicts a column formation. This formation is used when enemy contact is not expected. This formation maximizes C^2 and the speed of the formation. Normally, the company transitions from the column to the wedge as enemy contact becomes more likely.

LINE

Figure E-4, page E-4, shows the company in a line formation. This formation is designed to maximize the company's forward firepower. The company transitions from the wedge to the line as enemy contact becomes eminent. Engineer companies do not generally use this formation. However, if the company is tasked to suppress a dismounted

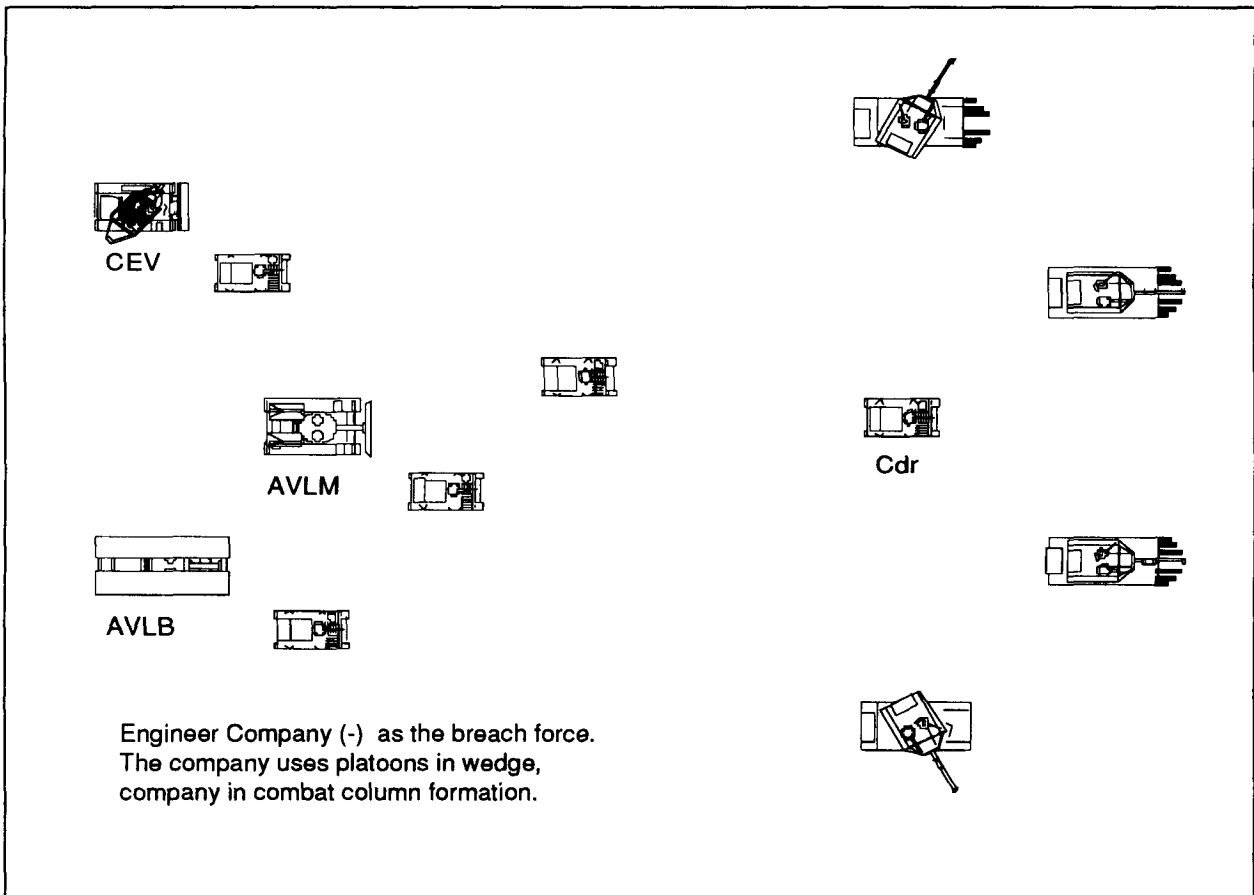


Figure E-1. Engineer company (-) as the breaching force

threat while another company maneuvers, this formation works well.

ECHELON

The echelon formation is used when the company is on the flank of the battalion/TF and the enemy threat is also from the flank. Figure E-5, page E-5, shows an echelon right formation. The echelon formation can also be used on the left flank of the battalion and, in that case, it would be the mirror image of Figure E-5. This formation maximizes the company's firepower to the flank.

DISMOUNTED MOVEMENT TECHNIQUES

The dismounted engineer company must be proficient in moving with its maneuver counterpart. In the following paragraphs, forma-

V

The V formation is a variation of the wedge. It is used when there is a significant threat of command-detonated mines or explosives. The formation shown in Figure E-6, page E-6, could be used during a route-clearance operation. It allows the company to secure the flanks of the road while a platoon clears the route. This formation also identifies command-detonated-mine firing wires or ambushes before the enemy can attack the element on the route. It is not generally used when there is a significant enemy threat.

tions, movement techniques, and actions taken during movement for the dismounted engineer company are discussed.

E-2 Basic Formations and Movement Techniques

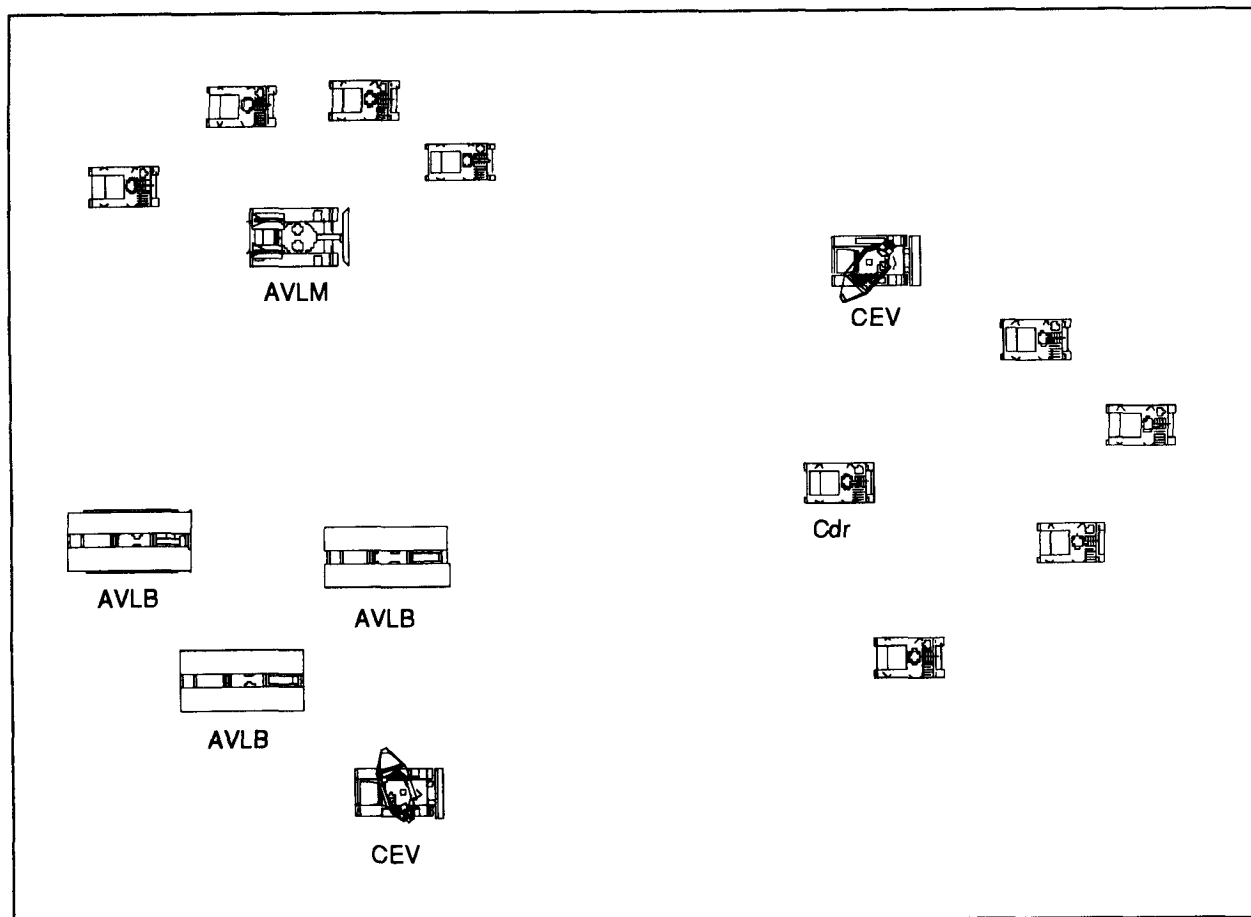


Figure E-2. Engineer company in wedge formation

Company formations are built from multiple platoon formations. These formations include the company column, line, V, and wedge. The company commander selects the best formation based on his METT-T analysis. Table E-1, page E-7, shows a comparison of each formation and its use.

WEDGE

The dismounted wedge is used when the enemy situation is vague and enemy contact is likely (see Figure E-7, page E-8). This formation allows a large volume of fire around the formation. Generally, at least one platoon or element will be free to maneuver from the wedge after contact.

COLUMN

The column formation is the company's primary movement formation (see Figure E-8, page E-9). It provides good dispersion both laterally and in depth and simplifies control. The lead platoon is the base platoon for fire control.

LINE

The line formation allows the delivery of maximum fire to the front but little fire to the flanks (see Figure E-9, page E-10). This formation is hard to control and does not lend itself well to rapid movement. It is the basic company assault formation during an attack.

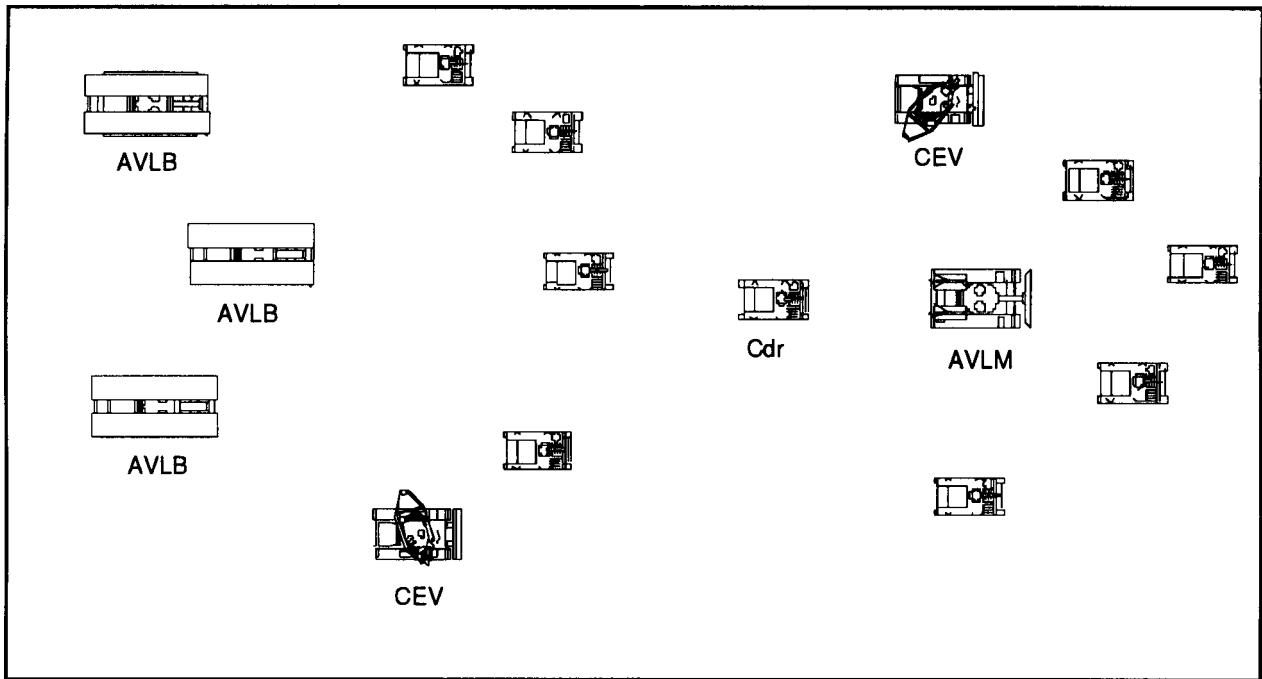


Figure E-3. Engineer company in column formation, platoons in wedge formation

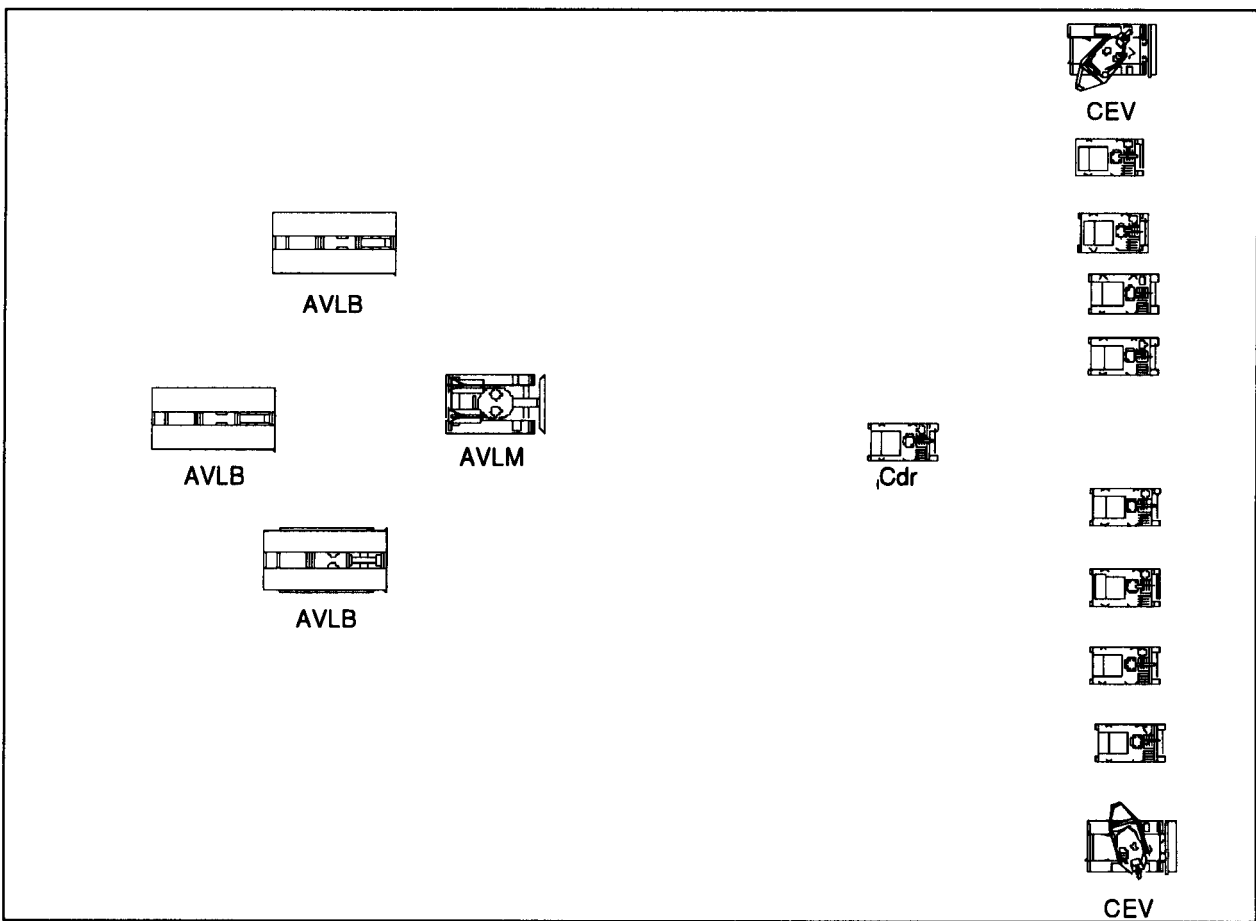


Figure E-4. Engineer company in line formation

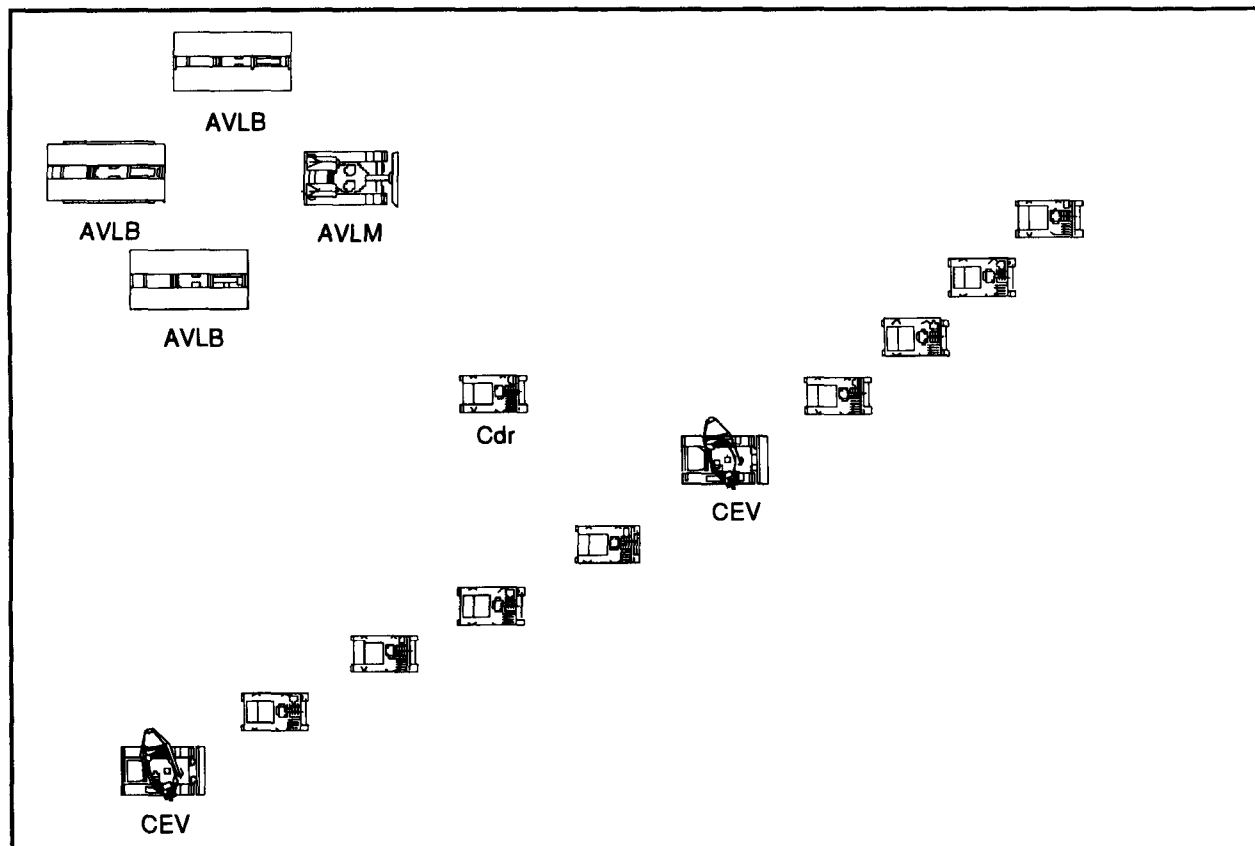


Figure E-5. Engineer company in echelon right formation

V

The V formation has two platoons up front to provide a heavy volume of fire on contact (see Figure E-10, page E-11). It also has one platoon in the rear that can either overwatch or trail the other platoons. This formation is hard to control and movement is slow.

FILE

The file formation gives maximum control to leaders and is used for speed during movement (see Figure E-11, page E-12).

TRAVELING

The dismounted engineer company supporting a maneuver TF normally travels as part

of one of the larger maneuver elements. When breaching assets are needed forward with the lead company, the engineer company travels behind the lead company for security (see Figure E-12, page E-13). If each maneuver company needs a breaching capability, the dismounted engineer company can be broken into platoon-sized elements, where each platoon travels with a maneuver company. In this case, the company headquarters travels with either the battalion tactical operations center or the main effort for C².

HAND-AND-ARM SIGNALS

During many operations, the company has to use hand-and-arm signals for C². See FM

5-10, Appendix A, for these hand-and-arm signals.

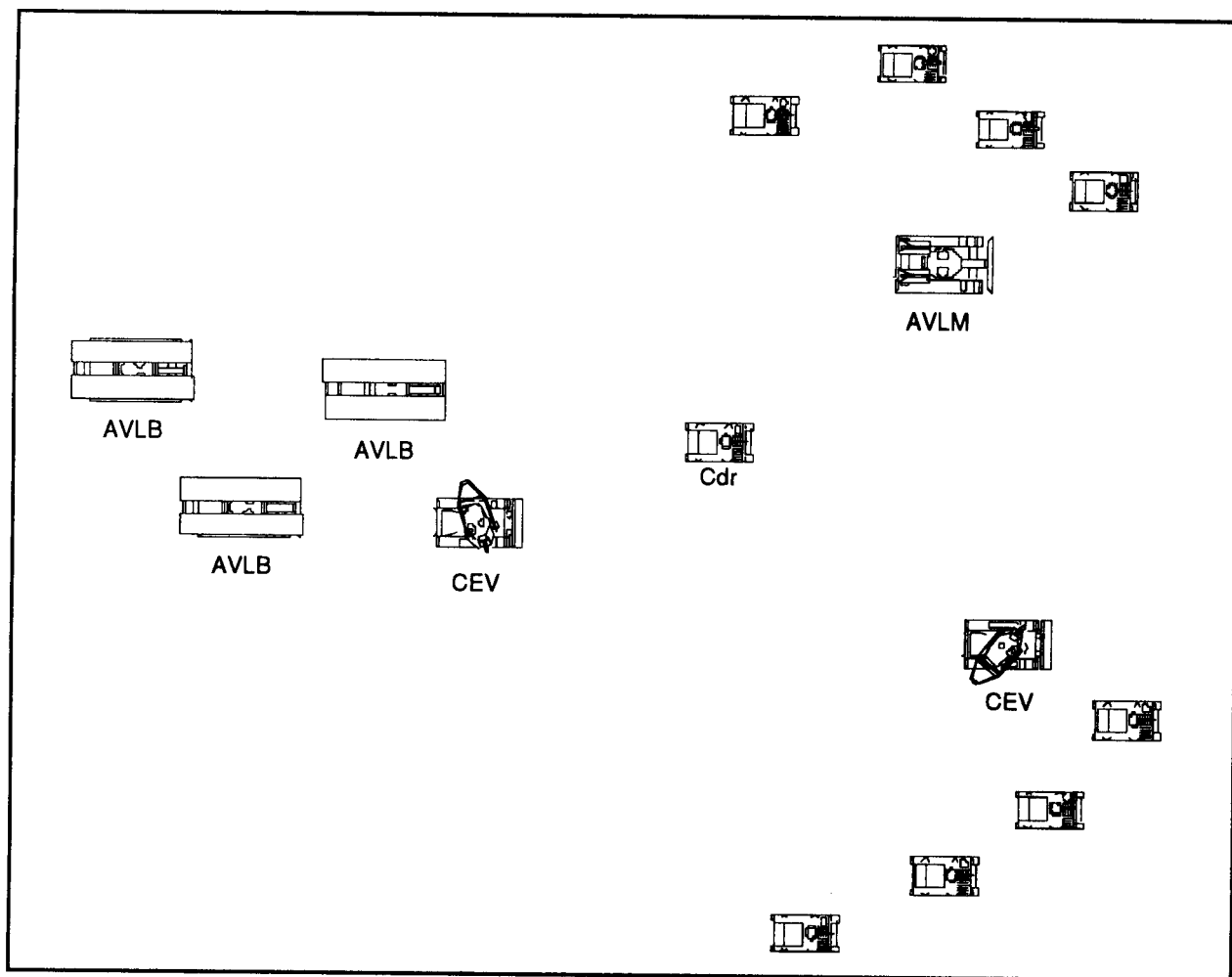


Figure E-6. Engineer company in V formation

Table E-1. Comparison of company formations

Dismounted Movement Formations	Movement Use	Movement Characteristics			
		Control	Flexibility	Fire Capability/Restriction	March Rate
Column	When the company performs primary movement formations	Good for maneuver (fire and movement)	Provides good dispersion laterally and in depth	Allows limited firepower to the front and rear, high volume to the flank	Good
Line	When the enemy situation is unknown and the leader wants all soldiers forward for maximum firepower to the front	Difficult	Is minimal	Allows maximum firepower to the front, little to the flanks and rear	Slow
V	When the enemy situation is vague, but contact is expected from the front	Difficult	Provides two squads up front for immediate firepower and one squad to the rear for movement upon contact from the flank	Allows an immediate heavy volume of firepower to the front or flanks	Slow
Wedge	When the enemy situation is vague, but contact is not expected	Difficult but better than the company V and company line	Enables the leader to make contact with the smallest element and still have two squads to maneuver	Provides a heavy volume of firepower to the front or flanks	Slow but faster than the company V
File	When visibility is poor due to terrain or light	Easiest	Is the most difficult formation from which to maneuver	Allows immediate fires to the flanks; prevents focused fires to the front and rear	Fastest

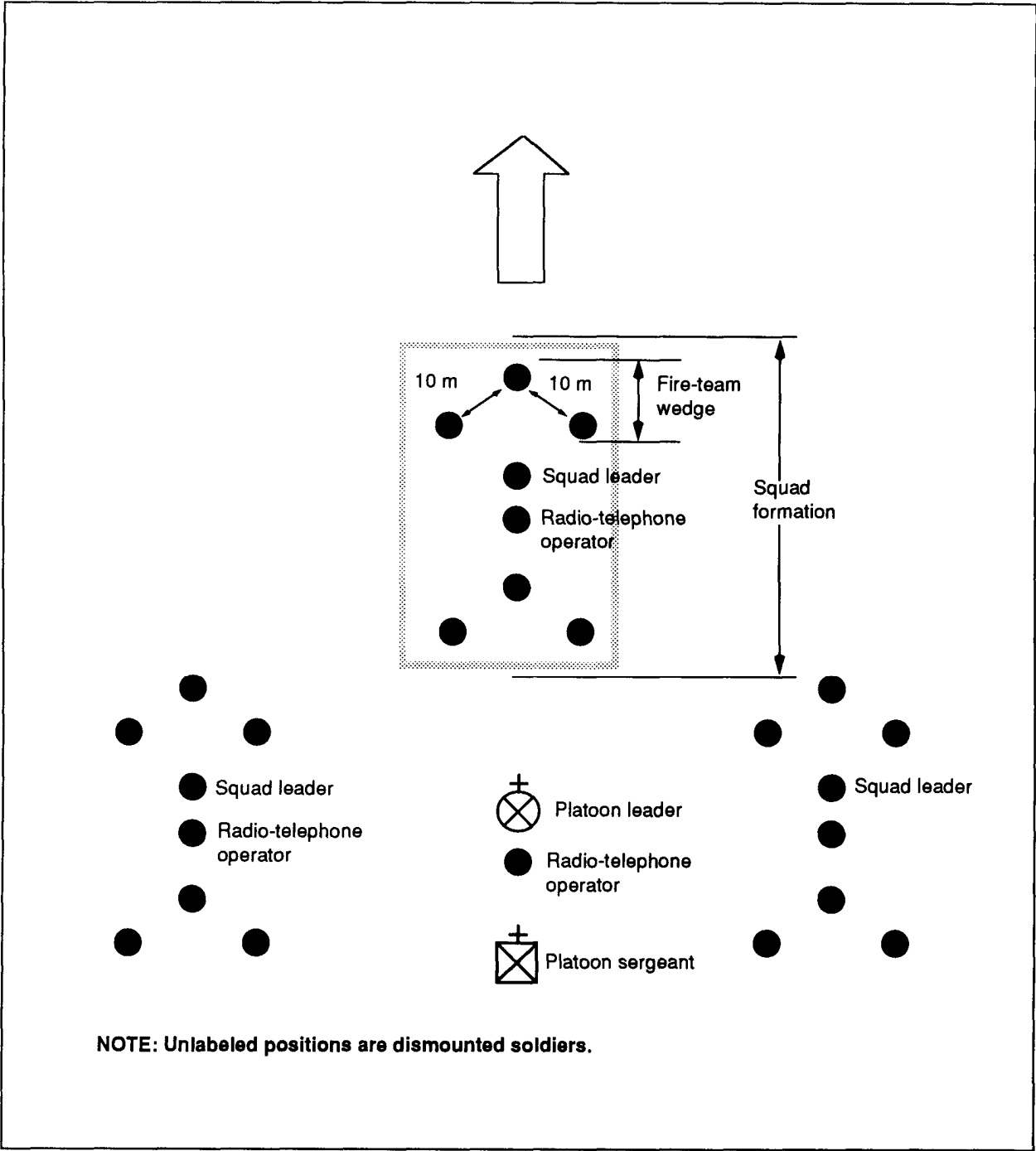


Figure E-7. Dismounted-platoon wedge formation

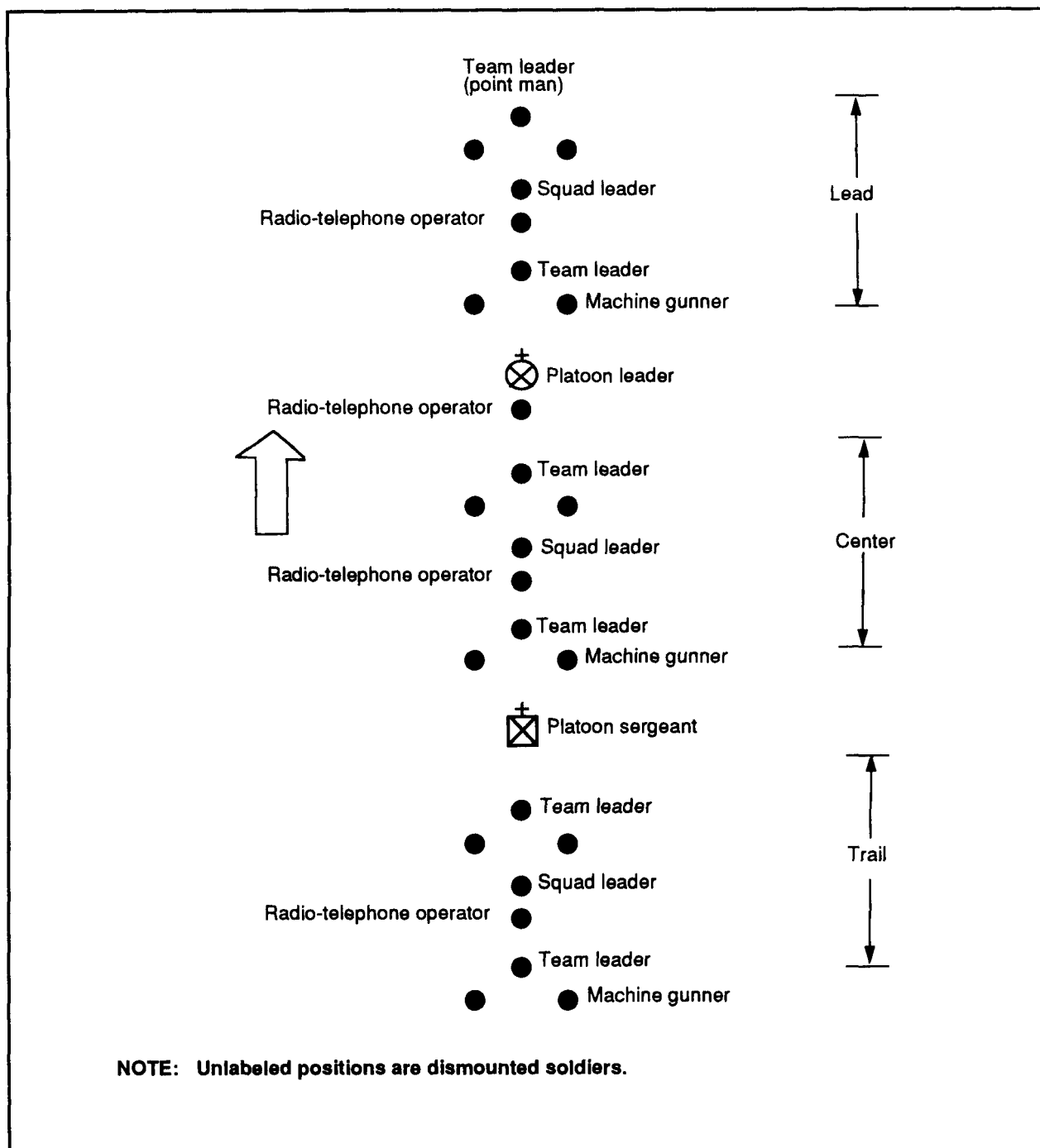


Figure E-8. Dismounted column formation

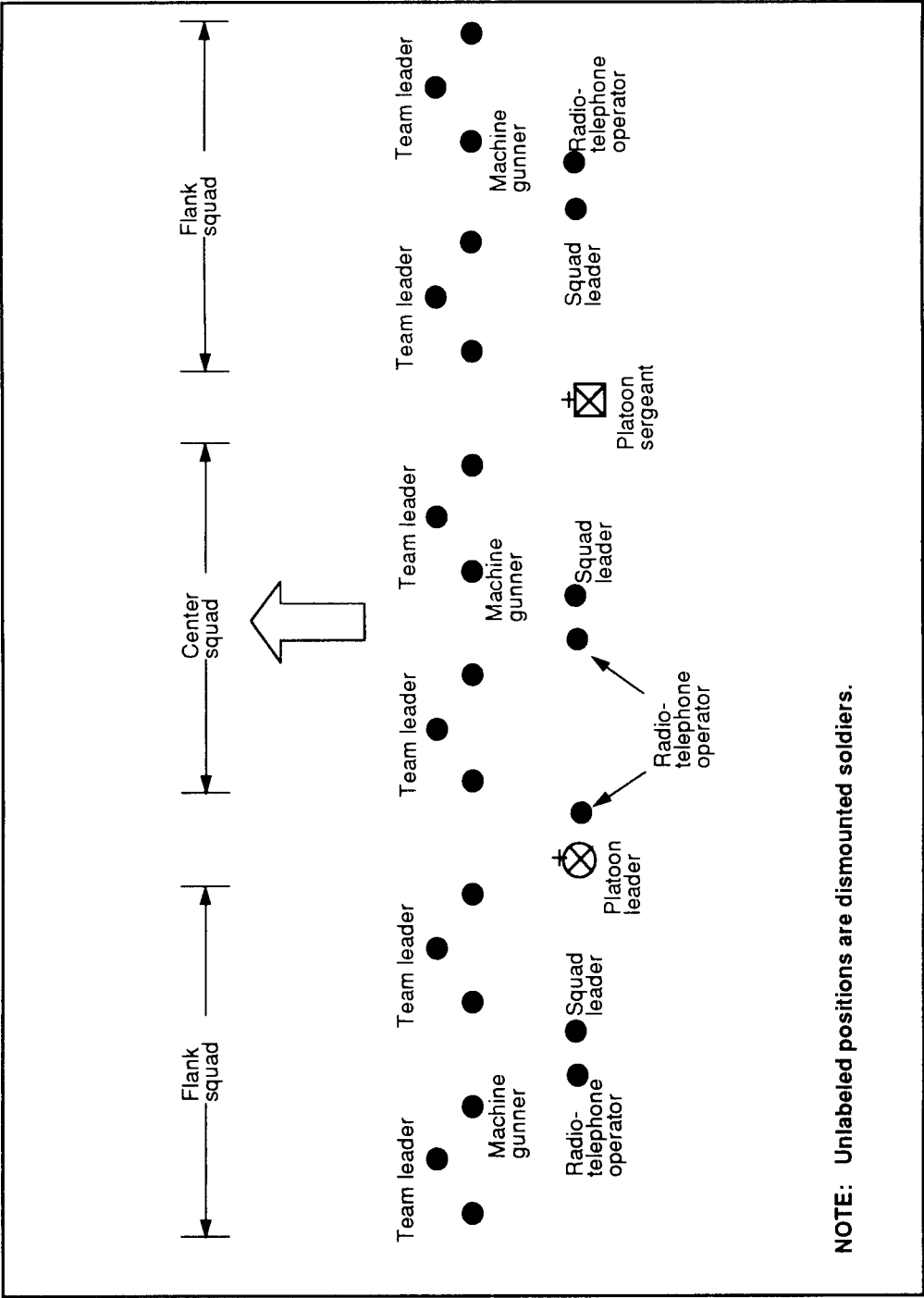


Figure E-9. Dismounted line formation

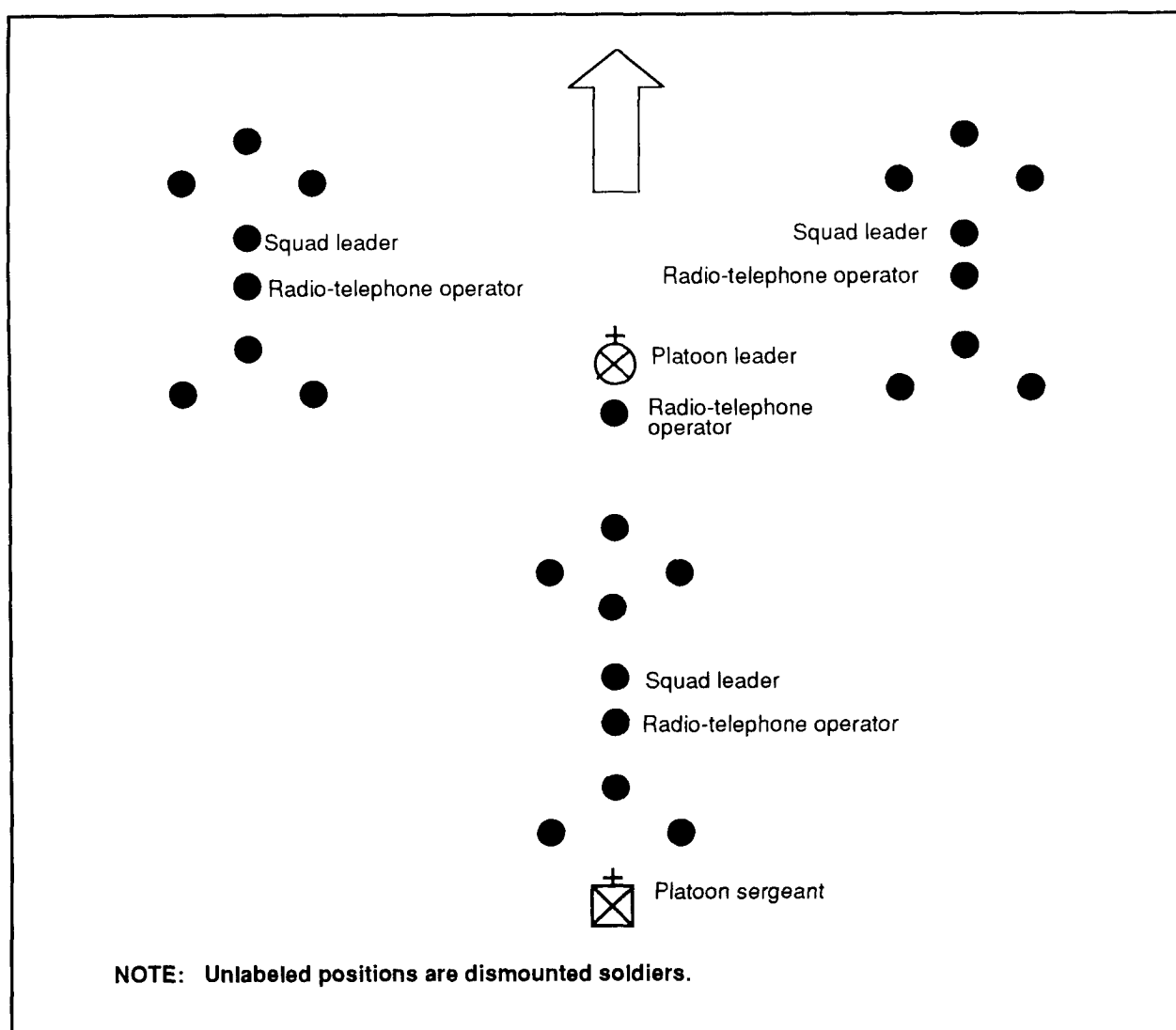


Figure E-10. Dismounted V formation

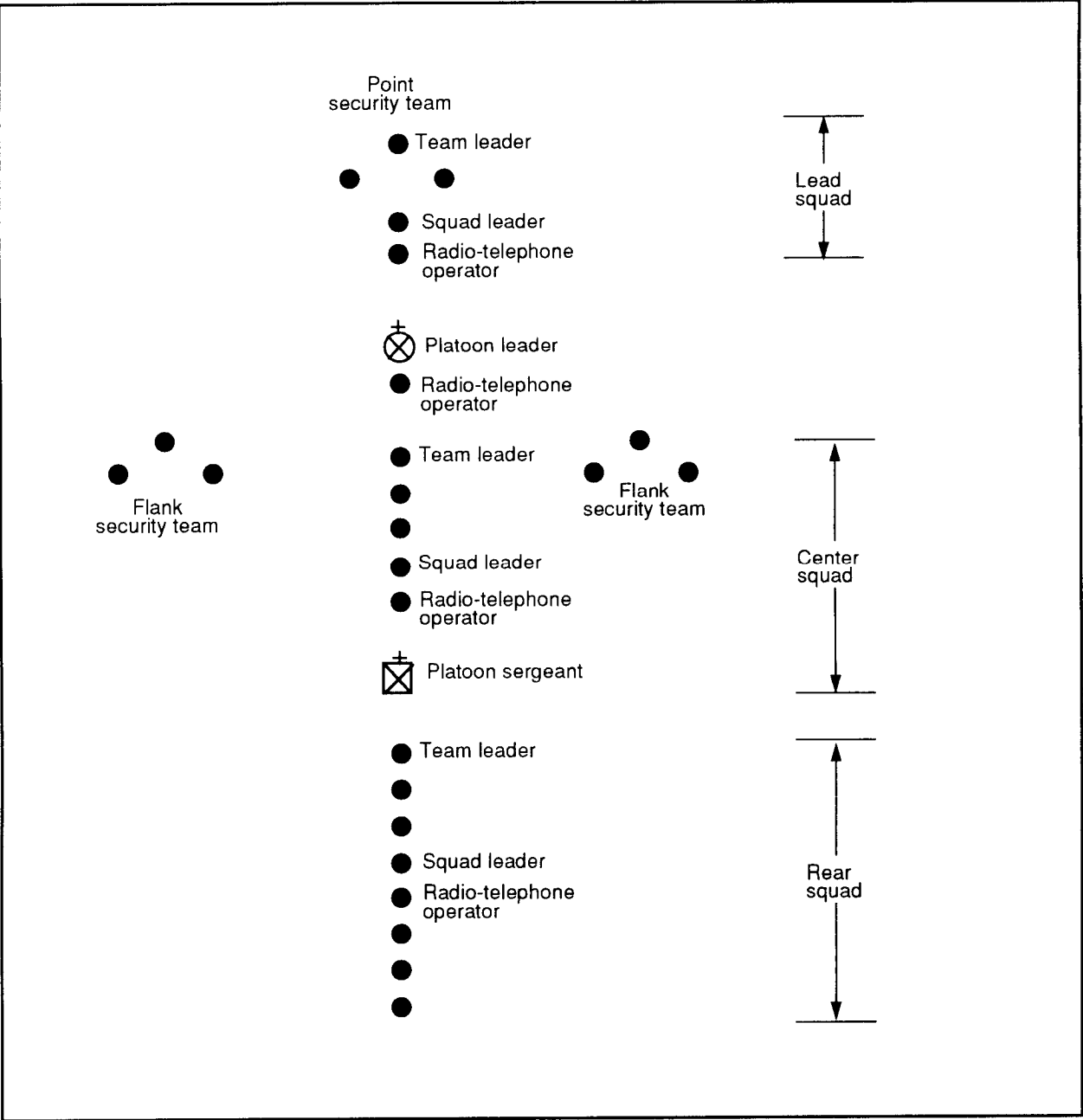


Figure E-11. Dismounted file formation

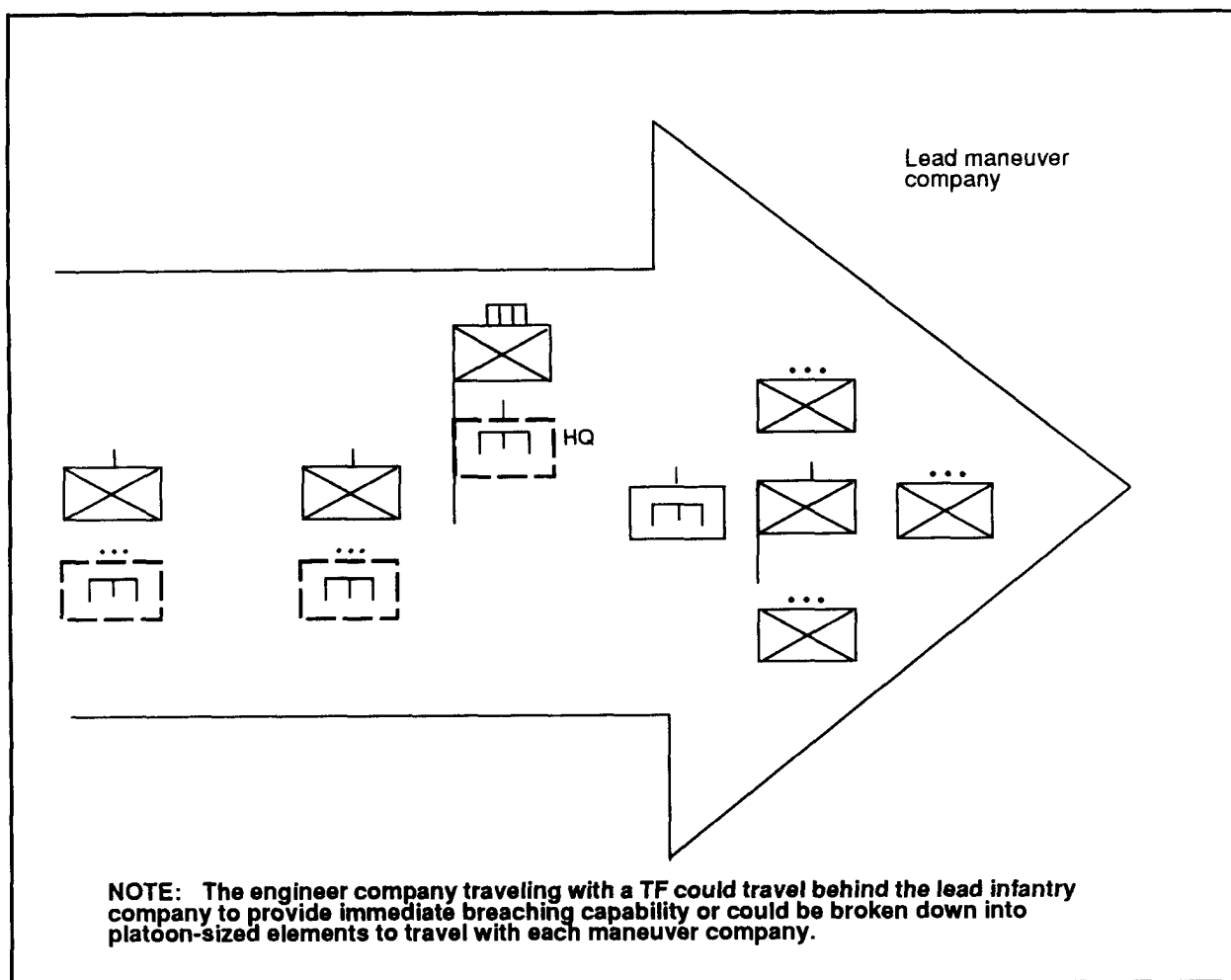


Figure E-12. Dismounted traveling formation