

Appendix G

Other Small Unit Organizations

As part of full spectrum operations, the Infantry platoon can expect to conduct missions with other types of Infantry platoons (within and outside of their own Infantry battalion), combat arms units, and combat support units. To aid the Infantry platoon leader, this appendix briefly discusses the structure, capabilities, and limitations of—

- The Infantry battalion scout platoon
- Infantry battalion mortar platoon
- Infantry battalion sniper section
- Bradley platoon and squad
- Stryker platoon and squad
- Maneuver company fire support team (FIST)
- Combat engineer support
- Air defense assets
- Tank platoon

INFANTRY BATTALION SCOUT PLATOON

G-1. The Infantry battalion scout platoon serves as the forward "eyes and ears" for the battalion commander. The primary mission of the scout platoon is to conduct reconnaissance and security to answer CCIR, normally defined within the battalion's intelligence, surveillance, reconnaissance (ISR) plan. The scout platoon can conduct route, zone, and area reconnaissance missions. The platoon can also conduct limited screening operations and can participate as part of a larger force in guard missions.

G-2. The scout platoon is organized into a platoon headquarters and three squads of six men each. Each squad leader is responsible for controlling his squad's movement and intelligence collection requirements. He reports critical intelligence information obtained by his squad to the scout platoon leader or battalion TOC.

G-3. In either offensive or defensive operations, the commander may deploy his scout platoon to conduct screening operations of the battalion's front, flank, or rear. The scout platoon may also occupy outposts from which it can relay critical information to the TOC concerning enemy composition, disposition, and activities.

INFANTRY BATTALION MORTAR PLATOON

G-4. The primary role of the Infantry battalion mortar platoon is to provide immediate, responsive indirect fires in support of the maneuver companies or battalion. The battalion mortar platoon consists of a mortar platoon headquarters, a mortar section that contains the fire direction center (FDC), and four mortar squads. The platoon's FDC controls and directs the mortar platoon's fires. Infantry battalion mortar sections are equipped with 120-mm and 81-mm mortars, but only have the capability to man 50 percent of these mortars at any one time.

G-5. The mortar platoon provides the commander with the ability to shape the Infantry's close fight with indirect fires that—

- Provide close supporting fires for assaulting Infantry forces in any terrain.
- Destroy, neutralize, suppress, or disrupt enemy forces and force armored vehicles to button up.

- Fix enemy forces or reduce the enemy's mobility and canalize his assault forces into engagement areas.
- Deny the enemy the advantage of defile terrain and force him into areas covered by direct fire weapons.
- Optimize indirect fires in urban terrain.
- Significantly improve the Infantry's lethality and survivability against a close dismounted assault.
- Provide obscuration for friendly movement.

G-6. Each mortar system is capable of providing three primary types of mortar fires:

- (1) High explosive (HE) rounds are used to suppress or destroy enemy Infantry, mortars, and other supporting weapons. HE is also used to interdict the movement of men, vehicles, and supplies in the enemy's forward area. Bursting white phosphorus (WP) rounds are often mixed with HE rounds to enhance their suppressive and destructive effects.
- (2) Obscuration rounds are used to conceal friendly forces as they maneuver or assault and to blind enemy supporting weapons. Obscurants can also be used to isolate a portion of the enemy force while it is destroyed piecemeal. Some mortar rounds use bursting WP to achieve this obscuration. Bursting WP may be used to mark targets for engagement by other weapons, usually aircraft, and for signaling.
- (3) Illumination rounds, to include infra-red illumination, are used to reveal the location of enemy forces hidden by darkness. They allow the commander to confirm or deny the presence of the enemy without revealing the location of friendly direct fire weapons. Illumination fires are often coordinated with HE fires to expose the enemy and to kill or suppress him.

INFANTRY BATTALION SNIPER SECTION

G-7. The primary mission of the sniper section in combat is to support combat operations by delivering precise long-range fire on selected targets. Snipers create casualties among enemy troops, slow enemy movement, lower enemy morale, and add confusion to their operations. They can engage and destroy high payoff targets. The secondary mission of the sniper section is collecting and reporting battlefield information. The sniper section is employed in all types of operations. This includes offensive, defensive, stability operations and civil support operations in which precision fire is delivered at long ranges. It also includes combat patrols, ambushes, countersniper operations, forward observation elements, military operations in urbanized terrain, and retrograde operations in which snipers are part of forces left in contact or as stay-behind forces.

COMPOSITION OF SNIPER SECTION

G-8. The Sniper section has 10 enlisted personnel: a section leader, 3 long range sniper rifle systems, and 3 standard sniper rifle systems. There are three sniper teams in the sniper section organized with a sniper, observer, and security. As a result, the sniper section can effectively employ three sniper teams at any one time. When necessary, the commander can employ up to five ad hoc sniper teams for limited duration missions by employing two man teams. Sniper teams can be task organized to any unit in the battalion or employed directly under battalion control. Snipers are most effective when leaders in the supported unit understand capabilities, limitations and tactical employment of sniper teams. See FM 3-21.10, *The Infantry Rifle Company*, and Appendix F for additional information on sniper team employment.

MECHANIZED INFANTRY RIFLE PLATOON AND SQUAD (BRADLEY)

G-9. BFV-equipped infantry rifle platoons and rifle squads normally operate as part of a larger force. They provide their own suppressive fires either to repel enemy assaults or to support their own maneuver. During close combat, platoon leaders consider the following to determine how to employ the BFVs.

- Support the rifle squads with direct fires.
- Provide mobile protection to transport rifle squads to the critical point on the battlefield.

- Suppress or destroy enemy infantry fighting vehicles and other lightly armored vehicles.
- Destroy enemy armor with TOW fires.

CAPABILITIES

G-10. The Bradley platoon's effectiveness is enhanced because of the lethality of its weapons systems and the rifle squad. To employ the platoon effectively, the platoon leader capitalizes on its strengths. The BFV-equipped mechanized infantry platoon can—

- Assault enemy positions.
- Assault with small arms and indirect fires to deliver rifle squads to tactical positions of advantage.
- Use 25-mm cannon and 7.62-mm machine gun fire to effectively suppress or destroy the enemy's infantry.
- Block dismounted avenues of approach.
- Seize and retain key and decisive terrain.
- Clear danger areas and prepare positions for mounted elements.
- Conduct mounted or dismounted patrols and operations in support of security operations.
- Develop the situation with Soldiers (three rifle squads) and equipment (25-mm cannon, TOW, and 7.62-mm coaxial machine gun).
- Establish strong points to deny the enemy important terrain or flank positions.
- Infiltrate enemy positions.
- Overwatch and secure tactical obstacles.
- Repel enemy attacks through close combat.
- Conduct assault breaches of obstacles.
- Participate in air assault operations.
- Destroy light armor vehicles using direct fire from the BFV.
- Employ 25-mm cannon fire to fix, suppress, or disrupt the movement of fighting vehicles and antiarmor systems up to 2,500 meters.
- Use TOW fires to destroy tanks and fighting vehicles out to 3,750 meters.
- Use Javelin fires to destroy tanks and fighting vehicles out to 2,000 meters.
- Operate in a chemical, biological, radiological, or nuclear (CBRN) environment.
- Participate in stability operations.

LIMITATIONS

G-11. BFV-equipped Infantry rifle platoons have the following limitations:

- Increased maintenance requirements.
- Increased fuel requirements.
- Size of vehicle limits maneuverability in restricted terrain.
- Load noise signature.
- Limited crew situational awareness.

ORGANIZATION

G-12. The mechanized infantry rifle platoon is equipped with four BFVs and can fight mounted or with rifle squads on the ground. Figure G-1 illustrates the BFV-equipped mechanized infantry rifle platoon organization. The platoon can fight as unified mutually supporting maneuver elements or as two distinct maneuver elements—one mounted and one dismounted. The platoon must prepare to fight in a variety of operational environments. Once the rifle squads have dismounted, the mounted element provides a base of fire for the rifle squads as they close with and destroy the enemy.

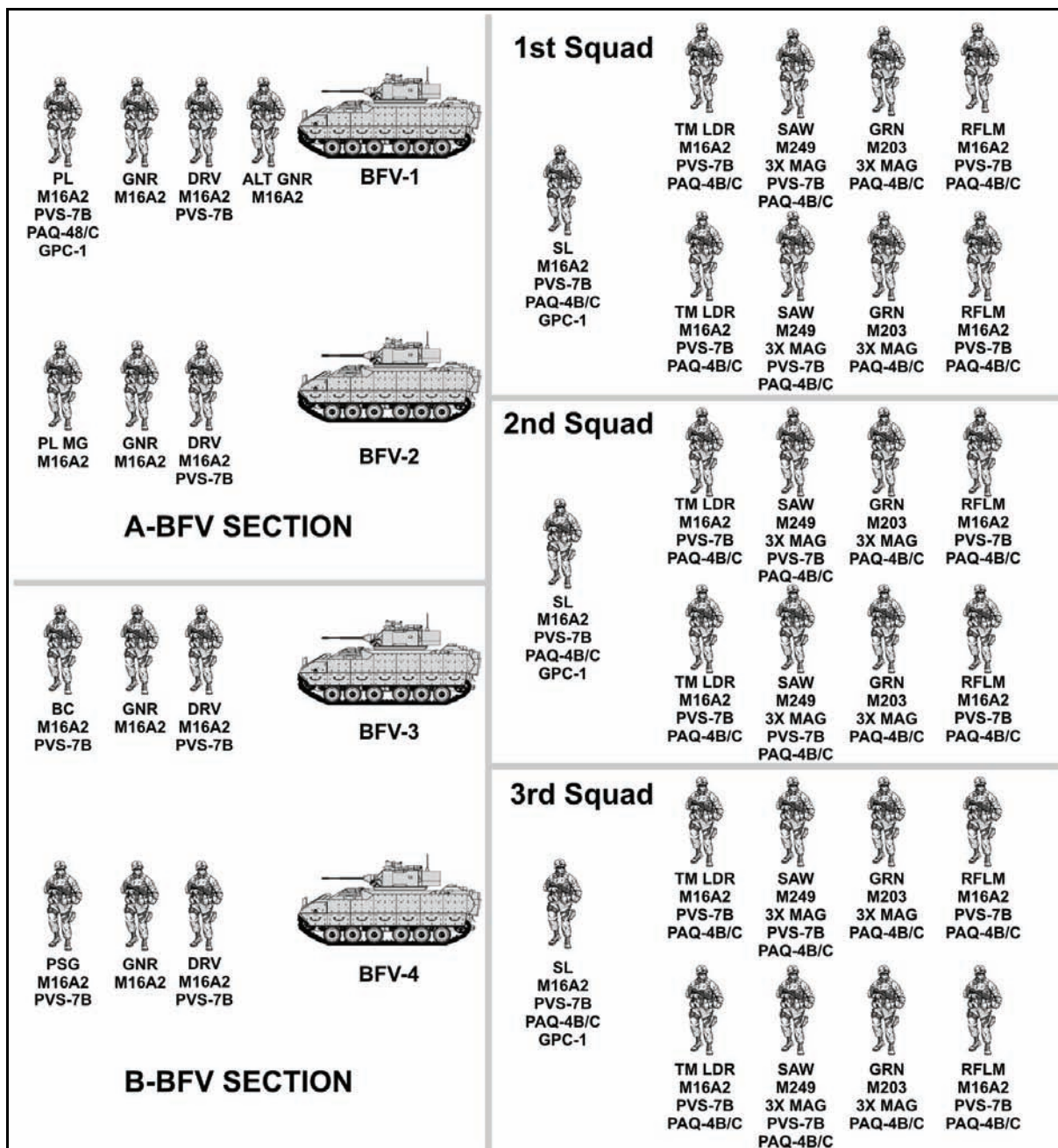


Figure G-1. Bradley fighting vehicle platoon organization.

STRYKER BRIGADE COMBAT TEAM INFANTRY RIFLE PLATOON AND SQUAD

G-13. The Army organized the Stryker brigade combat team (SBCT) in response to the need for a force that can deploy rapidly as an "early responder" to a crisis area anywhere in the world.

CAPABILITIES

G-14. The platoon combines the effects of the Infantry squads, the weapons squad, and the direct fires from the Infantry carrier vehicle (ICV). This includes Javelin fire-and-forget antitank missile fires. Protection is

afforded by the vehicle and the ability of the vehicle to protect the infantrymen from small-arms fire and fragmentation before dismounting. The SBCT infantry platoon equipped with the ICV can—

- Use the mobility of the ICV to transport the infantry squads to a position of advantage under the protection of the vehicle.
- Operate in a mounted or dismounted role.
- Destroy light armor vehicles and personnel using direct fire.
- Employ fires from the vehicle to destroy, suppress, or fix personnel and light infantry fighting vehicles.
- Destroy tanks and fighting vehicles with CCMS fires out to 2,000 meters (Javelin).
- Block dismounted avenues of approach.
- Protect obstacles and prevent enemy breaching operations.
- Establish strong points to deny the enemy key terrain or flank positions.
- Conduct assault breaches of obstacles.
- Clear danger areas and prepare positions for mounted elements.
- Assault enemy positions.
- Augment the ICV, mobile gun system (MGS), and tank antiarmor fires.
- Move over terrain not trafficable by other wheeled vehicles with the infantry squads.
- Infiltrate enemy positions.
- Conduct mounted or dismounted patrols and operations in support of security operations.
- Conduct air assault operations.

Limitations

G-15. The ICV-equipped infantry platoon has the following limitations:

- Platoon ICVs are vulnerable to enemy antiarmor fires.
- Platoon infantry squads are vulnerable to small arms and indirect fires.
- The pace of dismounted offensive operations is limited to the foot speed of the infantryman.
- The ICV poses a variety of difficulties in water-crossing operations, including the requirement for either adequate fording sites or a bridge with sufficient weight classification.
- A Soldier's load increases as a result of additional digital equipment and increased battery requirements.
- Inherent in a situation as an "early responder" is the difficulty in obtaining supplies for ongoing operations, especially with long lines of communication (LOC) and resupply in an underdeveloped area of operation. This situation is compounded because the unit may operate forward of the debarkation point and with threats to the LOCs, the routes may not be secure.

ORGANIZATION

G-16. The SBCT Infantry platoon has three elements: the platoon headquarters (Figure G-2), the mounted element, and the infantry squad element. The SBCT Infantry platoon is equipped with four ICVs. The ICV is a fully mobile system capable of operating in conjunction with infantry and other elements of the combined arms team. Each ICV has a vehicle commander (VC) and driver that operate the vehicle (Figure G-2). The PSG or a senior squad leader is included in the mounted section as the fourth VC and serves as one of the section leaders. The dismounted element (Figure G-3) consists of the platoon headquarters, three rifle squads, and a weapons squad.

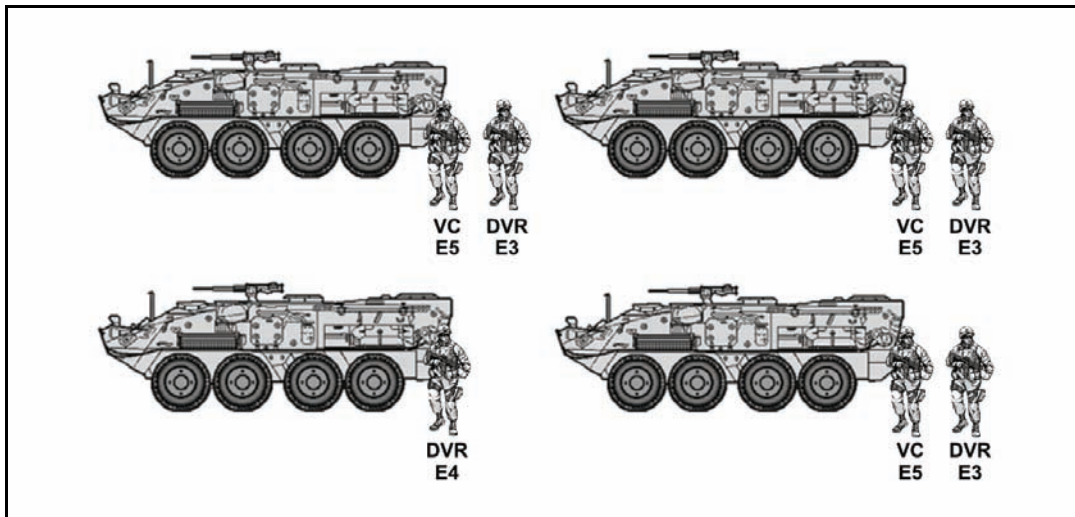


Figure G-2. Mounted element organization.

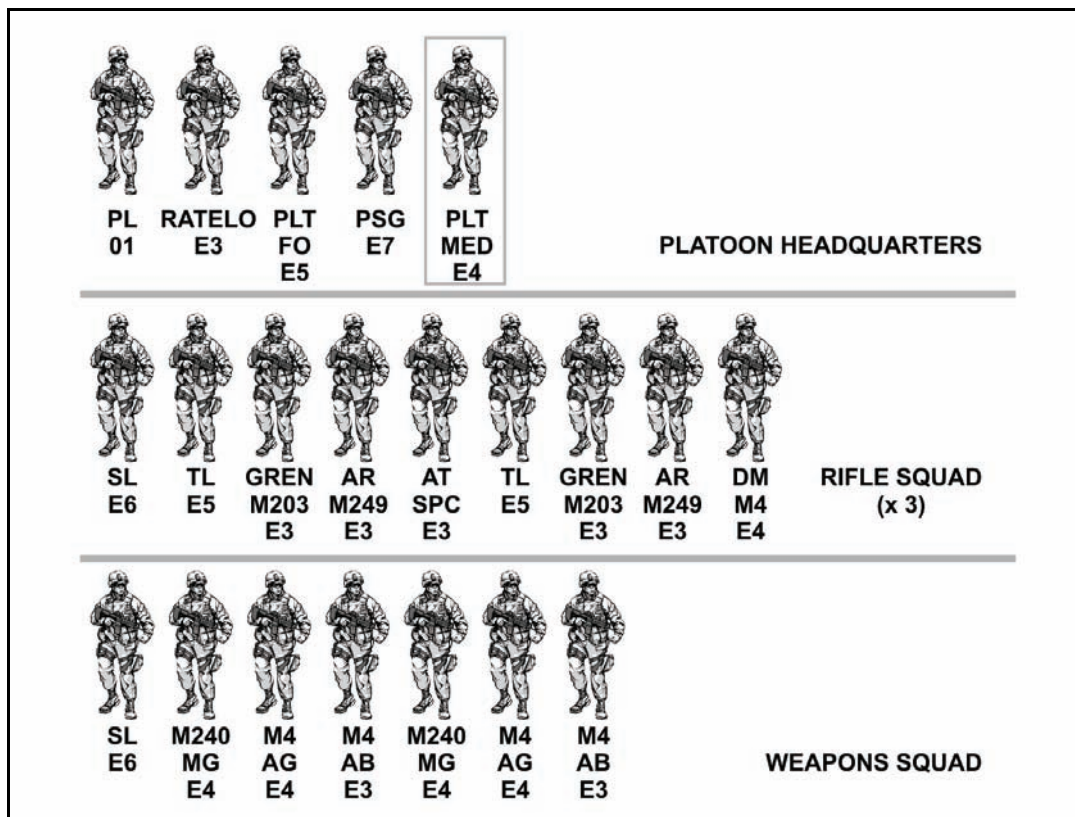


Figure G-3. Dismounted element organization.

PLATOON FORWARD OBSERVER DUTIES AND RESPONSIBILITIES

G-17. As the platoon’s fire support representative, the primary duty of the FO is to locate targets and call for and adjust indirect fire support. Additional responsibilities include the following:

- Refine or submit key targets for inclusion in the company fire plan.
- Prepare, maintain, and use situation maps.

- Establish and maintain communications with company FIST.
- Advise the platoon leader as to the capabilities and limitations of available indirect fire support.
- Report battlefield intelligence.
- Laser designate targets when required.

MANEUVER COMPANY FIRE SUPPORT TEAM (FIST) FIRE REQUEST CHANNELS

G-18. The FIST serves as the net control system (NCS) on the company fire support net. The FIST relays the call for fire to supporting artillery on a digital net or sends the fire mission to the mortar platoon or section. The command net allows the FIST to monitor unit operations. It links the FIST to the commander and platoon leaders for planning and coordination. This net is also an alternate means the platoon leader can use to contact the company commander when primary means fail.

Quick Fire Channel

G-19. A quick fire channel is established to directly link an observer (or other target executor) with a weapon system (Figure G-4). Quick fire channels may be either voice or digital nets. Within a maneuver brigade, quick fire channels are normally established on FA or mortar nets. These channels are designed to expedite calls for fire against high profile targets (HPTs) or to trigger preplanned fires. Quick fire channels may also be used to execute fires for critical operations or phases of the battle. Examples include linking a combat observation and laser team (COLT) with a battery or platoon FDC for counter reconnaissance fires or an AN-TPQ-37 radar with the multiple launch rocket system (MLRS) battery FDC for counterfires. Copperhead missions can best be executed by using quick fire channels.

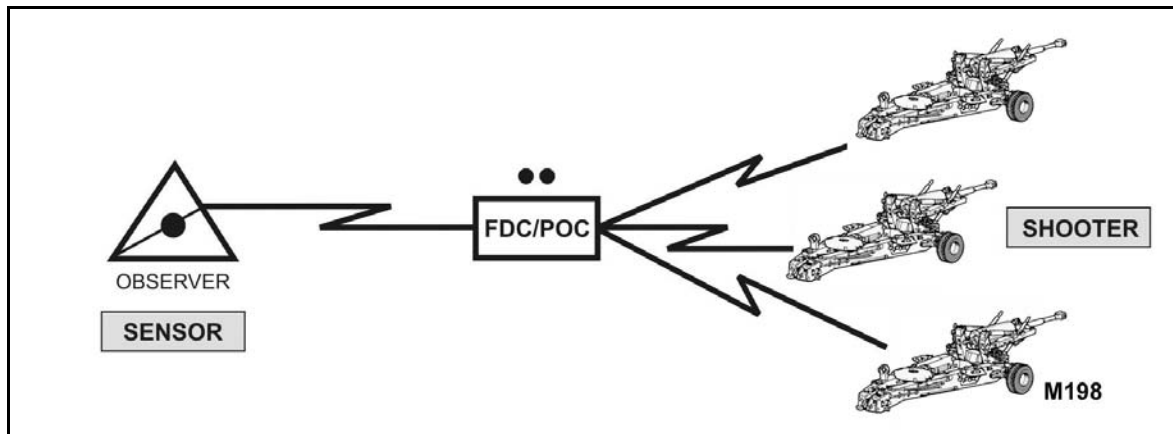


Figure G-4. Quick fire channel illustrating sensor-to-shooter link.

COMBAT ENGINEER SUPPORT

G-20. The light engineer organization is tailored to fight as part of the combined arms team in the Infantry. It focuses on mobility and provides limited countermobility and survivability engineer support. A light engineer unit can be task-organized to provide the necessary engineer functions to fight the battle.

ENGINEER PLATOON

G-21. An engineer platoon may be task-organized to a battalion or company based on the higher commander's analysis of METT-TC. The engineer platoon can be employed to accomplish most engineer missions. However they may require external support for them to conduct continuous operations for more than 48 hours. Figure G-5 shows an example of an engineer platoon.

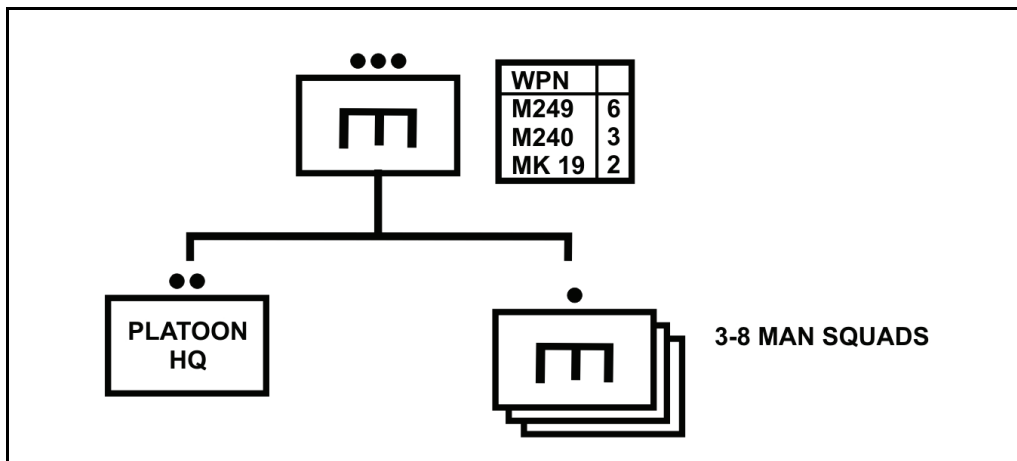


Figure G-5. Engineer platoon.

SAPPER SQUAD

G-22. A sapper squad may be task-organized to a company and executes engineer tasks to support the company mission. Task organization is based on the battalion commander’s analysis of METT-TC. The squad is the smallest engineer element that can be employed with its own organic C2 assets. Therefore, it can accomplish tasks such as reconnaissance, manual breaching, demolitions, or route clearance as part of a platoon or company mission. Depending on METT-TC, the engineer may receive augmentation of engineer equipment such as a small earth excavator (SEE) or other specialized engineer equipment. Figure G-6 shows an example of a sapper squad.

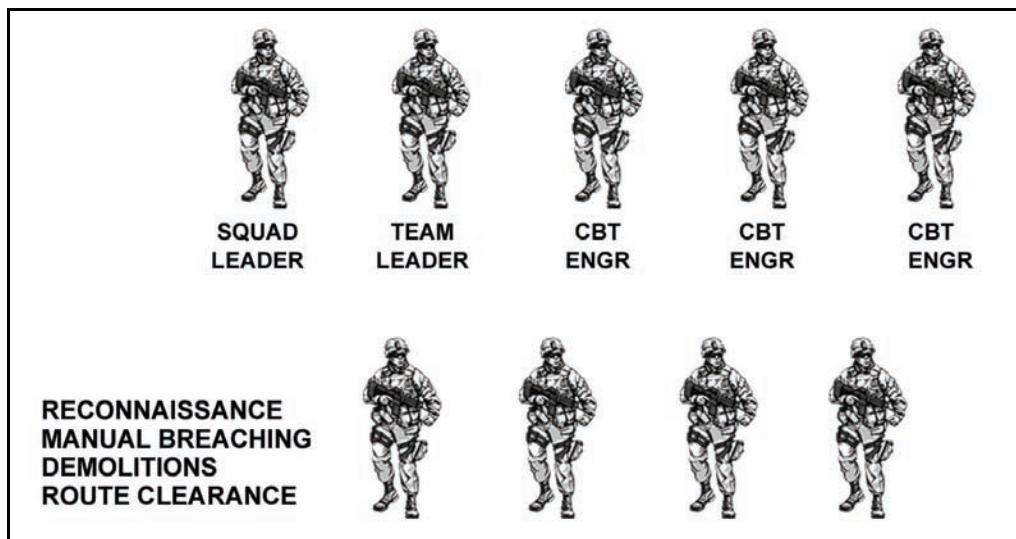


Figure G-6. Sapper squad.

CAPABILITIES AND MISSIONS

G-23. The mission of engineers corresponds to those missions normally conducted by Infantry units. Engineer units can operate in restricted terrain such as forests, jungles, mountains, and urban areas. Because of their austere nature, once they are employed, light engineers have the same tactical mobility as the Infantry. To compensate for this, they train to operate in a decentralized manner. Like their supported maneuver force, they operate best under conditions of limited visibility.

Capabilities

G-24. The engineer’s focus is mobility. They are experts in supporting infiltrations, air assaults, parachute assaults, ambushes, and raids. In this role, the engineer may conduct covert breaches, route reconnaissance, and obstacle reduction. He may also identify potential enemy counterattack routes and establish countermobility measures such as using scatterable mines (SCATMINEs) to protect the force. Engineers train in Infantry skills and are able to move undetected when close to the enemy.

Missions

G-25. Engineer missions fit into one of three categories: mobility, countermobility, and survivability. Table G-1 shows the tasks included in each of these categories. Depending on METT-TC, an engineer platoon or squad might be attached to a company. Engineers conduct reconnaissance, evaluate obstacles, and use demolitions and field expedients.

Table G-1. Engineer missions.

MOBILITY	COUNTERMOBILITY	SURVIVABILITY
Breach obstacles. Clear minefields. Clear routes. Cross gaps expediently. Construct combat roads or trails.	Construct obstacles to turn, fix, block, or disrupt enemy forces.	Construct crew-served weapons and vehicle fighting positions.

SURVIVABILITY




G-26. Engineer units may also be employed in survivability operations to assist in protecting friendly units by helping to prepare areas such as defensive positions. They may employ their blades to help prepare positions for systems such as mortars, C2, and key weapons. Units should prepare their areas for the arrival of the blades by marking the positions, identifying leaders to supervise position construction, and designating guides for the blade movement between positions.

G-27. Engineer units might employ a small earth excavator to aid in position construction. A SEE has a backhoe, bucket loader, handled hydraulic rock drill, chain saw, and pavement breaker. The SEE can dig positions for individual, crew-served, and AT weapons or for Stinger missile teams. It can also be employed to dig in ammunition pre-stock positions.

AIR AND MISSILE DEFENSE

G-28. Air defense systems that may operate in and adjacent to the Infantry platoon AO are the Avenger, man-portable air defense systems (MANPADS), and Linebacker (Table G-2). All systems can operate as MANPADS Stinger teams. Although other short-range air defense (SHORAD) systems support divisional units, the Infantry platoon is most likely to be supported by the Avenger or a MANPADS Stinger team. The Stinger is also fired from the Avenger and is designed to counter high-performance, low-level, ground attack aircraft; helicopters; and observation and transport aircraft.

Table G-2. Air defense systems.

<p>Man-Portable System</p> 	<p>Personnel: 2-man crew Basic load: 6 missiles with M998 HMMWV Acquisition/range: Visual Engagement range: 5 km Engagement altitude: 3 km+ Mutual support: 2 km+</p>
<p>Bradley Linebacker</p> 	<p>Personnel: 4-man crew Basic load: 10 missiles (4 ready to fire, 6 stowed) Acquisition/range: Visual/thermal Engagement range: 5 km (Stinger); 2,500-m 25-mm; 900-m coax Engagement altitude: 3 km+ Mutual support: 3 km Emplacement time: Fire on the move Reload time: 4 minutes</p>
<p>Avenger</p> 	<p>Personnel: 2-man crew Basic load: 8 ready-to-fire missiles, 250 rounds .50 cal Acquisition/range: Visual/FLIR 9-10 km, laser range finder Engagement range: 5 km+, .50 cal range: 1,800 m Rate of fire: 1,025 rpm Engagement altitude: 3 km+ Mutual support: 3 km Emplacement time: 6 minutes, can remote operations out to 50 meters</p>

AVENGER AND MANPADS STINGERS

G-29. The Avenger's combined arms mission is to provide protection to combat forces and other critical assets from attack. The Avenger is designed to counter hostile cruise missiles, unmanned aircraft systems, low-flying, high-speed, fixed-wing aircraft, and helicopters attacking or transiting friendly airspace. The Avenger provides the battalions with highly mobile dedicated air defense firepower. It is equipped with two standard vehicle-mounted launchers (SVMLs). Each carries four Stinger missiles. The Avenger has the following capabilities:

- A modified fire control subsystem and SVMLs that allow the Avenger to shoot on the move.
- An unobstructed, 360-degree field of fire that can engage at elevations between -10 and +70 degrees.
- A .50 cal machine gun that affords a measure of self-protection by providing additional coverage of the Stinger missile's inner launch boundary.
- A sensor package (forward-looking infrared radar [FLIR], carbon dioxide, eye-safe laser range finder, and a video autotracker) that provides target acquisition capability in battlefield obscuration at night and in adverse weather.
- Two-man crew can remain in the vehicle or remotely control the platform from a separate fighting position.
- Shoot-on-the-move and slew-to-cue capability.
- System maintains dismounted Stinger missile capability in event of launcher system damage, failure, or static mode.

G-30. The MANPADS Stinger Missile System employs a two-man crew that consists of a crew chief and a gunner. The MANPADS team normally has assigned transportation. Unit leaders must carefully consider the consequences before separating a Stinger team from its vehicle. Stinger teams operating away from their vehicles are limited in their ability to haul extra missiles to their firing point.

EARLY WARNING ALERTS

G-31. If SHORAD units are operating in the area, the platoon may receive early warning alerts from its elements. The SHORAD radar teams can broadcast an early warning of enemy air activity that will filter down to the platoon via the brigade, battalion, and company command nets. If METT-TC factors permit, the SHORAD platoon provides voice early warning directly to the battalions.

EMPLOYMENT OF AIR DEFENSE SYSTEMS

G-32. In offensive situations, air defense elements accompany the main attack. They may maneuver with the battalion's lead companies orienting on low-altitude air avenues of approach. When the unit is moving or in a situation that requires short halts, air defense elements should remain within the platoon's organic weapons systems maximum ranges to assure mutual support. The Stinger gunners (MANPADS) can dismount to provide air defense when the unit reaches the objective or pauses during the attack. In the defense, air defense elements may establish BPs based on available intelligence preparation of the battlefield (IPB) information and the company commander's scheme of maneuver.

Weapons Control Status

G-33. The weapons control status (WCS) describes the relative degree of control in effect for air defense fires. It applies to all weapons systems. The WCS is dictated in the battalion OPORD and may be updated based on the situation. The three levels of control are:

- **Weapons Free.** Crews can fire at any air target not positively identified as friendly. This is the least restrictive WCS level.
- **Weapons Tight.** Crews can fire only at air targets positively identified as hostile according to the prevailing hostile criteria.
- **Weapons Hold.** Crews are prohibited from firing except in self-defense or in response to a formal order. This is the most restrictive control status level.

TANK PLATOON

G-34. The tank platoon is the smallest maneuver element within a tank company. Organized to fight as a unified element, the platoon consists of four main battle tanks organized into two sections. The platoon leader (Tank 1) and platoon sergeant (Tank 4) are the section leaders. Tank 2 is the wingman in the platoon leader's section; Tank 3 is the wingman in the platoon sergeant's section (Figure G-7).

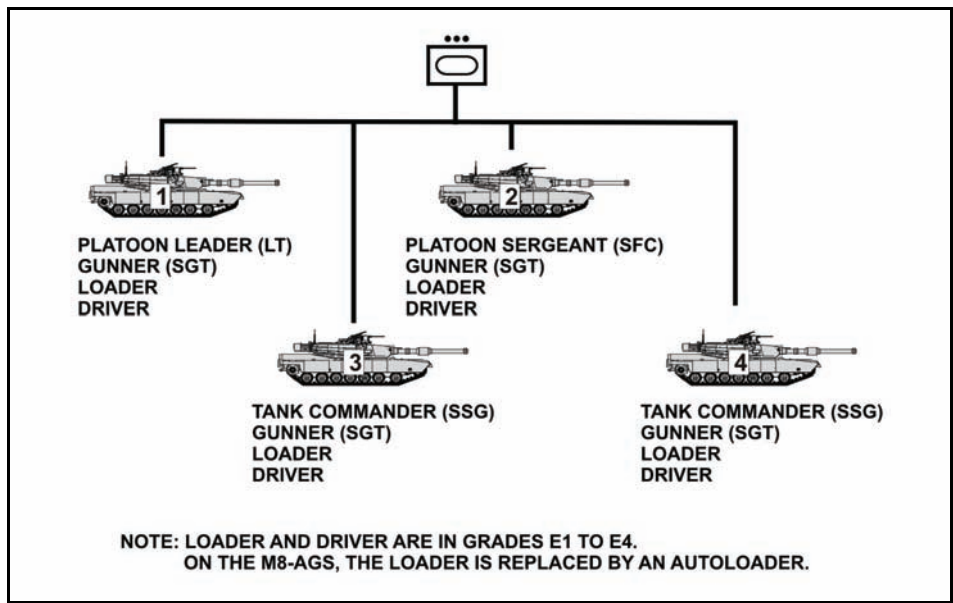


Figure G-7. Tank platoon organization.

G-35. The tank platoon is organic to tank companies and armored cavalry troops. The platoon may be cross-attached to a number of organizations, commonly a mechanized infantry company, to create company teams. It may also be placed under operational control (OPCON) of a light infantry battalion.

G-36. Under battlefield conditions, the wingman concept facilitates control of the platoon when it operates in sections. The concept requires that one tank orient on another tank on either its left or right side. In the absence of specific instructions, wingmen move, stop, and shoot when their leaders do. In the tank platoon, Tank 2 orients on the platoon leader's tank, while Tank 3 orients on the platoon sergeant's tank. The platoon sergeant (PSG) orients on the platoon leader's tank (Figure G-8).

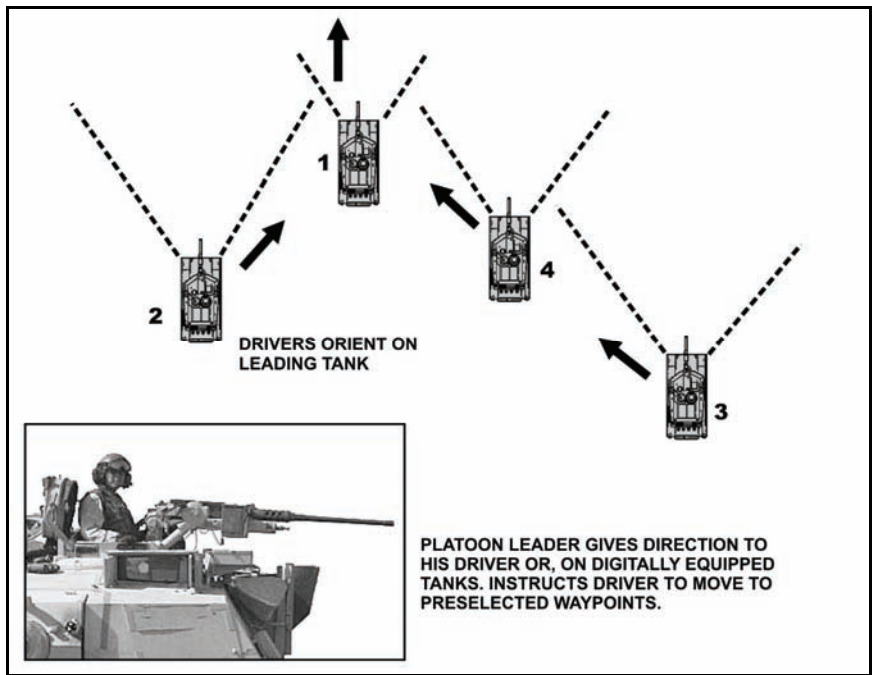


Figure G-8. The tank wingman concept.

Appendix H

Security

Security is the measures taken by the platoon to protect it against all acts designed to impair its effectiveness. Security measures are an inherent aspect of all military operations and can be moving or stationary.

SECTION I — SECURITY FUNDAMENTALS

H-1. Infantry platoons conduct local security measures. They may also be tasked to provide security measures for larger units (called the main body). Measures include screen, guard, cover, and area security. These tasks are executed in the larger unit's security zone (front, flank, or rear of the main body). The application of these security measures is founded on the enduring doctrine found in FM 22-6, *Guard Duty*. Leaders given these tasks or participating in the task of a larger unit must, at a minimum, understand their engagement criteria and whether or not to become decisively engaged.

- **Local security** consists of low-level security operations conducted near a unit to prevent surprise by the enemy (FM 1-02). Local security measures are the same as those outlined for *exterior guards* in FM 22-6.
- **Screen** is a form of security operations that primarily provides early warning to the protected force. (FM 1-02) A screen consists of a combination of observation posts and security patrols.
- **Guard** is a term with a dual meaning; the difference is the size element referred to. When used to refer to individuals, a *guard* is the individual responsible to keep watch over, protect, shield, defend, warn, or any duties prescribed by general orders and/or special orders. Guards are also referred to as a sentinels, sentries, or lookouts (FM 22-6). When used in reference to units, a *guard* is a tactical mission task where the guard force protects the main body by fighting to gain time while observing and preventing the enemy's observation and direct fire against the main body. (FM 1-02) Units conducting a guard mission cannot operate independently because they rely upon the fires and warfighting functions of the main body. Guards consist of a combination of OPs, battle positions, combat patrols, reconnaissance patrols, and movement to contact for force protection.
- **Cover** is a form of security operations with the primary task is to protect the main body. This is executed by fighting to gain time while also observing and preventing the enemy's ground observation and direct fire against the main body. (FM 1-02) Ordinarily only battalion -sized element and larger have the assets necessary to conduct this type of security operation.
- **Area security** is a form of security operations conducted to protect friendly forces, installations, routes, and actions within a specific area. (FM 1-02) During conventional operations (major theater of war scenarios) area security refers the security measures used in friendly controlled areas. Many of the tasks traditionally associated with stability operations and small scale contingencies fall within the scope of area security. These include road blocks, traffic control points, route security, convoy security, and searches.

H-2. The screen, guard, and cover are the security measures used primarily by battalion-sized units to secure themselves from conventional enemy units. These measures, respectively, contain increasing levels of combat power and provide increasing levels of security for the main body. Along with the increase of combat power, there is an increase in the unit's requirement to fight for time, space, and information on the enemy. Conceptually, the measures serve the same purpose as the local security measures by smaller units. For example, a battalion will employ a screen for early warning while a platoon will emplace an OP. The purpose is the same—early warning—only the degree and scale of the measures are different.

H-3. Local and area security are related in that they both focus on the enemy threat within a specified area. Again, the difference is one of degree and scale. Local security is concerned with protecting the unit from

enemy in the immediate area, whereas area security is concerned with enemy anywhere in the leader's area of operation (AO).

SECURITY FUNDAMENTALS

H-4. The techniques employed to secure a larger unit are generally the same as those of traditional offensive and defensive operations. It is the application of those techniques that differ. Table H-1 lists the most common techniques used, information required to execute the operation, and the principles used to employ them.

Table H-1. Security fundamentals.

Principles of Security Operations	Techniques Used to Perform Security Operations	Information Required from Controlling Headquarters
<ul style="list-style-type: none"> • Three General Orders • Provide early and accurate warning • Provide reaction time and maneuver space • Orient on the force / facility being secured • Perform continuous reconnaissance • Maintain enemy contact 	<ul style="list-style-type: none"> • Observation post • Combat outpost • Battle position • Patrols • Combat formations • Movement techniques • Infiltration • Movement to contact • Dismounted, mounted, and air insertion • Roadblocks • Checkpoints • Convoy and route security • Searches 	<ul style="list-style-type: none"> • Trace of the security area (front, sides, and rear boundaries), and initial position within the area • Time security is to be established • Main body size and location • Mission, purpose and commander's intent of the controlling headquarters • Counterreconnaissance and engagement criteria • Method of movement to occupy the area (zone reconnaissance, infiltration, tactical road march, movement to contact; mounted, dismounted, or air insertion) • Trigger for displacement and method of control when displacing. • Possible follow-on missions

LOCAL SECURITY

A unit must be protected at all times from surprise. Exterior guards are utilized to protect a unit from surprise and to give the unit time to prepare to counter any threat. Guards must be alert for surprise by ground, airborne, and air attacks; to provide early warning of chemical, biological, radiological, and nuclear (CBRN) attack or contamination; and to protect supplies and supply installations. If the unit is moving, security may vary from observation to the use of security patrols. During short halts, guards, small security detachments, and forward patrols are used to provide all-round security. For stationary positions in combat or hostile areas, unit commanders use exterior guards to establish a surveillance system to operate day and night throughout the unit area. The commander may use guards, listening posts, observation posts, patrols, aerial observers, and any other available means. The guards may have any number of special devices to assist them in performing their duties. These may include CBRN detection devices, electronic detection devices, infrared or other night vision devices, trip flares and antipersonnel mines, noisemaking devices, or any other device to provide early warning to the guard and unit.

Local Security—FM 22-6, Guard Duty. 17 September 1971.

H-5. Local security prevents a unit from being surprised and is an important part of maintaining the initiative. Local security includes any local measure taken by units against enemy actions. It involves avoiding detection by the enemy or deceiving the enemy about friendly positions and intentions. It also includes finding any enemy forces in the immediate vicinity and knowing as much about their positions and intentions as possible. The requirement for maintaining local security is an inherent part of all operations. Table H-2 lists a sample of active and passive local security measures.

Table H-2. Active and passive security measures.

Active and Passive Security Measures	
Active Measures (moving)	<ul style="list-style-type: none"> -Combat formations, movement techniques, movement to contact, spoiling attacks - Moving as fast as conditions allow to prevent enemy detection and adaptation - Skillful use of terrain
Active Measures (stationary)	<p><u>Outside the perimeter</u></p> <ul style="list-style-type: none"> - Observation posts, security patrols - Battle positions, combat patrols, reconnaissance patrols - Employing early warning devices - Establishing roadblocks / checkpoints <p><u>Inside the perimeter</u></p> <ul style="list-style-type: none"> - Establishing access points (entrance and exits) - Establishing the number and types of positions to be manned - Establishing readiness control (REDCON) levels - Designating a reserve / response force - Establishing stand-to measures
Passive measures	<ul style="list-style-type: none"> -Camouflage, cover and concealment, and deception measures (see appendix X) - Signal security - Noise and light discipline

SCREEN

H-6. A screen primarily provides early warning to the main body. A unit performing a screen observes, identifies, and reports enemy actions. Screen is defensive in nature but not passive in execution. It is employed to cover gaps between forces, exposed flanks, or the rear of stationary or moving forces.

Generally, a screening force fights only in self-defense. However, it may engage enemy reconnaissance elements within its capability (counterreconnaissance). A screen provides the least amount of protection of any security mission. It does not have the combat power to develop the situation. It is used when the likelihood of enemy contact is remote, the expected enemy force is small, or the friendly main body needs only a minimum amount of time once it is warned to react effectively

H-7. Screen tasks are to—

- Provide early warning of threat approach.
- Provide real-time information, reaction time, and maneuver space to the protected force.
- Maintain contact with the main body and any security forces operating on its flanks.
- Maintain continuous surveillance of all avenues of approach larger than a designated size into the area under all visibility conditions.
- Allow no enemy ground element to pass through the screen undetected and unreported.
- Maintain contact with enemy forces and report any activity in the AO.
- Destroy or repel all enemy reconnaissance patrols within its capabilities.
- Impede and harass the enemy within its capabilities while displacing.
- Locate the lead elements of each enemy advance guard and determine its disposition, composition and strength, and capabilities.

Stationary Screen

H-8. When tasked to conduct a stationary screen (Figure H-1), the leader first determines likely avenues of approach into the main body's perimeter. The leader determines the location of potential OPs along these avenues of approach. Ideally, the leader assigns OPs in depth if he has the assets available. If necessary, he identifies additional control measures (such as threat named areas of interest [NAIs], phase lines, TRPs, or checkpoints) to assist in controlling observation, tracking of the enemy, and movement of his own forces. The unit conducts mounted and foot patrols to cover ground between OP that cannot be observed from OPs. Once the enemy is detected from an OP, the screening force may engage him with indirect fires. This prevents the enemy from penetrating the screen line and does not compromise the location of the OP. If enemy pressure threatens the security of the screening force, the unit reports the situation to the controlling headquarters and requests permission to displace to a subsequent screen line or follow-on mission.

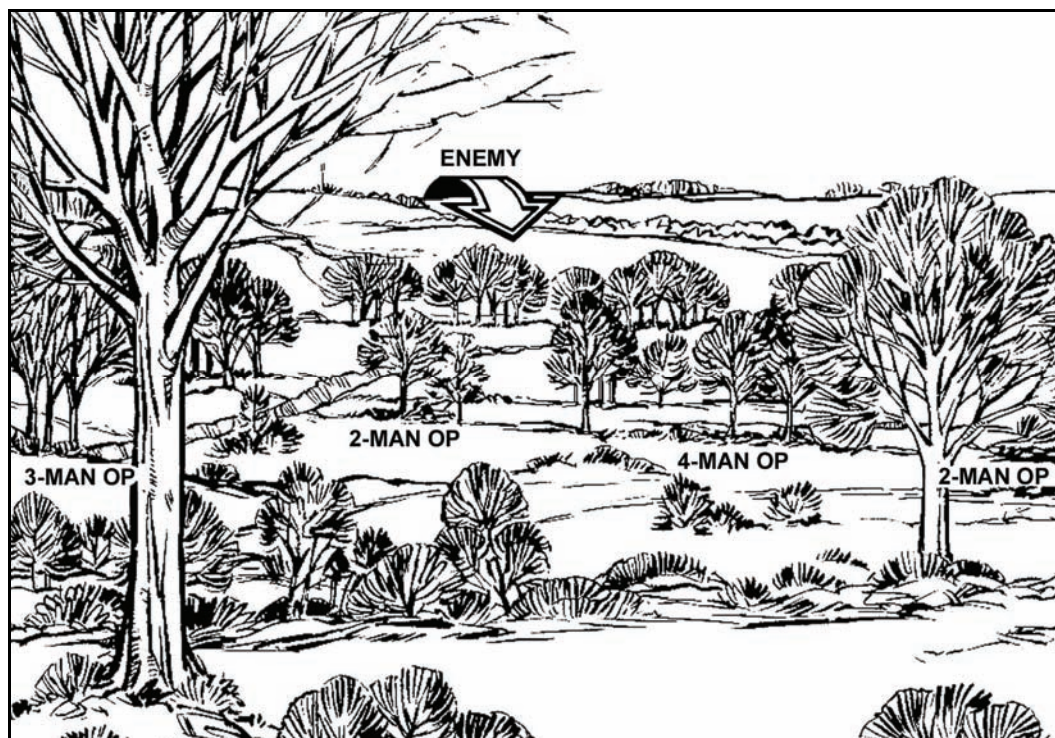


Figure H-1. Squad-sized stationary screen.

Moving Screen

H-9. Infantry platoons may conduct a moving screen to the flanks or rear of the main body force. The movement of the screen is tied to time and distance factors associated with the movement of the friendly main body.

H-10. Responsibilities for a moving flank screen begin at the front of the main body's lead combat element and end at the rear of the protected force. In conducting a moving flank screen, the unit either occupies a series of temporary OPs along a designated screen line to overwatch the main body, or if the main body is moving too fast, continues to move while maintaining surveillance. The screening force uses one or more of the three basic movement techniques to control movement along the screened flank (traveling, traveling overwatch, and bounding overwatch).

GUARD

H-11. A guard differs from a screen in that a guard force contains sufficient combat power to defeat, cause the withdrawal of, or fix the lead elements of an enemy ground force before it can engage the main body with direct fires. A guard force uses all means at its disposal, including decisive engagement, to prevent the enemy from penetrating the security zone. It operates within the range of the main body's indirect fire weapons, deploying over a narrower front than a comparable-size screening force to permit concentrating combat power. The three types of guard operations are: advance; flank; and rear guard.

H-12. Infantry platoons as part of a company can be assigned a guard mission conduct all of the measures associated with a screen. Additionally, they —

- Destroy the enemy advance guard.
- Cause the enemy main body to deploy, and then report its disposition, composition and strength, and capabilities.

AREA SECURITY

H-13. Area security is used by battalion-sized units and above to secure their area of operations (AO) from smaller enemy units (special purpose forces, guerrillas).

H-14. During area security operations civilians will be present. Therefore, commanders must ensure Soldiers understand the current ROE. However, leaders are always responsible for protecting their forces and consider this responsibility when applying the rules of engagement. Restrictions on conducting operations and using force must be clearly explained and understood by everyone. Soldiers must understand that their actions, no matter how minor, may have far-reaching positive or negative effects. They must realize that both friendly or hostile media and psychological operations organizations can quickly exploit their actions, especially the manner in which they treat the civilian population.

H-15. Leaders executing area security measures in a densely populated area must carefully assess the effect of imposing a degree of control on both traffic and pedestrians. For instance, during the rush hour period, however efficient the traffic control point (TCP), a crowd of impatient civilians or cars and trucks can quickly build-up and precipitate the very situation that the TCP leader is trying to avoid.

H-16. Population and resource control operations will cause inconvenience and disruption to all aspects of community life. Therefore, it is important that members of the civil community appreciate the purpose of such operations. In particular, they must understand that the control measures are protective and not punitive. All personnel involved in operations designed to ensure security must be thoroughly conversant with their duties and responsibilities. They must be able to work quickly and methodically to prevent delay and disruption to legitimate activities. They must also work to avoid unnecessary damage to personnel, vehicles, and property. To achieve their purpose they must be thorough. Leaders, at all levels, must ensure that adequate security is in place to counter all assessed risks.

SECTION III — OBSERVATION POSTS

H-17. The OP, the primary means of maintaining surveillance of an assigned avenue or NAI, is a position from where units observe the enemy and direct and adjust indirect fires against him. From the OP, Infantry platoons send SALUTE reports to their controlling headquarters when observing enemy activity.

TYPES OF OPS

H-18. OPs can be executed either mounted or dismounted. As they are complementary, if possible they should be used in combination.

H-19. The main advantage of a dismounted OP is that it provides maximum stealth hopefully preventing the enemy from detecting it. The two main disadvantages are that it has limited flexibility, taking time to displace and limited firepower to protect itself if detected.

H-20. The main advantages of a mounted OP are the flexibility that comes from vehicle mobility as well as the additional combat power resident in the vehicle's optics, communications, weapons, and protection. The main disadvantage is that vehicles are inherently easier to detect and can prevent the unit from accomplishing its mission.

POSITIONING OF OPS

H-21. Based on the specific METT-TC, leaders may array OPs linearly or in depth (Figures H-2 and H-3). Depth is the preferred technique for maintaining contact with a moving enemy along a particular avenue of approach. Linear placement is optimal when there is no clear avenue of approach or the enemy is not moving.

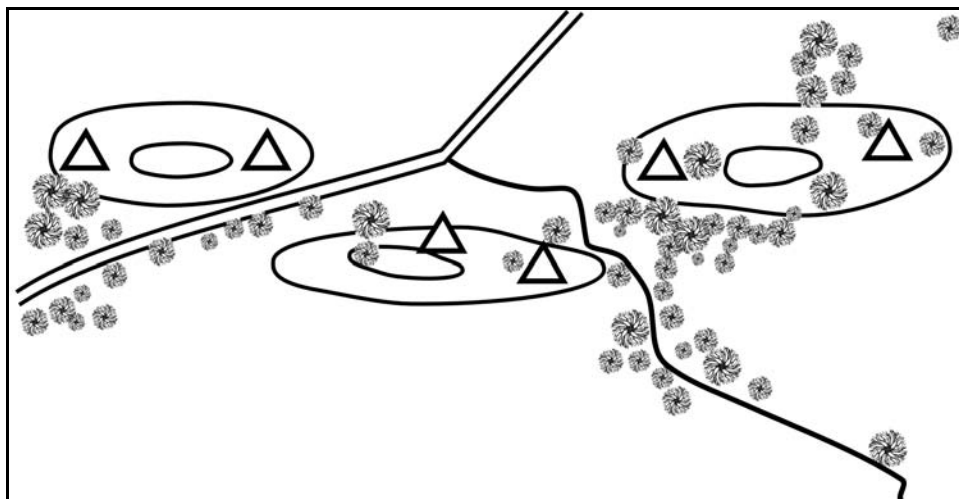


Figure H-2. Linear positioning of OPs.

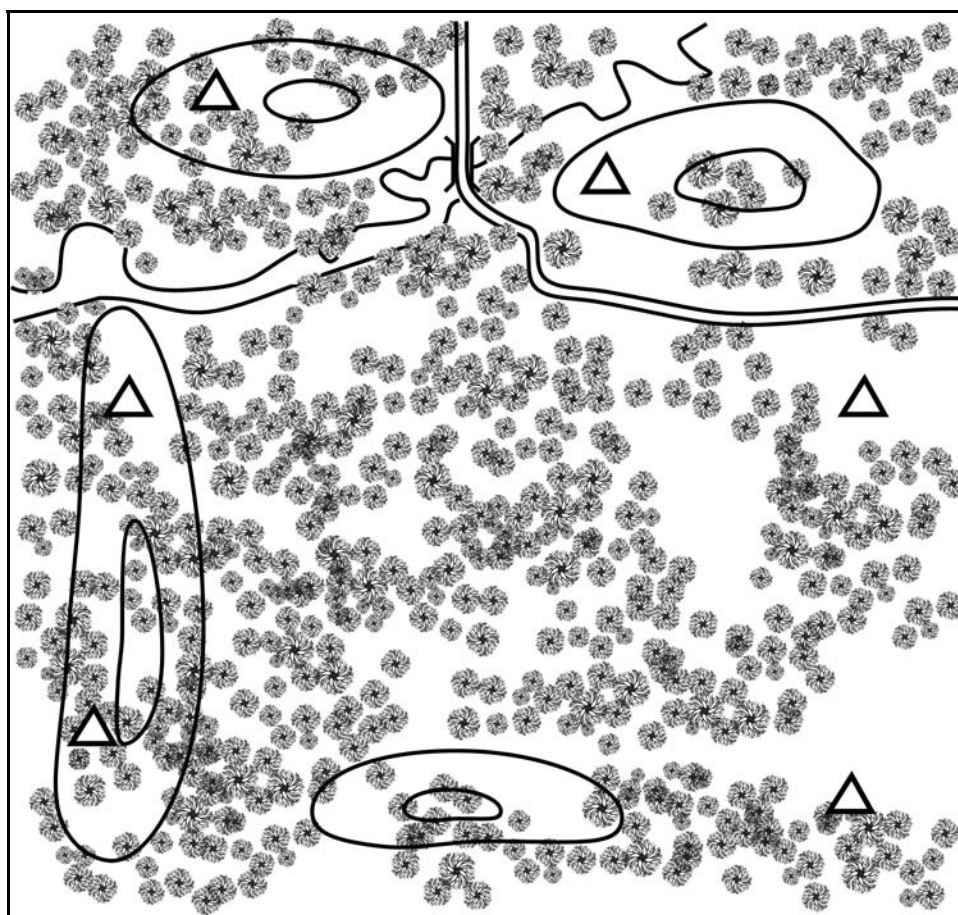


Figure H-3. In-depth positioning of OPs.

SELECTING AND SECURING THE OP

H-22. Based on guidance from the controlling headquarters, the leader selects the general location for the unit's OPs after conducting METT-TC analysis. From his analysis, he determines how many OPs he must establish. He also decides where they must be positioned to allow long-range observation along the avenues

of approach assigned and to provide depth through the sector. Leaders assigned a specific OP select its exact position when they get on the actual ground. See Figure H-4 for example of OP selection in urban terrain. OPs should have the following characteristics:

- Covered and concealed routes to and from the OP. Soldiers must be able to enter and leave their OP without being seen by the enemy.
- Unobstructed observation of the assigned area or sector. Ideally, the fields of observation of adjacent OPs overlap to ensure full coverage of the sector.
- Effective cover and concealment. Leaders select positions with cover and concealment to reduce their vulnerability on the battlefield. Leaders may need to pass up a position with favorable observation capability but with no cover and concealment to select a position that affords better survivability. This position should not attract any attention or skyline the observer.

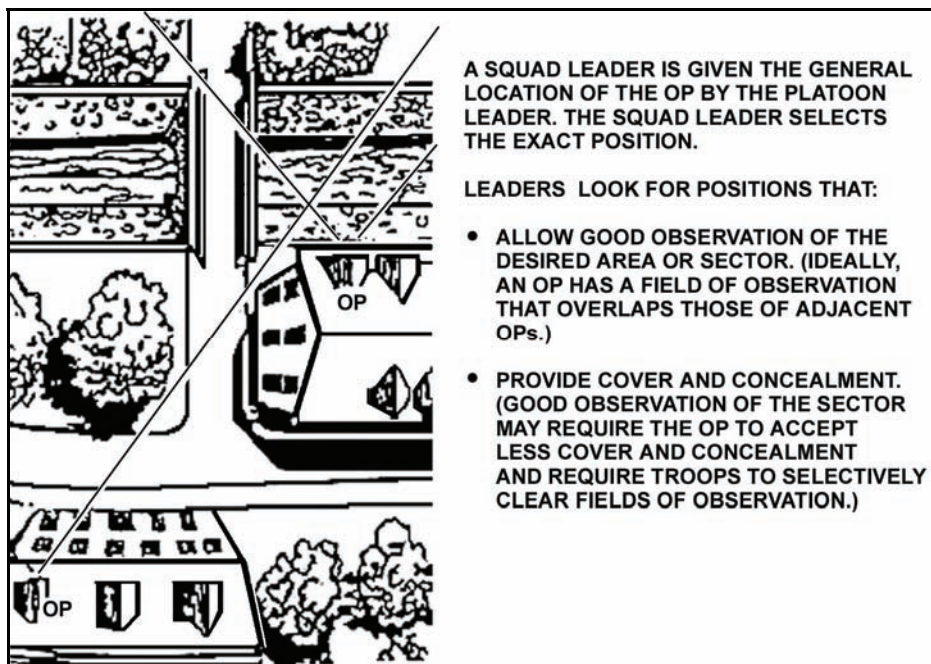


Figure H-4. Selection of OP location.

OP SECURITY

H-23. Small teams are extremely vulnerable in an OP. Their best self-defense is not to be seen, heard, or otherwise detected by the enemy. They employ active and passive local security measures.

OCCUPYING THE OP

H-24. The leader selects an appropriate technique to move to the observation post or screen line based on his analysis of METT-TC. (Infiltration, zone reconnaissance, movement to contact [mounted, dismounted, or air insertion], using traveling, traveling overwatch, or bounding overwatch.)

MANNING AND EQUIPMENT AT THE OP

H-25. At least two Soldiers are required to operate an OP. One man establishing security, recording information, and reporting to higher while the other observes. These men switch jobs every 20-30 minutes because the efficiency of the observer decreases with time. Three or more Soldiers are required to increase

security. For extended periods of time (12 hours or more), the unit occupies long-duration OPs by squad-sized units. Essential equipment for the OP includes the following:

- Map of the area.
- Compass / GPS.
- Communications equipment.
- Observation devices (binoculars, observation telescope, thermal sights, and/or night vision devices).
- SOI extract.
- Report formats contained in the SOP.
- Weapons.
- Protective obstacles and early warning devices.
- Camouflage, cover and concealment, and deception equipment as required.

DRAWING A OP SECTOR SKETCH

H-26. Once the leader has established the OP he prepares a sector sketch. This sketch is similar to a fighting position sketch but with some important differences. Figure H-5 shows an example OP sector sketch. At a minimum, the sketch should include:

- A rough sketch of key and significant terrain.
- The location of the OP.
- The location of the hide position.
- The location of vehicle fighting and observation positions.
- Alternate positions (hide, fighting, observation).
- Routes to the OP and fighting positions.
- Sectors of observation.
- Direct and indirect fire control measures.

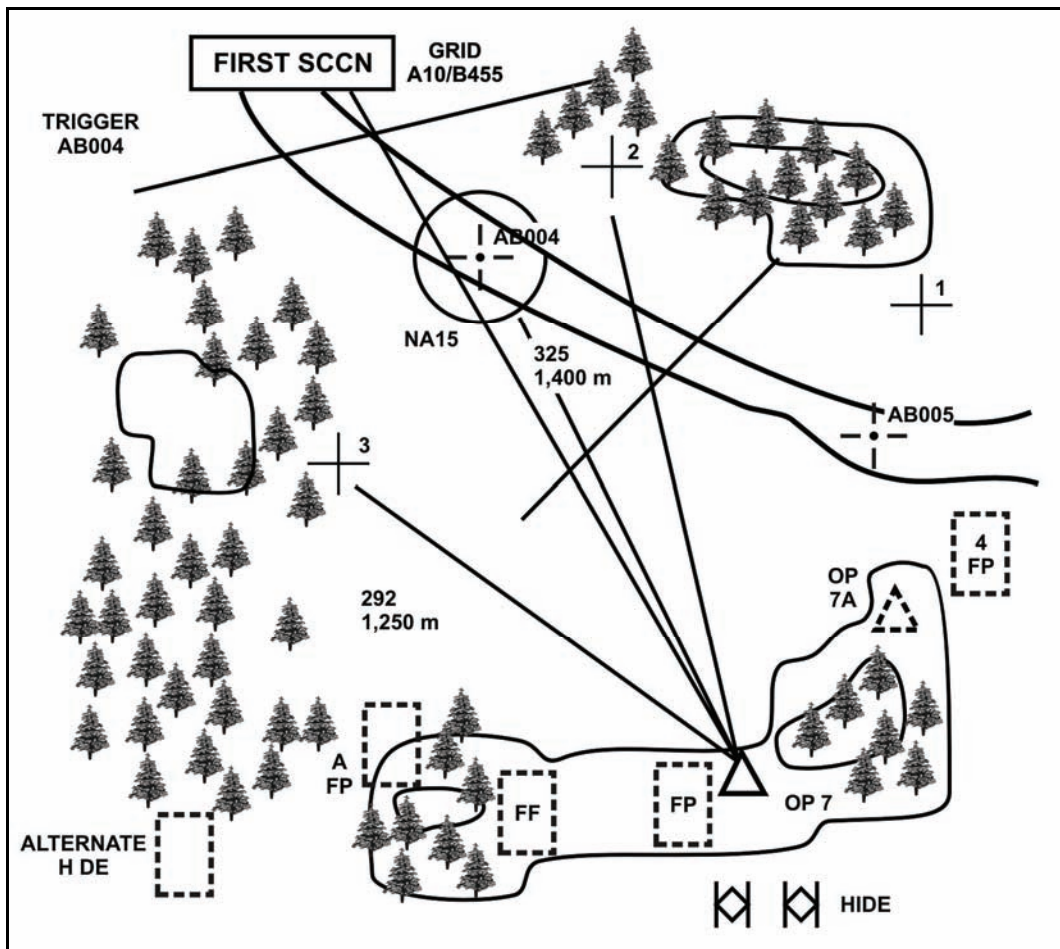


Figure H-5. Example OP sector sketch.

SECTION IV — TRAFFIC CONTROL POINTS (CHECKPOINTS)

H-27. Checkpoint (CP): As defined by FM 1-02 is a place where military police check vehicular or pedestrian traffic in order to enforce circulation control measures and other laws, orders, and regulations. The CP is primarily a military police task; however, while conducting area security, Infantry platoons are frequently employed to establish and operate CPs (Figure H-6).

H-28. Although similar, the CP should not be confused with a roadblock or blocking position. Roadblocks are designed to prevent all access to a certain area by both wheeled and pedestrian traffic for a variety of purposes. The CP should also not be confused with an OP which is established to collect information.

H-29. When conducting checkpoint operations, Soldiers need the following support:

- Linguists that are familiar with the local language and understand English.
- HN police or a civil affairs officer.
- Wire / Sandbags.
- Signs to reduce misunderstandings and confusion on the part of the local populace
- Lighting.
- Communications equipment.
- Handheld translation devices.

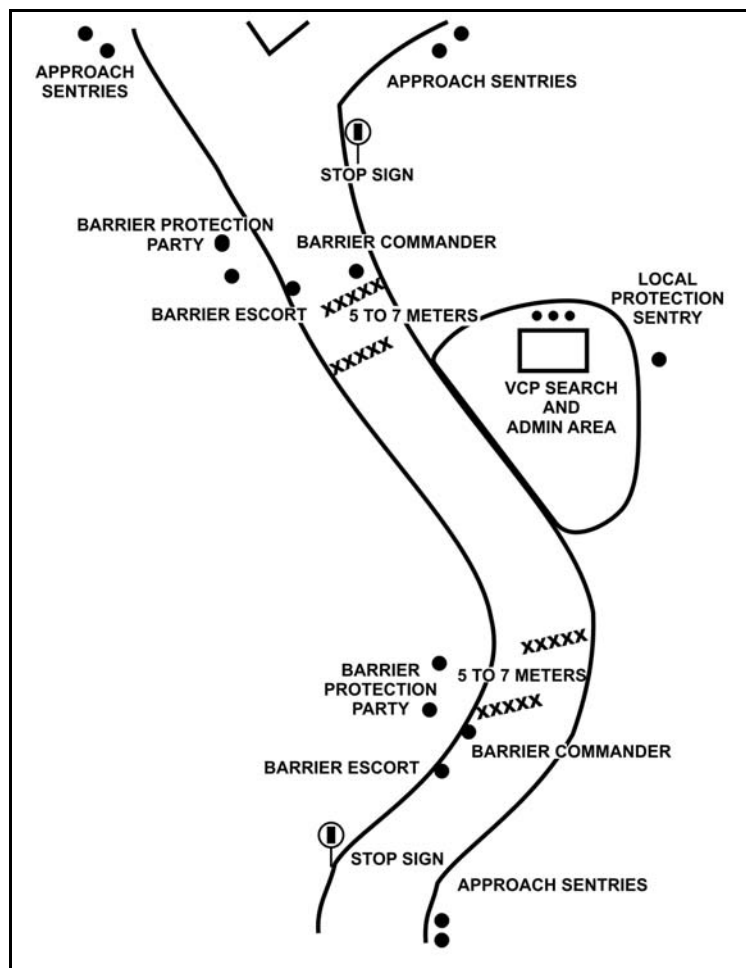


Figure H-6. Example check-point sketch.

TYPES OF CPS

H-30. There are two types of CPs: deliberate; and hasty.

DELIBERATE CP

H-31. A deliberate CP is permanent or semi-permanent. It is established to control the movement of vehicles and pedestrians, and to help maintain law and order. They are typically constructed and employed to protect an operating base or well-established roads. Like defensive positions, deliberate CPs should be continuously improved. Deliberate CPs—

- Control all vehicles and pedestrian traffic so crowds cannot assemble, known offenders or suspected enemy personnel can be arrested, curfews can be enforced, deter illegal movement, prevent the movement of supplies to the enemy, and deny the enemy contact with the local inhabitants.
- Dominate the area of responsibility around the CP. This includes maintaining law and order by local patrolling to prevent damage to property or injury to persons.
- Collect information.

HASTY CP

H-32. A hasty CP differs from a deliberate CP in that they are not, in most cases, pre-planned. A hasty CP will usually be activated as part of a larger tactical plan or in reaction to hostile activities (for example, bomb, mine incident, or sniper attack), and can be lifted on the command of the controlling headquarters. A hasty CP will always have a specific task and purpose. Most often used to avoid predictability and targeting by the enemy. It should be set up to last from five minutes to up to two hours using an ambush mentality. The short duration reduces the risk of the enemy organizing an attack against the checkpoint. The maximum time suggested for the CP to remain in place would be approximately eight hours, as this may be considered to be the limit of endurance of the units conducting the CP and may invite the CP to enemy attacks.

H-33. Characteristics of a hasty checkpoint (Figure H-7) include:

- Located along likely enemy avenues of approach.
- Achieve surprise.
- Temporary.
- Unit is able to carry and erect construction materials without additional assistance.
- Uses vehicles as an obstacle between the vehicles and personnel, and reinforces them with concertina wire.
- Soldiers are positioned at each end of the checkpoint.
- Soldiers are covered by mounted or dismounted automatic weapons.
- Assault force/response force is concealed nearby to attack or assault in case the site is attacked.

H-34. The hasty CPs success is brought about by swift and decisive actions. In many cases, there may be no clear orders before the CP is set up. Leaders must rely on common sense and instinct to determine which vehicles or pedestrians to stop for questioning or searching. They are moved quickly into position, thoroughly conducted, and just as swiftly withdrawn when lifted or once the threat has passed.

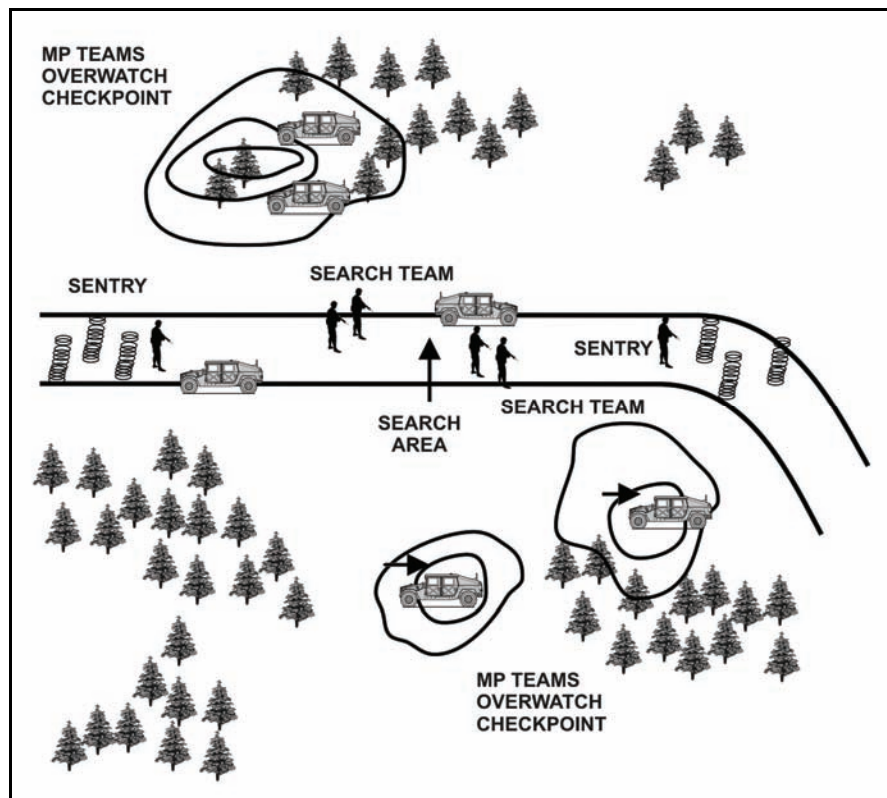


Figure H-7. Hasty check point example.

PHYSICAL LAYOUT

H-35. A checkpoint should consist of four areas: canalization zone, turning or deceleration zone, search zone, and safe zone (Figure H-8).

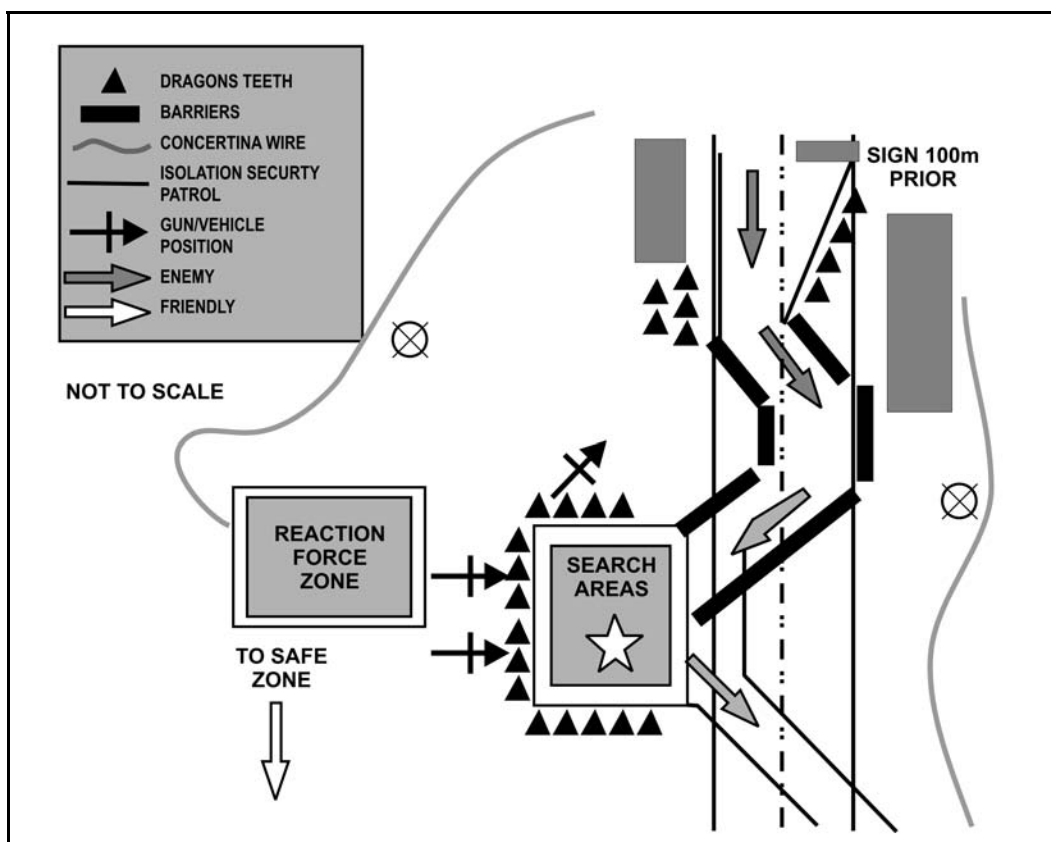


Figure H-8. Four zones of a CP.

H-36. The CP should be sited in such a position as to prevent persons approaching the site from bypassing it or turning away from the CP without arousing suspicion. Ideal sites are where vehicles have already had to slow down. It should be remembered that on country roads vehicles will need extra room to slow down and halt, (particularly large heavy vehicles). The sighting of the CP must take into consideration the type and number of vehicles expected to be using that part of the road where the CP will be sited. Areas where there are few road networks enhance the CP effectiveness.

H-37. The site should allow for a vehicle escape route and include plans to destroy a hostile element that uses such a route. If the checkpoint is completely sealed off, enemy forces may attempt to penetrate it by attempting to run over obstacles or personnel.

H-38. Location should make it difficult for a person to turn around or reverse without being detected. Soldiers establish hasty checkpoints where they cannot be seen by approaching traffic until it is too late for approaching traffic to unobtrusively withdraw. Effective locations on which to set up hasty checkpoints include—

- Bridges (near either or both ends, but not in the middle).
- Defiles, culvert, or deep cuts (either end is better than in the middle).
- Highway intersections (these must be well organized to reduce the inherent danger).
- The reverse slope of a hill (hidden from the direction of the main flow of traffic).
- Just beyond a sharp curve.

CANALIZATION ZONE

H-39. The canalization zone uses natural obstacles and/or artificial obstacles to canalize the vehicles into the checkpoint.

- Place warning signs out forward of the checkpoint to advise drivers of the checkpoint ahead (at least 100 meters).
- Canalize the vehicles so they have no way out until they have the consent of personnel controlling the checkpoint.
- This zone encompasses the area from maximum range to maximum effective range of your weapon systems. It usually consists of disrupting and/or turning obstacles.

TURNING OR DECELERATION ZONE

H-40. The search element establishes obstacles and an overwatch force to control each road or traffic lane being blocked. The turning or deceleration zone forces vehicles into making a rapid decision. The vehicle can decelerate, make slow hard turns, or maintain speed and crash into a series of obstacles. The road or traffic lanes should be blocked by means of obstacles positioned at either end of the CP. See Appendix F for a discussion of obstacles. These obstacles should be such as to be quickly and easily moved in case of emergencies. They should be sited so as to extend the full width of a traffic lane and staggered to force vehicles to slow to negotiate an ‘S’ turn (Figure H-9). Stop signs should also be erected ahead of the obstacles and at night illuminated by means of a light or lantern.

H-41. Ensure that vehicles are stopped facing an obstacle (berm, tank, or wall) that is capable of stopping a slow moving truck. Some obstacles will have to be improvised. Examples of these include:

- Downed trees.
- Beirut toothpick – nails driven through lumber.
- Caltrops placed across the road.
- Debris, rubble, large rocks.
- Abatis.
- Road cratering.
- Dragon’s teeth, tetrahedrons, concrete blocks.
- Mines.
- Prepared demolitions.
- Concertina wire.

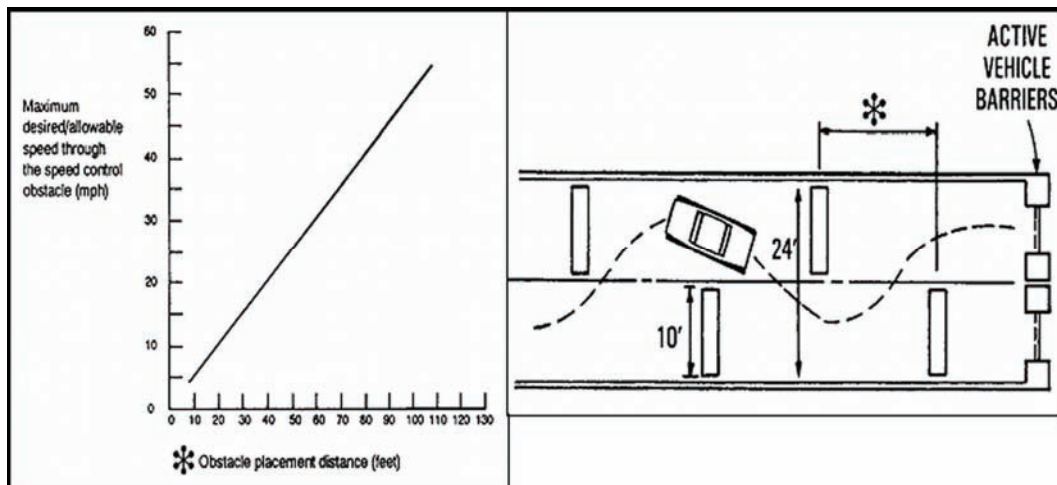


Figure H-9. Controlling vehicle speed through obstacle placement and serpentine placement.

SEARCH ZONE

H-42. The search zone is a relatively secure area where personnel and vehicles are positively identified and searched. A decision is made to confiscate weapons and contraband, detain a vehicle, or allow it to pass. The area is set up with a blocking obstacle that denies entry/exit without loss of life or equipment. When searching:

- Isolate the vehicle being checked from other cars by an obstacle of some type, which is controlled by a Soldier.
- Emplace an overwatch position with a crew-served weapon in an elevated position to cover the vehicle, particularly the driver. The crew-served weapon should be mounted on a T/E and tripod.

H-43. The search zone is further subdivided into three subordinate areas:

- **Personnel search zone** - where personnel are positively identified, searched, and/or detained. This may include partitioned or screened areas to provide privacy, especially when searching women and children. Use female Soldiers to search women, if available.
- **Vehicle search zone** - where vehicles are positively identified, and searched.
- **Reaction force zone** - where a reaction force is located to reinforce the checkpoint and immediately provide assistance using lethal and non-lethal force. Additionally, engineers, and EOD personnel may be co-located here to assist in analyzing and diffusing/destroying ammunition, demolitions, and/or booby traps. This element is organized and equipped to conduct close combat. This element engages in accordance with the established engagement criteria and ROE. This element has a position which allows it to overwatch the CP as well as block or detain vehicles that try to avoid the CP.

H-44. When establishing these zones, consider the following:

- Weapons' surface danger zones (SDZs), geometry.
- 360 degree security.
- Rapid removal of detainees and vehicles.
- Capabilities and skill level of all attachments.
- Potential suicide

H-45. Placing the search area to the side of the road permits two-way traffic. If a vehicle is rejected, it is turned back. If vehicle is accepted for transit, it is permitted to travel through the position. If the vehicle is a threat, the CP leader determines whether to attack or apprehend.

H-46. When confronted by a potentially threatening vehicle:

- The search element alerts the CP leader, moves to a safe/fortified position, and may engage or allow the vehicle to pass based on leader instructions and ROE.
- If the vehicle passes through the escape lane, the leader may direct the assault element to engage the vehicle based on ROE.

SAFE ZONE

H-47. The safe zone is the assembly area for the checkpoint that allows personnel to eat, sleep, and recover in relative security.

TASK ORGANIZATION

H-48. The basic organization of a CP includes a security element, a search element, an assault element, and a C2 element. The actual strength and composition of the force is determined by the nature of the threat, road layout, type of checkpoint required, and the anticipated number of vehicles to be processed. Table H-3 details typical duties of these elements as well as a general list of Do's and Don'ts.

Table H-3. Task organization.

C2
Overall Responsibility
- Exercises C2
- Maintains communications with controlling HQ
- Maintains a log of all activities
- Coordinates RIP as required
- Coordinates linkups as required
- Coordinates the role of civil authorities
- Coordinates local patrols.
- Integrates reserve / QRF
- If available, the C2 element should have a vehicle for patrolling, for moving elements, or administrative actions
Security Element
- Provides early warning to the CP through local security measures
- Prevent ambush
- Able to reinforce position is necessary
- Observes and reports suspicious activity
- Monitors traffic flow up to and through the checkpoint
Search Element
-Halts vehicles at the checkpoint.
- Guides vehicles to search area
- Conducts vehicle searches: passenger, cargo
- Conducts personnel searches: male, female
- Directs cleared vehicles out of the CP
- Detains personnel as directed
Assault Element
- Destroys escaping vehicles and personnel
- Able to reinforce position as necessary
(Soldiers occupy support by fire positions beyond the actual CP)
Do
- Speak to driver - driver speaks to occupants
- Have the driver open all doors and compartments before Soldier conducts search of vehicle
- Ask politely to follow your instructions
- Speak naturally and no louder than necessary
- Allow driver to observe the search
- All vehicle occupants are required to exit the vehicle
- Be courteous when searching
- Use scanners and metal detectors when possible
- Stay calm and make a special effort to be polite
- Maintain a high standard of dress, military bearing, and stay in uniform
Don't
- Be disrespectful or give any hint of dislike
- Put your head or arm in vehicle or open the door without permission
- Shout or show impatience
- Frisk women or tell them to put their hands up
- Become involved in a heated argument
- Use force as directed by unit ROE
- Become careless or sloppy in appearance

C2 ELEMENT

H-49. The C2 element controls the operation. The C2 element normally consists of a leader, his RTO and runner.

H-50. The leader normally establishes a headquarters / administrative area to synchronize the efforts of the subordinate activities. The headquarters and security element should be sited centrally and in a position which facilitates control of the obstacles. The headquarters area should be secure and sufficiently large to incorporate an administrative area and vehicle search area. Depending on the threat, this area should have sufficient cover or survivability positions should be built.

H-51. The CP should have communication to their controlling headquarters by radio. A spare radio and batteries should be supplied to the CP. Radio and telephone checks are carried out as per the unit's SOP using signal security measures. Communications within the site should be undertaken using whatever means are available.

CIVIL AUTHORITY ASSISTANCE

H-52. The closest liaison must be maintained between the CP leader and the senior policeman. Policemen at a CP are employed to assist in the checking and searching of vehicles and personnel, to make arrests when necessary. Police are ideally employed on the scale of one officer for each lane of traffic. These civil authorities should attend rehearsals. As the degree of threat increases, police officers should be on stand by to move with the patrol to the CP site. Wherever possible, it should be the responsibility of the military to command and control the CP while the police control the search aspects.

H-53. The leader must understand the guidance from his chain of command on contingencies that occur outside of the CP area that might require forces from the CP. The CP, unless otherwise ordered, is the primary task. If an incident occurs in the vicinity of the checkpoint that is likely to require manpower and affect the efficient operation of the CP, the leader should seek guidance from his higher headquarters.

H-54. Sequence of events for establishing the CP include:

- Leader's reconnaissance.
- Establish support by fire positions (and fighting positions as required).
- Establish blocking positions (entrance and exit).
- Establish search area for personnel and vehicles.
- Establish holding area (if required).
- Establish an area for C2 and admin.

SECURITY ELEMENT

H-55. The nature of the CP makes it particularly vulnerable to enemy attack. Protection should therefore be provided for overall position as well as those of subordinate positions. Concealed sentries should also be positioned on the approaches to the CP to observe and report approaching traffic, and to prevent persons or vehicles from evading the CP. When available, early warning devices or radar may be used to aid guards on the approaches to the CP.

H-56. The security element stays alert for any change of scenery around the checkpoint. Crowds gathering for no apparent reason or media representatives waiting for an event are all indicators that something may happen.

ESCALATION OF FORCE

H-57. Escalation of Force (EOF) is a sequential action that begins with non-lethal force measures that could escalate to lethal force measures to protect the force. Infantrymen at the CP must ensure they follow ROE and EOF guidance when reacting to situations.

SEARCH ELEMENT

Vehicle Searches

H-58. Two members of the search team position themselves at both rear flanks of the vehicle undergoing a search, putting the occupants at a disadvantage. These Soldiers maintain eye contact with the occupants once they exit the vehicle and react to any threat attempts by the occupants during the vehicle search.

H-59. The actual search is conducted by two Soldiers. One Soldier conducts interior searches; the other performs exterior searches. They instruct the occupants (with interpreters if available) to exit the vehicle during the interior search and instruct the driver to watch the vehicle search. Once the interior search is complete, they escort the driver to the hood of the vehicle and instruct him to open it. After the engine compartment has been examined, they instruct the driver to open the other outside compartments (tool boxes, gas caps, trunks). The driver removes any loose items that are not attached to the vehicle for inspection. Members of the search team rotate positions to allow for mental breaks.

H-60. Soldiers use mirrors and metal detectors to thoroughly search each vehicle for weapons, explosives, ammunition, and other contraband. Depending on the threat level, the vehicle search area provides blast protection for the surrounding area.

Personnel Searches

H-61. Soldiers may be required to conduct personnel searches at the checkpoints. Every attempt should be made for host nation authorities to conduct, or at least observe, searches of local nationals. Additionally, leaders must plan for same-gender searches. Personnel searches are conducted only when proper authorization has been obtained, usually from higher HQ, according to the ROE, Status of Forces Agreement (SOFA), or host nation agreements. This does not preclude units from searching individuals that pose a threat to U.S. or other friendly forces.

H-62. Units may have to detain local nationals who become belligerent or uncooperative at checkpoints. The OPOD and the ROE must address the handling of such personnel. In any case, self-protection measures should be planned and implemented according to the orders from higher HQ.

H-63. Searches of local nationals should be performed in a manner that preserves the respect and dignity of the individual. Special consideration must be given to local customs and national cultural differences. In many cultures it is offensive for men to touch or even talk to women in public. Searchers must be polite, considerate, patient, and tactful. Leaders must make every effort not to unnecessarily offend the local population. Such situations can have a very negative impact on peace operations and can quickly change popular opinion toward U.S. and other friendly forces.

H-64. Each captive is searched for weapons and ammunition, items of intelligence value, and other inappropriate items. Use of digital cameras will record any evidence of contraband.

H-65. When possible, conduct same gender searches. However, this may not always be possible due to speed and security considerations. If females are not available, use medics or NCOs with witnesses. Perform mixed gender searches in a respectful manner using all possible measures to prevent any action that could be interpreted as sexual molestation or assault. The on-site supervisor carefully controls Soldiers doing mixed-gender searches to prevent allegations of sexual misconduct.

H-66. Soldiers conduct individual searches in search teams that consist of the following:

- **Searcher:** A searcher is the Soldier that actually conducts the search. He is in the highest-risk position.
- **Security:** Security includes at least one Soldier to provide security. He maintains eye contact with the individual being searched.
- **Observer:** The observer is a leader that has supervisory control of the search operation. He also provides early warning for the other members of the team.

H-67. The two most common methods that are used to conduct individual searches are the frisk search, and the wall search.

- **Frisk search:** This method is quick and adequate to detect weapons, evidence, or contraband. However, it is more dangerous because the searcher has less control of the individual being searched.
- **Wall search:** This method affords more safety for the searcher because the individual is searched in a strained, awkward position. Any upright surface, such as a wall, vehicle, tree, or fence may be used.

H-68. If more control is needed to search an uncooperative individual, the search team places the subject in the kneeling or prone position.

SECTION V — CONVOY AND ROUTE SECURITY

H-69. Convoy security missions are conducted when insufficient friendly forces are available to continuously secure lines of communication in an AO. They may also be conducted in conjunction with route security missions. A convoy security force operates to the front, flanks, and rear of a convoy element moving along a designated route. Convoy security missions are offensive in nature and orient on the force being protected.

H-70. To protect a convoy, the security force must accomplish the following critical tasks:

- Reconnoiter and determine the trafficability of the route the convoy will travel.
- Clear the route of obstacles or positions from where the threat could influence movement along the route.
- Provide early warning and prevent the threat from impeding, harassing, containing, seizing, or destroying the convoy.
- Protect the escorted force from enemy contact
- React decisively to enemy contact

H-71. Company-sized units and larger organizations usually perform convoy or route security missions. Convoy security provides protection for a specific convoy. Route security aims at securing a specific route for a designated period of time, during which multiple convoys may use the route. These missions include numerous tasks such as reconnaissance, security, escorting, and establishing a combat reaction force. These tasks become missions for subordinate units. The size of the unit performing the convoy or route security operation depends on many factors, including the size of the convoy, the terrain, and the length of the route. For example, an Infantry platoon can escort convoys, perform route reconnaissance, and establish traffic control points along main supply routes.

ORGANIZATION OF FORCES

H-72. During convoy security operations, the convoy security commander and Infantry leader must establish and maintain security in all directions and throughout the platoon. As noted, several factors, including convoy size affect this disposition. The key consideration is whether the unit is operating as part of a larger escort force or is executing the escort mission independently. Additional METT-TC considerations include the employment of rifle squads during the mission (fire teams ride in escorted vehicles).

H-73. The unit should also be reinforced with engineers to reduce obstacles along the route. The higher headquarters should coordinate additional ISR assets to support the security mission. Unmanned aircraft systems (UASs) or aerial reconnaissance should reconnoiter the route in advance of the unit's lead elements.

H-74. When the platoon executes a convoy escort mission independently, the convoy commander and platoon leader disperse Infantry in vehicles throughout the convoy formation to provide forward, flank, and rear security. Engineer assets, if available, should be located near the front to respond to obstacles. At times, engineer assets may be required to move ahead of the convoy with scouts to proof the convoy route. In some independent escort missions, variations in terrain along the route may require the unit to operate using a modified traveling overwatch technique. In it, one section leads the convoy while the other trails the

convoy. Dispersion between vehicles in each section is sufficient to provide flank security. The terrain may not allow the trail section to overwatch the movement of the lead section.

H-75. When sufficient forces are available, the convoy security should be organized into four elements: reconnaissance element; screen element; escort element; and a reaction element (Figure H-10). The Infantry platoon may be assigned any one of the four tasks, but as a general rule, probably cannot be assigned all four.

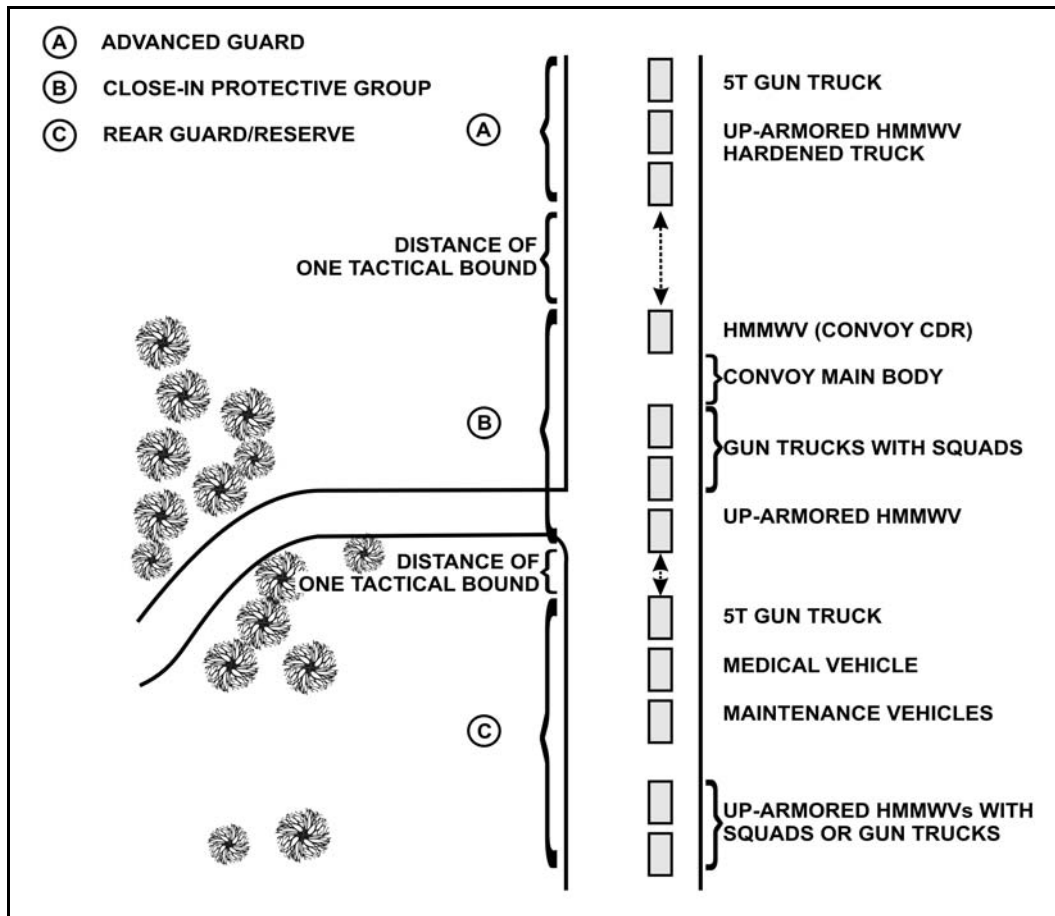


Figure H-10. Convoy escort organization.

ADVANCED GUARD

H-76. The advance guard reconnoiters and proofs the convoy route. The advanced guard element performs tasks associated with movement to contact and zone / route reconnaissance forward of the convoy. It searches for signs of enemy activity such as ambushes and obstacles. This element focuses on identifying enemy forces able to influence the route, route trafficability, or refugees or civilian traffic that may disrupt movement. Engineers are attached to the unit to assist reconnoitering and classifying bridges, fords, and obstacles along the route. The advanced guard normally operates from 3 to 4 kilometers ahead of the main body of the convoy. If available, UASs or aerial reconnaissance should precede the reconnaissance element by 5 to 8 kilometers dependent on the terrain and visibility conditions.

H-77. Within its capabilities, the advanced guard attempts to clear the route and provides the convoy commander with early warning before the arrival of the vehicle column. In some cases, an individual vehicle, a squad, or a platoon-sized element may be designated as part of the advanced guard and may receive additional combat vehicle support (tank with a mine plow, or mine roller). The leader plans for integrating engineer assets to aid in breaching point-type obstacles. Command-detonated devices and other improvised explosive devises (IEDs) pose a major threat during route reconnaissance.

FLANK AND REAR GUARD/SCREEN

H-78. This element performs a guard or screen, depending on the amount of combat power allocated, providing early warning and security to the convoy's flanks and rear (unit may utilize outposts). The leader must develop graphic control measures to enable a moving flank screen centered on the convoy. The guard / screen's purpose is to prevent observation for employment of effective indirect fires and identify combat elements prior to a direct fire engagement against the convoy. These elements gain and maintain contact with threat reconnaissance and combat elements, employing fires (direct and indirect) to suppress and guiding reaction or escort elements to defeat or destroy the threat force. Units use a combination of OPs or battle positions on terrain along the route.

H-79. The rear guard follows the convoy (Figure H-11). It provides security in the area behind the main body of the vehicle column, often moving with medical and recovery assets. Again, an individual vehicle or the entire unit may make up this element.

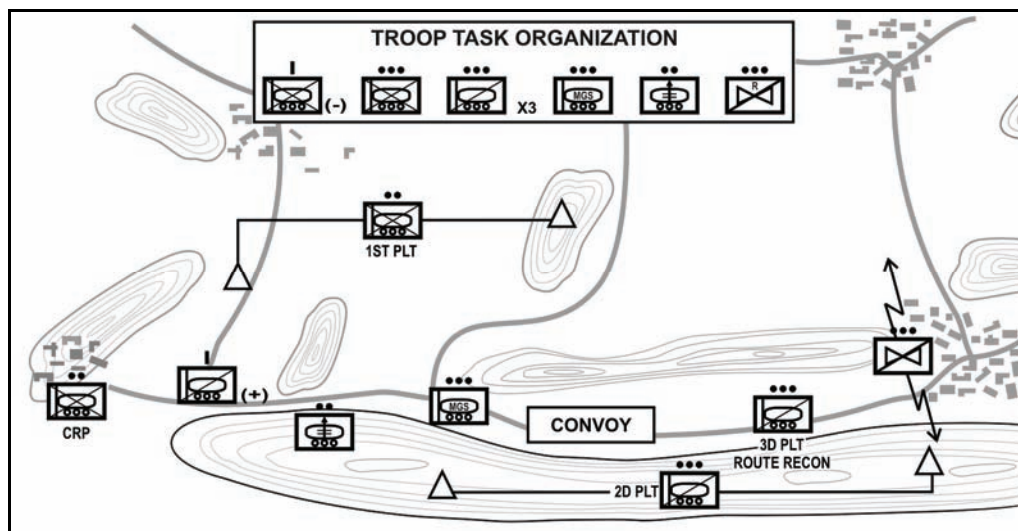


Figure H-11. Rear guard.

ESCORT ELEMENT

H-80. The escort element provides close-in protection to the convoy. The convoy may be made of many types of vehicles, including military sustainment and C2 as well as civilian trucks and buses. The escort element may also provide a reaction force to assist in repelling or destroying threat contact. The unit assigned the escort mission to provide local security throughout the length of the convoy. The escort element defeats close ambushes and marks bypasses or breaches obstacles identified by reconnaissance as necessary. If the reaction force is not available in sufficient time, the escort element may be required to provide a reaction force to defeat far ambushes or block attacking threat forces. The Infantry platoon or squad may perform a convoy escort mission either independently or as part of a larger unit's convoy security mission. Aviation units may also be a part of the escort force and the leaders of both ground and air must be able to quickly contact each other.

REACTION FORCE

H-81. The reaction force provides firepower and support to the elements above in order to assist in developing the situation or conducting a hasty attack. It may also perform duties of the escort element. The reserve will move with the convoy or be located at a staging area close enough to provide immediate interdiction against the enemy.

COMMAND AND CONTROL

H-82. Because of the task organization of the convoy escort mission, C2 is especially critical. The relationship between the Infantry platoon or squad and the convoy commander must provide unity of command and effort if combat operations are required during the course of the mission. In most cases, the unit will execute the escort mission under the control of the security force commander, who is usually under OPCON or attached to the convoy commander.

H-83. The leader should coordinate with the security force commander or the escorted unit to obtain or exchange the following information:

- Time and place of linkup and orders brief.
- Number and type of vehicles to be escorted.
- High value assets within the convoy.
- Available weapon systems, ammunition, and ordnance (crew served, squad, and individual).
- Vehicle maintenance status and operating speeds.
- Convoy personnel roster.
- Unit's or escorted unit SOP, as necessary.
- Rehearsal time / location.

H-84. It is vital that the convoy commander issues a complete OPORD to all convoy vehicle commanders before executing the mission. This is important because the convoy may itself be task-organized from a variety of units, and some vehicles may not have tactical radios. The order should follow the standard five-paragraph OPORD format (Table H-4), but special emphasis should be placed —

- Route of march (including a strip map for each vehicle commander).
- Order of march.
- Actions at halts.
- Actions in case of vehicle breakdown.
- Actions on contact.
- Chain of command.
- Communication and signal information.

Table H-4. Convoy OPORD example.

Task Organization	
SITUATION	SERVICE AND SUPPORT
Enemy: <ul style="list-style-type: none"> • Activity in the last 48 hours • Threats • Capabilities Friendly: <ul style="list-style-type: none"> • Units in the area or along the route • ROE Light and Weather Data: <ul style="list-style-type: none"> • Effects of light and weather on the enemy and on friendly forces • BMNT, sunrise, high temp, winds, sunset, EENT, moonrise, % illumination, low temp 	MEDEVAC procedures: <ul style="list-style-type: none"> • 9-line MEDEVAC request • Location of medical support/combat lifesavers • Potential PZ/LZ locations Maintenance procedures: <ul style="list-style-type: none"> • Location of maintenance personnel • Location and number of tow bars • Recovery criteria • Stranded vehicle procedures
MISSION	COMMAND AND SIGNAL
Task and purpose of the movement mission statement	Convoy commander Sequence of command Location of convoy commander Call signs of every vehicle/unit in the convoy Convoy frequency MEDEVAC frequency Alternate frequencies
EXECUTION	
Commander's intent End-state Concept of the operation (concept sketch or terrain model) Task to maneuver units Fires CAS	
Coordinating instructions: <ul style="list-style-type: none"> • Timeline <ul style="list-style-type: none"> ○ Marshal ○ Rehearsals ○ Convoy briefing ○ Inspections ○ Initiate movement ○ Rest halts ○ Arrival time • Order of movement/bumper numbers and individual manifest • Movement formation • Speed/catch-up speed • Interval (open areas and in built-up areas) • Weapons orientation, location of key weapons systems • Route • Checkpoints • Actions on contact • Actions on breakdowns • Actions at the halt (short halt and long halt) 	

REACTING TO ENEMY CONTACT

H-85. As the convoy moves to its new location, the enemy may attempt to harass or destroy it. This contact

will usually occur in the form of an ambush, often with the use of a hastily-prepared obstacle. The safety of the convoy rests on the speed and effectiveness with which escort elements can execute appropriate actions on contact. Based on the factors of METT-TC, portions of the convoy security force such as the unit may be designated as a reaction force. The reaction force performs its escort duties, conducts tactical movement, or occupies an AA (as required) until enemy contact occurs and the convoy commander gives it a reaction mission.

ACTIONS AT AN AMBUSH

H-86. An ambush is one of the more effective ways to interdict a convoy. Reaction to an ambush must be immediate, overwhelming, and decisive. Actions on contact must be planned for and rehearsed so they can be executed quickly.

H-87. In almost all situations, the unit will take several specific, instantaneous actions when it reacts to an ambush (Figures H-12 and H-13). However, if the convoy is moving fuel and other logistics, the best method might be to suppress the enemy, continue to move and report. These steps, illustrated in include the following:

- As soon as they encounter an enemy force, the escort vehicles take action toward the enemy. They seek covered positions between the convoy and the enemy and suppress the enemy with the highest volume of fire permitted by the ROE. Contact reports are submitted to higher headquarters as quickly as possible.
- The convoy commander retains control of the convoy vehicles and continues to move them along the route at the highest possible speed.
- Convoy vehicles, if armed, may return fire only if the escort has not positioned itself between the convoy and the enemy force.
- Leaders may request that any damaged or disabled vehicles be abandoned and pushed off the route.
- The escort leader uses SPOTREPs to keep the convoy security commander informed. If necessary, the escort leader or the convoy commander requests support from the reaction force and or calls for and adjusts indirect fires.

NOTE: Fire support for areas behind the forward line of troops is planned and coordinated on an area basis (such as a base operations center, base cluster operations center, or rear area operations center). This planning may provide fire support to main supply routes (MSRs) or other routes. Convoy commanders are responsible for the fire support plans for their convoy and for ensuring escort security leaders are familiar with the plan.

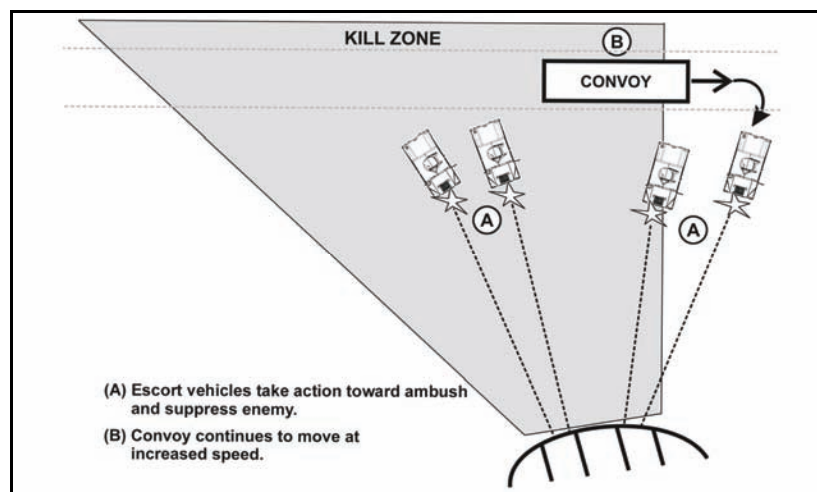


Figure H-12. Convoy escort actions toward ambush.

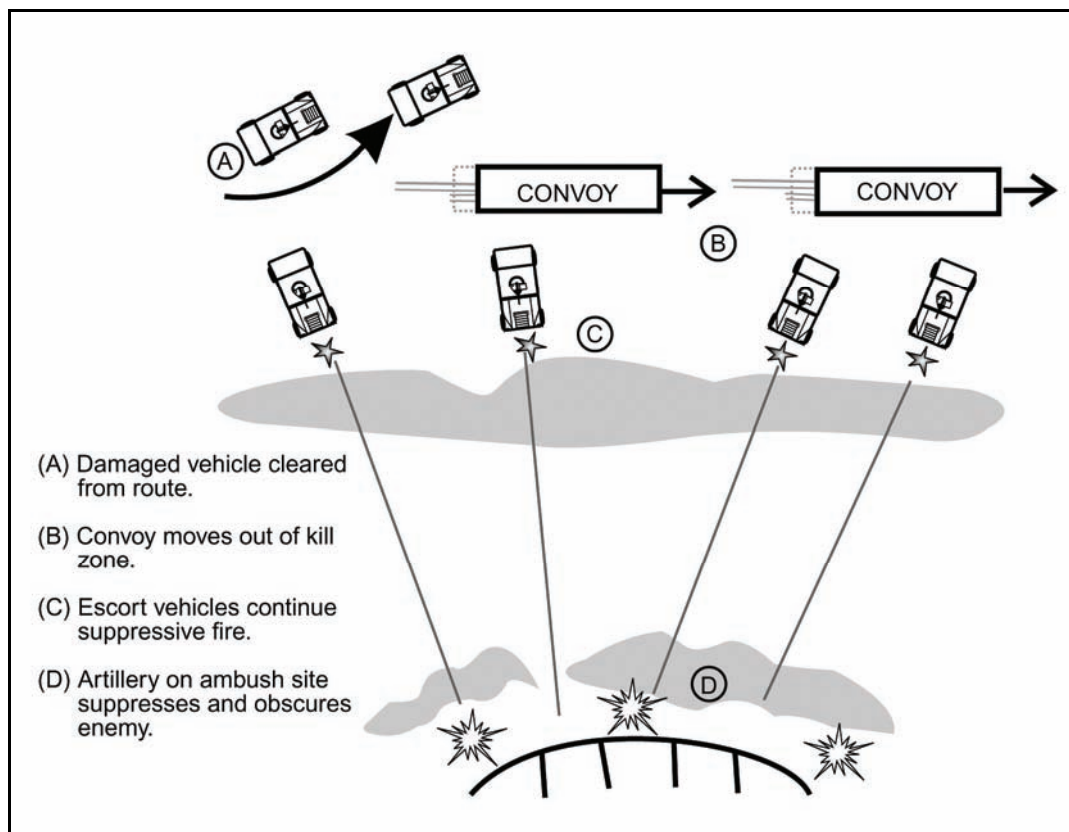


Figure H-13. Convoy continues to move.

H-88. Once the convoy is clear of the kill zone, the escort element executes one of the following COAs:

- Continues to suppress the enemy as combat reaction forces move to support (Figure H-14).
- Uses the Infantry to assault the enemy (Figure H-15).
- Breaks contact and moves out of the kill zone.
- Request immediate air support to cut-off escape routes.

H-89. In most situations, Infantry platoons or squads will continue to suppress the enemy or execute an assault. Contact should be broken only with the approval of the controlling commander.

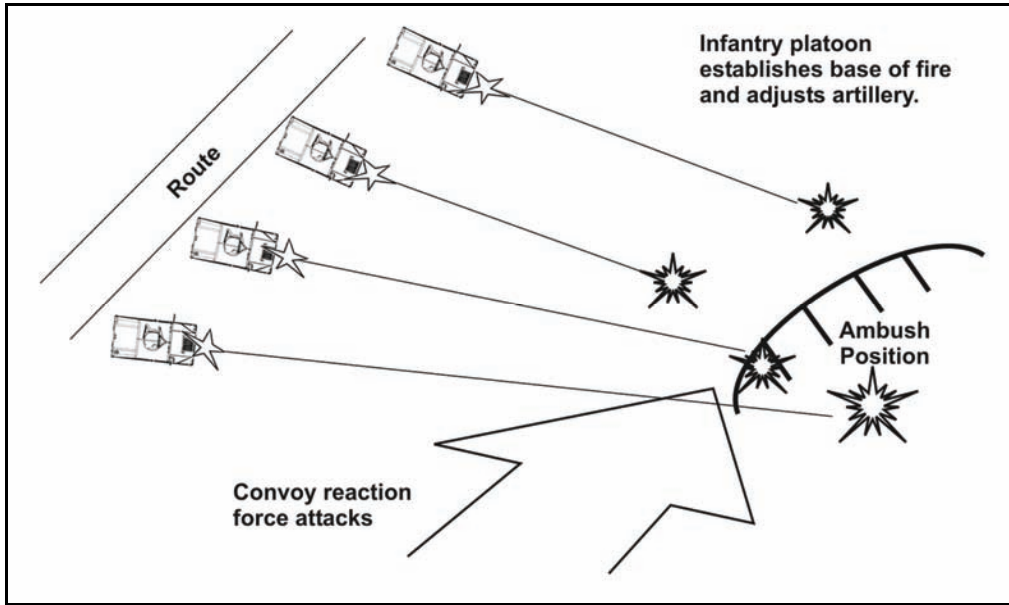


Figure H-14. Escort suppresses ambush for reaction force attack.

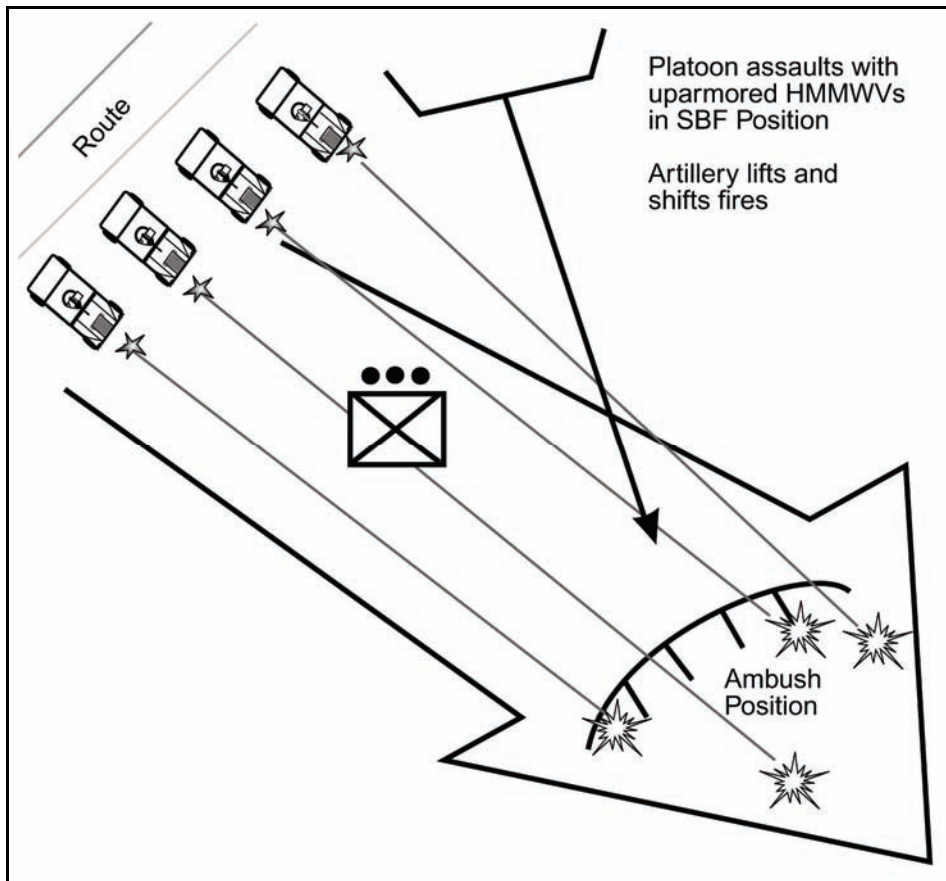


Figure H-15. Escort assaults ambush.

ACTIONS AT AN OBSTACLE

H-90. Obstacles are a major impediment to convoys. The purpose of reconnaissance ahead of a convoy is to identify obstacles and either breach them or find bypasses. In some cases the enemy or its obstacles may avoid detection by the reconnaissance element.

H-91. Obstacles can be used to harass the convoy by delaying it. If the terrain is favorable, the obstacle may stop the convoy altogether. Obstacles may also be used to canalize the convoy to set up an enemy ambush. When an obstacle is identified, the convoy escort faces two problems: reducing or bypassing the obstacle, and maintaining protection for the convoy. Security becomes critical, and actions at the obstacle must be accomplished very quickly. The convoy commander must assume that the enemy is covering the obstacle with direct- and indirect-fire weapons systems.

H-92. To reduce any time the convoy is halted and to reduce its vulnerability, the following actions should occur when the convoy escort encounters a point-type obstacle:

- The lead element identifies the obstacle and directs the convoy to make a short halt to establish security. The convoy escort overwatches the obstacle and requests the breach element force to move forward (Figure H-16).
- The convoy escort maintains 360-degree security of the convoy and provides overwatch as the breach force reconnoiters the obstacle in search of a bypass.

H-93. Once all reconnaissance is complete, the convoy commander determines which of the following COAs he will take:

- Bypass the obstacle.
- Breach the obstacle with assets on hand.
- Breach the obstacle with reinforcing assets.

H-94. The convoy security commander relays a SPOTREP and requests support by combat reaction forces, engineer assets (if they are not part of the convoy), and aerial reconnaissance elements. Artillery units are alerted to prepare to provide fire support.

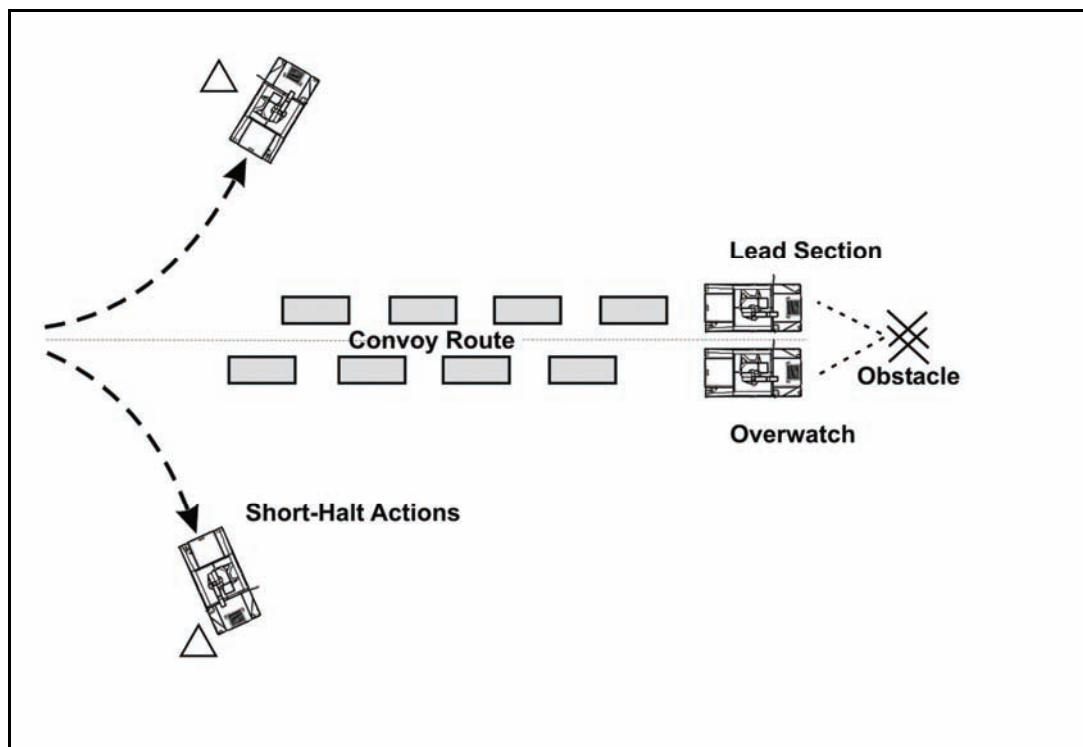


Figure H-16. Convoy escort overwatches an obstacle.

H-95. Obstacles may be in the form of unexploded ordnance (UXO), or uncharted minefields. If the convoy encounters UXO or mines, the convoy security commander should identify, mark, report, and bypass.

ACTIONS DURING HALTS

H-96. During a short halt, the convoy escort remains alert for possible enemy activity. If the halt is for any reason other than an obstacle, the following actions should be taken.

H-97. The convoy commander signals the short halt and transmits the order via tactical radio. All vehicles in the convoy initially assume a herringbone formation.

H-98. If possible, escort vehicles are positioned up to 100 meters beyond the convoy vehicles that are just clear of the route. Escort vehicles remain at the ready, dismount the rifles teams or squads as required, and establish local security. Infantry security elements or escort vehicles must occupy terrain within small arms range that dominates the convoy route during halts.

H-99. When the order is given to move out, convoy vehicles reestablish movement formation, leaving space for escort vehicles. Once the convoy is in column, local security elements (if used) return to their vehicles, and the escort vehicles rejoin the column.

H-100. The convoy resumes movement.

Appendix I

Improvised Explosive Devices, Suicide Bombers, and Unexploded Ordnance

Improvised explosive devices (IEDs), car bombs, unexploded ordnance (UXO), and suicide bombers pose deadly and pervasive threats to Soldiers and civilians in operational areas all over the world. Infantrymen at all levels must know how to identify, avoid, and react to these hazards properly. Newly assigned leaders and Soldiers should read everything they can find on current local threats. They should also become familiar with unit SOP policies and other relevant information contained in locally produced Soldier handbooks and leader guidebooks.

This appendix introduces discussions of improvised explosive devices (IEDs), homicide bombers, and unexploded ordnance (UXO). It incorporates tactical-level countermeasures learned from recent combat operations.

SECTION I — IMPROVISED EXPLOSIVE DEVICES

I-1. IEDs are nonstandard explosive devices used to target U.S. Soldiers, civilians, NGOs, and government agencies. IEDs range from crude homemade explosives to extremely intricate remote-controlled devices. The devices are used to instill fear in U.S. Soldiers, coalition forces, and the local civilian population. Their employment is intended to diminish U.S. national resolve with mounting casualties. The sophistication and range of IEDs continue to increase as technology continues to improve and as terrorists gain experience.

TYPES

I-2. Some of the many types of IEDs follow.

TIMED EXPLOSIVE DEVICES

I-3. These can be detonated by remote control such as by the ring of a cell phone, by other electronic means, or by the combination of wire and either a power source or timed fuze (Figure I-1).

IMPACT DETONATED DEVICES

I-4. These detonate after being dropped, thrown, or impacted in some manner.

VEHICLE BOMBS

I-5. These may include explosive-laden vehicles detonated with electronic command wire or wireless remote control, or with timed devices. They might be employed with or without drivers.

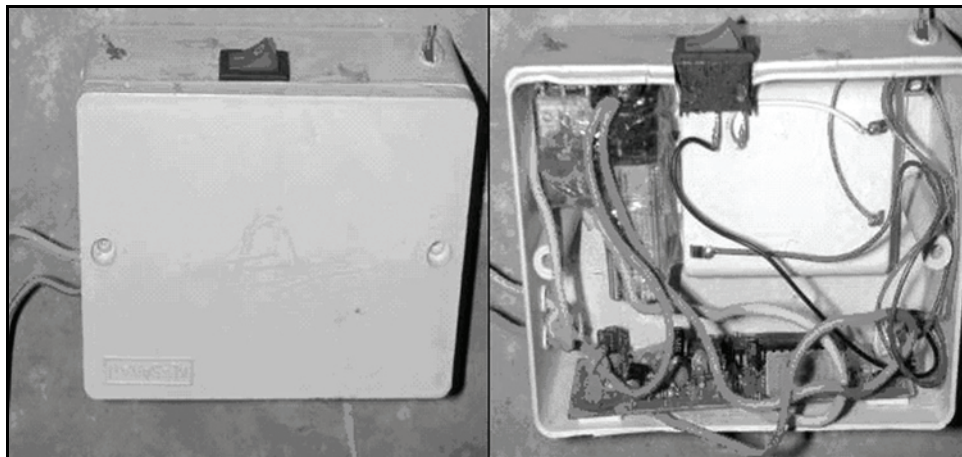


Figure I-1. Example of IED detonation device with explosive.

CHARACTERISTICS

- I-6. Key identification features and indicators of suspected IEDs include—
- Exposed wire, cord, or fuze protruding from an object that usually has no such attachment.
 - An unusual smell, sound, or substance emanating from an object.
 - An item that is oddly light or heavy for its size.
 - An object that seems out of place in its surrounding.
 - An object or area locals are obviously avoiding.
 - An threatening looking object covered with written threats or whose possessor uses verbal threats.
 - An object that is thrown at personnel, facilities, or both.

INGREDIENTS

- I-7. Anything that can explode will be used to make IEDs. Examples include:
- Artillery rounds containing high explosives or white phosphorous.
 - Any type of mine (antitank or antipersonnel).
 - Plastic explosives such as C4 or newer.
 - A powerful powdered explosive.
 - Ammonium nitrate (fertilizer) combined with diesel fuel in a container. (The truck bomb that destroyed the Oklahoma City Federal Building used ammonium nitrate and diesel fuel.)

CAMOUFLAGE

I-8. An IED can vary from the size of a ballpoint pen to the size of a water heater. They are often contained in innocent-looking objects to camouflage their true purpose. The type of container used is limited only by the imagination of the terrorist. However, containers usually have a heavy metal casing to increase fragmentation. Figure I-2 shows some of the types of camouflage that have been used to hide IEDs in Iraq. Some of the more commonly used containers include:

- Lead, metal, and PVC pipes with end caps (most common type).
- Fire extinguishers.
- Propane tanks.
- Mail packaging.
- Wood and metal boxes.

- Papier-mâché or molded foam or plastic "rocks," (containers that look like rocks, usually employed along desert roads and trails).
- Military ordnance, or rather modified military ordnance, which uses an improvised fuzing and firing system.

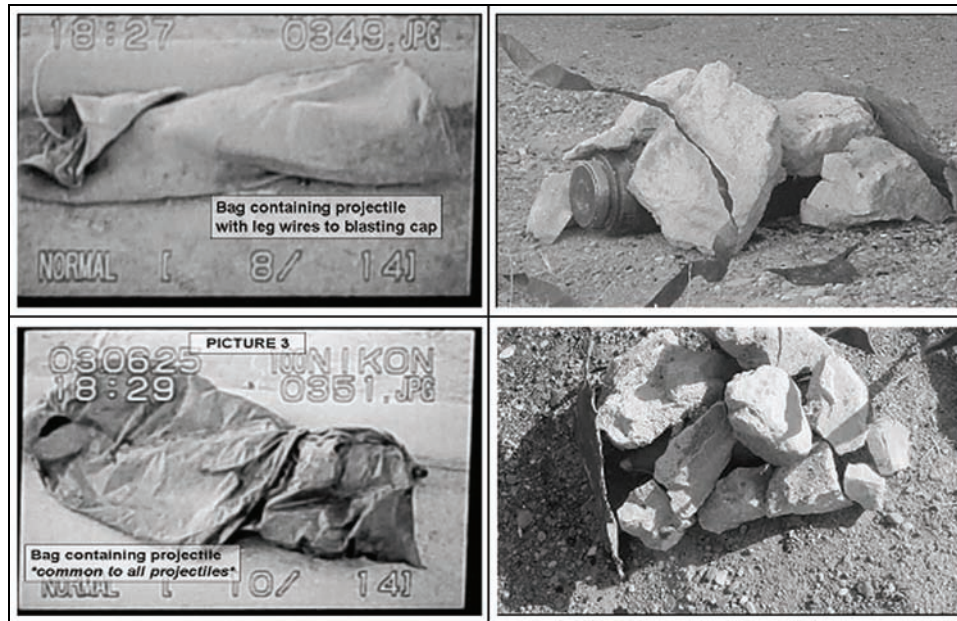


Figure I-2. Camouflaged UXO.

VEHICLE-BORNE DEVICES (CAR BOMBS)

I-9. Car bombs obviously use a vehicle to contain the device. The size of the device varies by the type of vehicle used. They can be packed into varying sizes of sedans, vans, or a large cargo trucks (Figure I-3). Larger vehicles can carry more explosives, so they cause more damage than smaller vehicles. Device functions, like package types, vary.

I-10. Signs of a possible car bomb include:

- A vehicle riding low, especially in the rear, especially if the vehicle seems empty. Explosive charges can also be concealed in the panels of the vehicle to distribute the weight of the explosives better.
- Suspiciously large boxes, satchels, bags, or any other type of container in plain view on, under, or near the front seat in the driver's area of the vehicle.
- Wire or rope-like material coming from the front of the vehicle that leads to the rear passenger or trunk area.
- A timer or switch in the front of a vehicle. The main charge is usually out of sight, and often in the rear of the vehicle.
- Unusual or very strong fuel-like odors.
- An absent or suspicious-behaving driver.







ATF	Vehicle Description	Maximum Explosives Capacity	Lethal Air Blast Range	Minimum Evacuation Distance	Falling Glass Hazard
	Compact Sedan	500 pounds 227 Kilos (In Trunk)	100 Feet 30 Meters	1,500 Feet 457 Meters	1,250 Feet 381 Meters
	Full Size Sedan	1,000 Pounds 455 Kilos (In Trunk)	125 Feet 38 Meters	1,750 Feet 534 Meters	1,750 Feet 534 Meters
	Passenger Van or Cargo Van	4,000 Pounds 1,818 Kilos	200 Feet 61 Meters	2,750 Feet 838 Meters	2,750 Feet 838 Meters
	Small Box Van (14 Ft. box)	10,000 Pounds 4,545 Kilos	300 Feet 91 Meters	3,750 Feet 1,143 Meters	3,750 Feet 1,143 Meters
	Box Van or Water/Fuel Truck	30,000 Pounds 13,636	450 Feet 137 Meters	6,500 feet 1,982 Meters	6,500 Feet 1,982 Meters
	Semi-Trailer	60,000 Pounds 27,273 Kilos	600 feet 183 Meters	7,000 Feet 2,134 Meters	7,000 Feet 2,134 Meters

Figure I-3. Vehicle IED capacities and danger zones.

EMPLOYMENT

I-11. IEDs have been used against the U.S. military throughout its history. Operation Enduring Freedom (Afghanistan) and Iraqi Freedom (OIF) have seen the use of IED attacks on a significant scale targeting U.S., coalition, and Iraqi Security forces, and civilian concentrations. Some threat TTPs might include:

- An IED dropped into a vehicle from a bridge overpass. An enemy observer spots a vehicle and signals a partner on the overpass when to drop the IED. Uncovered soft-top vehicles are the main targets. These IEDs are triggered either by timers or by impact (Figure I-4).
- An IED used in the top-attack mode and attached to the bottom of a bridge or overpass. This IED is command-detonated as a vehicle passes under it. This method gets around the side and undercarriage armor used on U.S. vehicles.
- An IED used with an ambush. Small arms, RPGs, and other direct-fire weapons supplement the IED, which initiates the ambush (Figures I-5, I-6, and I-7). Terrorists sometimes use deception measures such as dummy IEDs to stop or slow vehicles in the real kill zone.
- The driver of a suicide or homicide vehicle such as a taxicab feigns a breakdown and detonates the vehicle when Soldiers approach to help. The vehicle with IEDs might also run a checkpoint and blow up next to it.
- Suicide bombers sometimes approach U.S. forces or other targets and then self-detonate. Children might approach coalition forces wearing explosive vests.

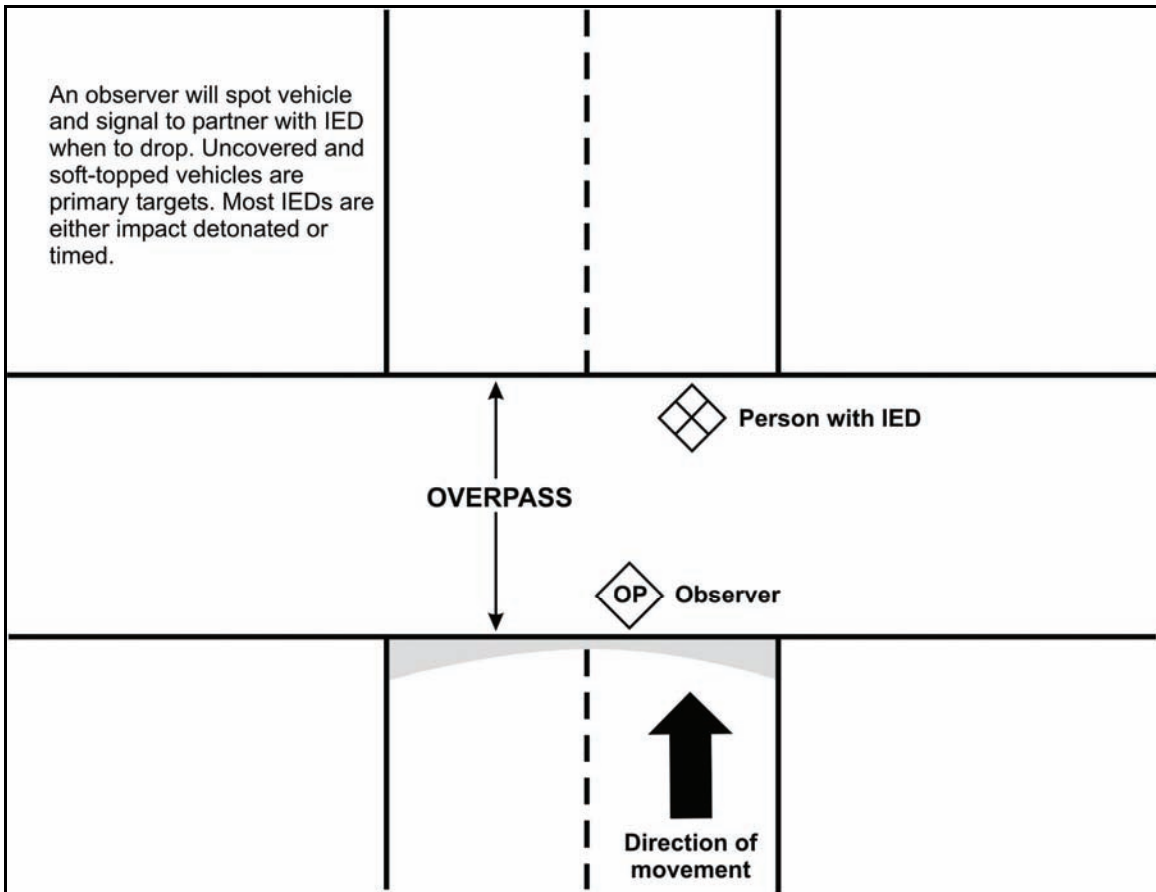


Figure I-4. Example of IED dropped into vehicles.

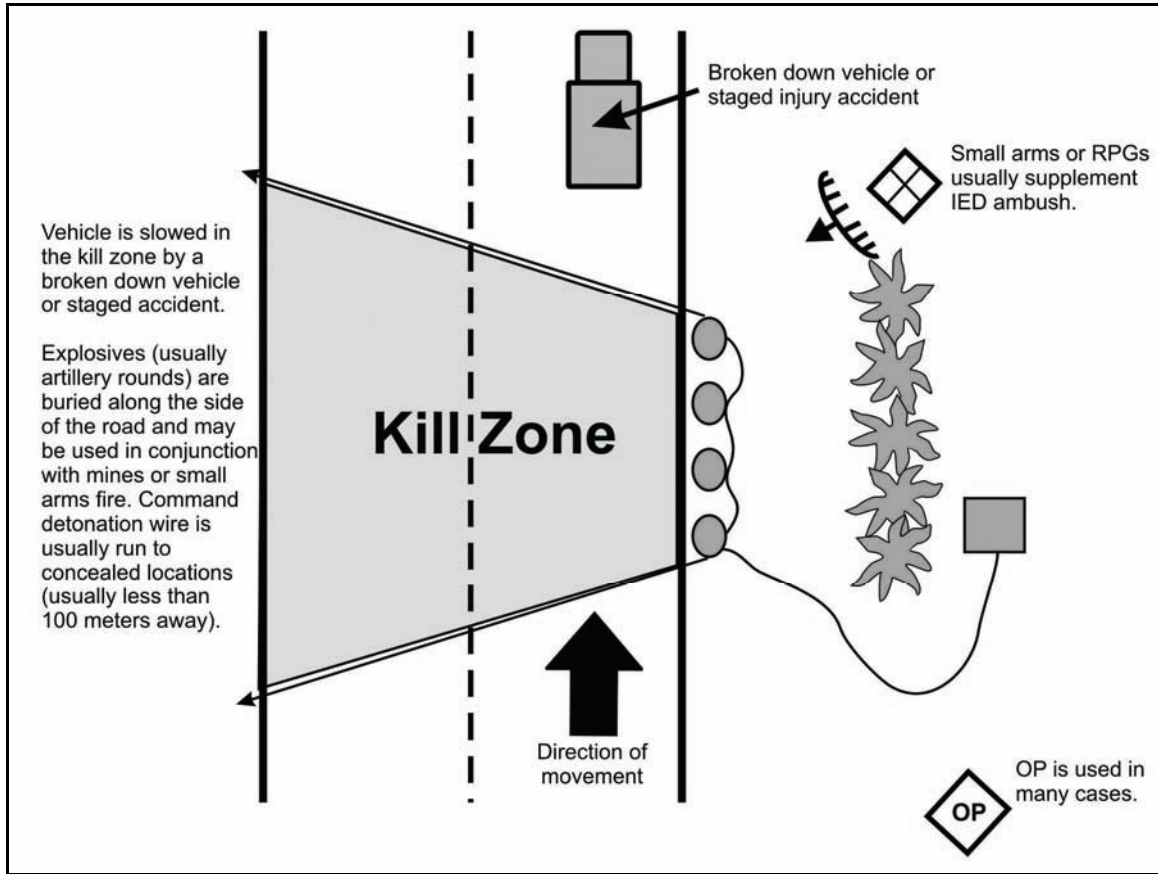


Figure I-5. Typical IED combination ambush.

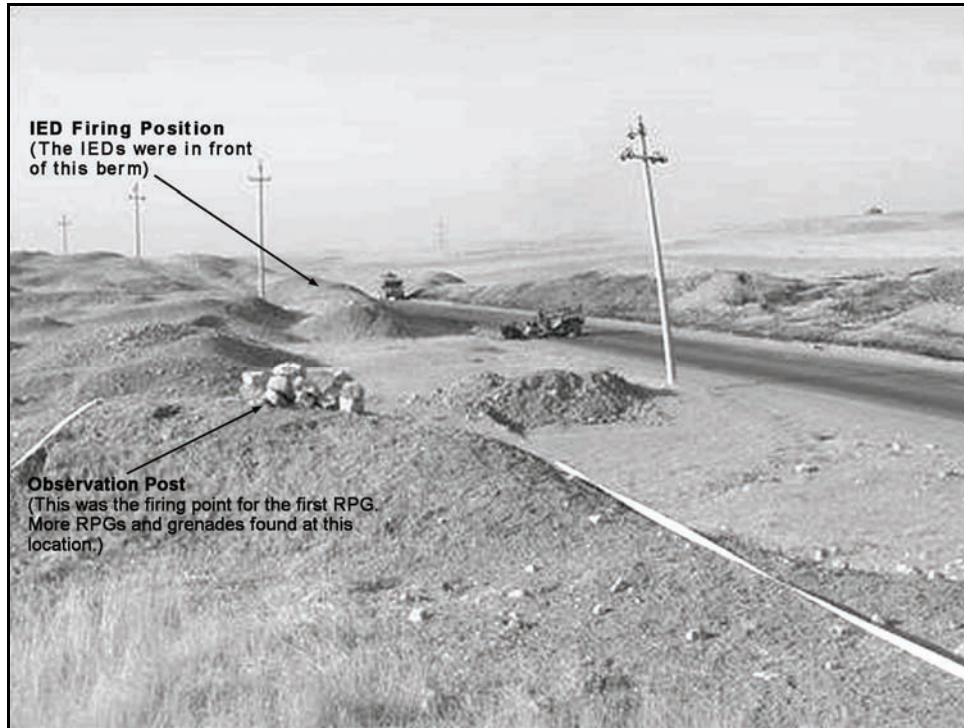


Figure I-6. IED combination ambush in Iraq.

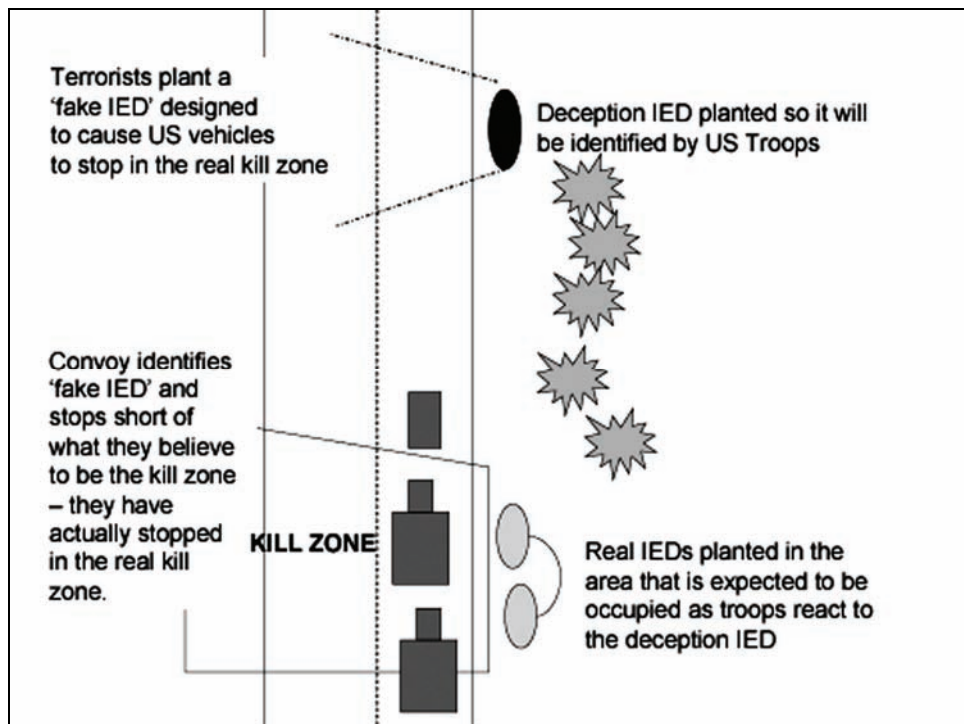


Figure I-7. Deception or fake IED used to stop convoy in kill zone.

COUNTERMEASURES

I-12. The enemy continues to adapt as friendly countermeasures evolve. Following are some measures used to counter an IED threat.

AVIATION SUPPORT

I-13. Operate with army aviation support when possible. Terrorists employing command-detonated IEDs generally rely on a quick escape after detonating an IED or executing an ambush. Recent trends have shown that OH-58D support deters attacks because terrorists are unable to break contact easily.

ALL-ROUND SECURITY

I-14. Remain alert. Maintain all-round security at all times. Scan rooftops and bridge overpasses for enemy activity.

CONVOY SECURITY

I-15. When possible, travel in large convoys. Vary road speed to disrupt the timing of command-detonated devices. However, terrorists often target convoys (or specific vehicles within convoys) with poor security postures. All occupants of convoy vehicles should have and keep their weapons pointed in an alert and defensive posture. Maintain a strong rear security element or a follow-on "shadow" trail security element. This force can more quickly be brought to bear on an enemy attacking the rear of a convoy. Use armed vehicles to speed ahead of a convoy to overwatch overpasses as the convoy passes. The lead vehicle in a convoy should have binoculars to scan the route ahead. All convoys should have extra tow bars or towing straps to recover broken-down vehicles quickly.

ADAPTATION

I-16. Be aware of evolving enemy tactics/procedures and be prepared to design countermeasures (Figure I-8). To the maximum possible extent, avoid becoming predictable. Vary routes, formations, speeds, and techniques.

TURNS

I-17. Avoid moving toward or stopping for an item in the roadway. Give wide clearance to items in the road. Turn to the outside of corners because terrorists often plant IEDs on the inside of turns to close the distance to the target. Turning to the outside also allows a longer field of view past the turn.

AUDIBLE SIGNALS

I-18. At night be aware of audible signals that can be used to communicate the approach of a convoy such as flares, gunfire, lights going off, or horns honking.

ENEMY OBSERVERS

I-19. Be alert for people who seem overly interested in your convoy, especially those using cell phones while watching your convoy.

UNUSUAL SILENCE

I-20. Be aware of unusually quiet areas. Often, local civilians have been warned of an enemy attack on coalition forces.

USE OF HEADLIGHTS

I-21. Do not use service drive headlights during the day. Having lights on during daylight makes the military vehicles stand out and easier to identify at a greater distance.

VEHICLE PROTECTION

I-22. Harden all vehicles.

OTHER TRAVELING PRECAUTIONS

I-23. Do not stop for broken down civilian vehicles, vehicle accidents, or wounded civilians along a convoy route.

CIVILIAN VEHICLE THREATS

I-24. Be alert to civilian vehicles cutting in and out or ramming vehicles in a convoy as if attempting to disrupt, impede, or isolate the convoy. Current ROE might permit you to fire warning shots or to engage threatening vehicles.

FIVES C's TECHNIQUE

I-25. Using the five C's (confirm, clear, call, cordon, control) technique helps to simplify both awareness and reaction to a suspected IED.

CONFIRM

I-26. The first step when encountering a suspected IED is to confirm that it is an IED. If Soldiers suspect an IED while performing 5- and 25-meter searches of their positions, they should act as if it could detonate at any moment, even if it turns out to be a false alarm. Using as few people as possible, troops should begin looking for telltale signs such as wires, protruding ordnance, or fleeing personnel.

CLEAR

I-27. If an IED is confirmed, the next step is to clear the area. The safe distance is determined by several factors: the tactical situation, avoidance of predictability, and movement several hundred meters away. Everyone within the danger zone should be evacuated. If more room is needed such as when the IED is vehicle-borne, Soldiers should clear a wider area and continuously direct people away. Only explosive ordnance disposal (EOD) personnel or their counterparts may approach the IED. While clearing, avoid following a pattern and look out for other IEDs. If you find any more, reposition to safety and notify a ranking member on the scene.

CALL

I-28. While the area around the IED is being cleared, a nine-line IED/UXO report should be called in. The report is much like the nine-line MEDEVAC report. It includes the necessary information for the unit's TOC to assess the situation and prepare an appropriate response.

CORDON

I-29. After the area has been cleared and the IED has been called in, Soldiers should establish fighting positions around the area to prevent vehicle and foot traffic from approaching the IED. They assure the area is safe by checking for secondary IEDs. They use all available cover. The entire perimeter of the effected area should be secured and dominated by all available personnel. Available obstacles should be used to block vehicle approach routes. Scan near and far for enemy observers who might try to detonate the IED. Insurgents often try to hide where they can watch their target area and detonate at the best moment. To deter attacks, randomly check the people leaving the area.

CONTROL

I-30. Since the distance of all personnel from the IED directly affects their safety, Soldiers should control the site to prevent people from straying too close until the IED is cleared. No one may leave the area until the EOD gives the "all clear." While controlling the site, assure all Soldiers know the contingency plans in case they come under attack by any means, including direct-fire small arms or RPGs, or indirect fires.

SECTION II — SUICIDE BOMBERS

I-31. These are different from all other terrorist threats, and require specific guidance on actions, particularly the interpretation of the ROE.

DEFINITION

I-32. A suicide attack is so called because it is an attack that means certain death for the attacker. The terrorist knows that success depends on his willingness to die. He conducts this kind of attack by detonating a worn, carried, or driven portable explosive charge. In essence, the attacker is himself a precision weapon. Suicide bombers aim to cause the maximum number of casualties, or to assassinate a particular target. Stopping an ongoing suicide attack is difficult. Even if security forces stop him before he reaches his intended target, he can still activate the charge and kill or injure those around him at the time. An additional benefit is the simplicity of such an attack. Neither escape nor extraction is an issue. Nor is intelligence, for no one will be left to interrogate. The only way to prepare for a suicide attack is to train Soldiers to react immediately with competence and confidence. Soldiers should also train to avoid overreacting with unnecessary or inappropriate lethal force. The following are potential high-value targets for suicide bombers.

- High-signature forces such as uniformed military and security elements; military vehicles; civilian vehicles used for military purposes; military bases; checkpoints; patrols; liaison personnel; or supportive host nation personnel.
- Members and facilities of the international community such as ambassadors and other diplomats; embassy, U.N., and NGO buildings; and diplomatic vehicles and staffs.
- National and provincial leaders and government officials.
- Civilians in public places such as markets, shops, and cafes. Although civilians in these locations are seldom primary targets, some groups do attack them.

DELIVERY METHODS

I-33. The two main methods of employing devices are by person or by vehicle.

- A person-borne suicide bomb usually has a high-explosive and fragmentary effect and uses a command-detonated firing system such as a switch or button the wearer activates by hand. A vest, belt, or other specially modified clothing can conceal explosives with fragmentation (Figure I-8).
- A vehicle-borne suicide bomb uses the same methods and characteristics of other package or vehicle bombs, and is usually command detonated.

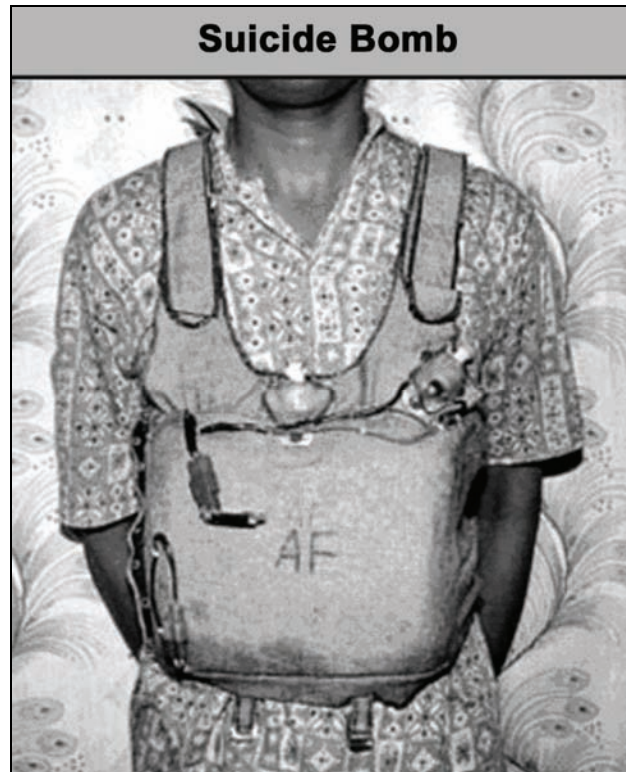


Figure I-8. Suicide bomber vest.

INDICATORS

I-34. Suicide bombers can be either gender and any age. For example, recent Palestinian bombers were female teenagers. You might be looking at a suicide bomber if you see someone who—

- Tries to blend in with the (target) environment.
- Wears ordinary, nondistinctive clothing, military or religious garb, or an oversized, bulky, or unseasonably heavy coat or jacket.
- Demonstrates fanatical religious beliefs by behaviors such as praying fervently, possibly loudly, in public.
- Has a shaved head (Muslim males); wears their hair short and their face clean shaven; or wears fragrance, which is unusual for an Arab man.
- Behaves nervously, that is, sweats, or glances about anxiously.
- Has religious verses from the Quran written or drawn onto their body, hands, or arms.
- (Islamic males) dresses as and pretends to be a woman.
- Carries a bag tightly, clutched close to the body, and in some cases squeezes or strokes it.

SPECIAL CONSIDERATIONS

I-35. Consider the following when dealing with potential suicide bombers:

- Most will try to detonate the device if they believe they have been discovered.
- Suicide bombers are of any nationality, not necessarily of direct Middle Eastern descent. They may simply sympathize with the terrorist group's cause(s).
- If you determine that a suspect is a suicide bomber, then you will probably have to use deadly force. Prepare for and expect a detonation. Shoot from a protected position from as far away as possible.

- Many suicide bombers use pressure-release-type detonation devices that they hold in their hands. They apply the pressure before they begin their final approach to the target. The explosive payload will detonate as soon as the bomber relaxes his grip, so it will go off even if you kill him.
- Some bombers also have a command-detonated system attached to their bomb, and a second person observes and tracks him to the target. This also allows the terrorists to control and detonate the bomb, even if the bomber dies or his trigger is destroyed or disabled.
- The suicide bomber may also use a timed detonation system, and again this works whether or not you kill him before he reaches his target.

COMPLICATIONS

I-36. Dealing with a suicide bomber is one of the toughest situations a Soldier can face. In just a few seconds he must identify the bomber, assess the situation, consider how to comply with the ROE, and act decisively. There is seldom time to think beyond that or to wait for orders. The only possible way to stop the bomber short of his target is to immediately incapacitate him with lethal force. Challenging him would probably cause him to trigger his device at once. The suicide bomber is trained and prepared to carry out his mission. Some experts believe that a suicide bomber considers himself already dead when setting out on an attack. The Soldier and leader must continually be aware that—

- A pressure release switch can detonate the device as soon as the bomber is shot.
- A device could be operated by remote control or timer even after the bomber is incapacitated.
- Another person observe and command-detonate the bomb.
- A second suicide bomber might be operating as a backup or to attack the crowd and assistance forces that normally gather after a detonation.

SECTION III — UNEXPLODED ORDNANCE

I-37. Unexploded ordnance (UXO) are made up of both enemy and friendly force ordnance that have failed to detonate. UXO sometimes pose no immediate threat, but they can cause injuries, loss of life, and damage to equipment if appropriate actions are not taken. UXO can be found on the battlefield, in urban areas, caves, and almost anywhere in an AO. UXO can be a result of a recent battle or war, or left over from past conflicts. During Operation Enduring Freedom (OEF), U.S. Soldiers, coalition forces, and the local population were in danger of encountering an estimated 10,000,000 pieces of UXO and mines left over from 23 years of war in Afghanistan. Soldiers in Bosnia and Soldiers fighting in Operation Iraqi Freedom have been exposed to an estimated 8 million antipersonnel mines and 2 million antitank mines, as well as UXO. Soldiers can expect to encounter UXO in any future conflict.

RECOGNITION

I-38. Soldiers' knowledge of UXO is essential to help prevent the risk of injury. Soldiers are generally familiar with the appearance of ammunition and munitions used in their own weapons. They seldom recognize what the actual projectile looks like once it has been fired, especially if it is discolored or deformed by impact. Also, Soldiers might not be able to easily recognize UXO from USAF-delivered weapons or from non-U.S. weapons. In general, leaders should caution their Soldiers against disturbing any unknown object on the battlefield.

I-1.

I-39. FM 3-100.38 provides detailed illustrations and identifying characteristics of the four categories of UXO, including projected, thrown, placed, and dropped.

PROJECTED ORDNANCE

I-40. Projected ordnance includes:

- Projectiles such as HE, chemical, illumination, and submunitions.
- Mortar rounds such as HE, chemical, WP, and illumination.

- Rockets such as self-propelled projectiles, no standard shape.
- Guided missiles such as missiles with guidance systems.
- Rifle grenades similar to mortars but fired from rifles.

THROWN ORDNANCE

I-41. Thrown ordnance including fragmentation, smoke, illumination, chemical, and incendiary hand grenades.

PLACED ORDNANCE

I-42. Placed ordnance includes:

- AP mines, generally small, of various shapes and sizes, and made of plastic, metal, or wood. They might have trip wires attached.
- AT mines, large, of various shapes and sizes, and made of plastic, metal, or wood. They might have antihandling devices.

DROPPED ORDNANCE

I-43. Dropped ordnance includes:

- Bombs, small to very large, with metal casings, tail fins, lugs, and fuzes. They may contain HE, chemicals, or other hazardous materials.
- Dispensers that look similar to bombs but may have holes or ports in them. Do not approach as sub-munitions might be scattered around.
- Very sensitive submunitions such as small bombs, grenades, or mines.

DANGER

DO NOT TRY TO TOUCH OR MOVE UXO. ORDNANCE FAILS FOR MANY REASONS, BUT ONCE FIRED OR THROWN, THE FUZING SYSTEM WILL LIKELY ACTIVATE. THIS MAKES THE ORDNANCE TOO UNSTABLE TO HANDLE. IF A ROUND FAILS TO FUNCTION INITIALLY, ANY SUBSEQUENT STIMULUS OR MOVEMENT MIGHT SET IT OFF.

IMMEDIATE ACTION

I-44. Many areas, especially previous battlefields, might be littered with a wide variety of sensitive and deadly UXO. Soldiers need to follow these precautions on discovering a suspected UXO:

- Do not move toward the UXO. Some types of ordnance have magnetic or motion-sensitive fuzing.
- Never approach or pick up UXO even if identification is impossible from a distance. Observe the UXO with binoculars if available.
- Send a UXO report to higher HQ (Figure I-9). Use radios at least 100 meters away from the ordnance. Some UXO fuzes might be set off by radio transmissions.
- Mark the area with mine tape or other obvious material at a distance from the UXO to warn others of the danger. Proper markings will also help EOD personnel find the hazard in response to the UXO report.
- Evacuate the area while carefully scanning for other hazards.
- Take protective measures to reduce the hazard to personnel and equipment. Notify local people in the area.

BOOBY TRAPS

I-45. Booby traps are typically hidden or disguised explosive devices rigged on common items to go off unexpectedly (Figure I-9). They may also be employed as antihandling devices on UXO, emplaced mines, or as improvised explosive devices (IED). Identify, mark, and report using the nine-line UXO incident report (Figure I-10). Field-expedient booby traps have also been employed with some success during most conflicts.

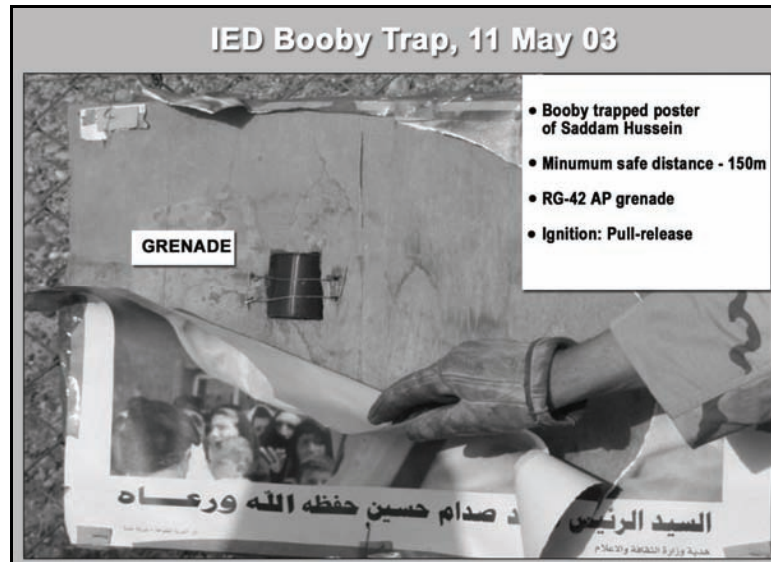


Figure I-10. Example booby trap.

1. **DTG:** Date and time UXO was discovered.
2. **Reporting Unit or Activity, and UXO Location:**
Grid coordinates.
3. **Contact Method:** How EOD team can contact the reporting unit.
4. **Discovering Unit POC:** MSE, DSN phone number and unit frequency, or call sign.
5. **Type of UXO:** Dropped, projected, thrown, or placed, and number of items discovered.
6. **Hazards Caused by UXO:** Report the nature of perceived threats such as a possible chemical threat or a limitation of travel over key routes.
7. **Resources Threatened:** Report any equipment, facilities, or other assets threatened by the UXO.
8. **Impact on Mission:** Your current situation and how the UXO affects your status.
9. **Protective Measures:** Describe what you have done to protect personnel and equipment such as marking the area and informing local civilians.

Figure I-10. Nine-line UXO incident report.

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Glossary

ACRONYMS AND ABBREVIATIONS

<i>Acronym/Term</i>	<i>Definition</i>
AA	assembly area
AAR	after-action review
ACL	allowable cargo load
AD	air defense
ADA	air defense artillery
ADAM	air defense and missile
AG	assistant gunner
AHD	antihandling device
ALO	air liaison officer
ANCD	automated network control device
AO	area of operations
AP	Antipersonnel
APC	armored personnel carrier
APDS	armor piercing discarding sabot
APOBS	Antipersonnel Obstacle Breaching System
AR	automatic rifleman
AT	antitank
ATGM	antitank guided missile
BAS	battalion aid station
BB	bunker buster
BC	Bradley commander
BCU	battery coolant unit
BDM	bunker defeat munition
BFT	blue force tracker
BIT	built-in text
BITE	built-in test equipment
BMNT	beginning morning nautical twilight
BVF	M2 Bradley Fighting Vehicle
C2	command and control
CAPS	counter active protection system
CAS	close air support
CASEVAC	casualty evacuation
CBRN	chemical, biological, radiological, and nuclear
CCIR	commander's critical information requirements
CCM	close combat missile
CCMS	Close Combat Missile System

CCP	casualty collection point
CFL	coordinated fire line
CLU	command launch unit
COA	course of action
COE	contemporary operational environment
COP	common operating picture
CP	check point
CWST	combat survival water test
DA	Department of the Army
DD	Department of Defense form
DED	detailed equipment decontamination
DLIC	detachment left in contact
DoD	Department of Defense
DTD	detailed troop decontamination
DTG	date-time group
DVR	driver
EA	engagement area
ECM	electronic countermeasures
EENT	end of evening nautical twilight
EFP	explosive formed penetrator
EPW	enemy prisoner of war
ES2	enemy soldier and sensor
ETAC	enlisted tactical air controller
FBCB2	Force XXI Battle Command Brigade and Below System
FDC	fire direction center
FEBA	forward edge of the battle area
FFE	fire for effect
FIST	fire support team
FLIR	forward looking infrared radar
FLOT	forward line of troops
FM	field manual
FO	forward observer
FOV	field of vision
FPF	final protective fire
FPL	final protective line
FRAGO	fragmentary order
FS	fire support
FSCL	fire support coordination line
FSCM	fire support coordination measures
FSE	fire support element
FSO	fire support officer

GNR	gunner
GPS	Global Positioning System
GSR	ground surveillance radar
GTA	graphic training aid
GTL	gun team leader
GTP	ground tactical plan
HE	high explosive
HEAT	high explosive antitank
HEDP	high explosive dual purpose
HEI-T	high explosive incendiary w/ tracer
HEMTT	heavy expanded mobility tactical truck
HMMWV	high-mobility multipurpose wheeled vehicle
HPT	high profile target
HQ	Headquarters
HUMINT	human intelligence
IBA	individual body armor
ICV	Infantry carrier vehicle
ICOM	ingetrated communication
IED	improvised explosive device
IMP	Impact
IMT	individual movement techniques
IPB	intelligence preparation of the battlefield
IR	information requirement
IRP	initial rally point
ISR	intelligence, surveillance, reconnaissance
ITAS	Improved Target Acquisition System
JSLIST	joint service lightweight integrated suit technology
JTAC	joint terminal air controller
KIA	killed in action
KPH	kilometers per hour
LACE	liquid, ammunition, casualty, and equipment
LAW	light antiarmor weapon
LC	line of contact
LCMR	lightweight counter-mortar radar
LD	line of departure
LOA	limit of advance
LOC	line of communication
LOGPAC	logistics package
LOS	line of sight
LOW	law of war
LTA	launch tube assembly

LZ	landing zone
MANPADS	Man-Portable Air Defense System
MBA	main battle area
MDI	modernized demolition initiator
MEDEVAC	medical evacuation
MEL	maximum engagement line
METTC-TC	mission, enemy, terrain, troops-time, civil
MGS	Mobile Gun System
MLO	multipurpose rain/snow/cb overboot
MOPMS	modular pack mine system
MOPP	mission-oriented protective posture
MR	Moonrise
MS	Moonset
MSD	minimum safe distance
MSR	main supply route
MVT	Movement
NAI	named area of interest
NCO	non-commissioned officer
NCS	net control system
NFA	no-fire area
NFV	narrow field of view
NLT	not later than
NMC	nonmission capable
NSB	near surface burst
NVD	night vision device
NVG	night vision goggles
NVS	night vision sight
OAKOC	observation and fields of fire, avenues of approach, key and decisive terrain, obstacles, cover and concealment
OP	observation post
OPCON	operational control
OPORD	operation order
OPTEMPO	operational tempo
ORP	objective rally point
OT	observer target
PA	physician's assistant
PCI	precombat inspection
PDF	principle direction of fire
PI	percent of incapacitation
PIR	priority intelligence requirement
PLD	probable line of deployment

PLGR	precision lightweight GPS receiver
PLL	parts load list
PMCS	preventive maintenance checks and services
PMM	preventive medicine measures
POL	petroleum, oil, and lubricants
POSNAV	position navigation
PRX	Proximity
PSG	platoon sergeant
PSI	pressure per square inch
PZ	pickup zone
RCU	remote control unit
RED	risk estimate distance
RFA	restrictive fire area
RIP	relief in place
RLEM	rifle-launched entry munitions
ROE	rules of engagement
ROI	rules of interaction
RPG	rocket-propelled grenade
RRP	reentry rally point
RTO	radiotelephone operator
SA	situational awareness
SALUTE	size, activity, location, uniform, time, equipment
SBCT	Stryker brigade combat team
SBF	support by fire
SCATMINES	scatterable mines
SD	self-destruct
SDM	squad designated marksman
SDZ	surface danger zone
SEAD	suppression of enemy air defenses
SEE	small earth excavator
SHORAD	short-range air defense
SINGGARS	Single Channel Ground/Airborne Radio System
SITEMP	situation template
SL	squad leader
SLAM	selectable lightweight attack munition
SLM	shoulder-launched munitions
SMAW-D	shoulder-launched multipurpose assault weapon (disposable)
SME	small earth excavator
SOFA	status of forces agreement
SOP	standing operating procedure
SOSRA	suppress, obscure, secure, reduce, and assault

SR	Sunrise
SSC	small-scale contingency
SS	Sunset
SU	situational understanding
SVML	standard vehicle-mounted launcher
TACP	tactical air control party
TC	truck commander
TCP	traffic control point
TL	team leader
TLP	troop-leading procedures
TM	technical manual
TOW	tube-launched, optically-tracked, wire-guided
TPT	trainer practice tracer
TRP	target reference point
TSOP	tactical standing operating procedure
TTP	tactics, techniques, and procedures
TWS	thermal weapons site
UAS	unmanned aircraft system
UCMJ	Uniform Code of Military Justice
UHF	ultra high frequency
UMCP	unit maintenance collection point
UXO	unexploded ordnance
VC	vehicle commander
WARNO	warning order
WCS	weapons control status
WFF	warfighting function
WFOV	wide field of view
WIA	wounded in action
WLGH	weapon-launched grappling hook
WP	white phosphorus
WSL	weapons squad leader
XO	executive officer

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PETER J. SCHOOMAKER
General, United States Army
Chief of Staff

Official:



JOYCE E. MORROW
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