DEPARTMENT OF THE NAVY
Headquarters United States Marine Corps
Washington, D.C. 20380-0001

FOREWORD

1. PURPOSE

Marine Corps Warfighting Publication (MCWP 3.11-2), Marine Rifle Squad, provides basic guidance that enables the rifle squad leader to fight and lead his squad in combat. As such it does not contain voluminous information about environmental operations that can be easily referred in other MCWP or MCRP (Marine Corps Reference Publication).

2. SCOPE

This manual describes the organization, weapons, capabilities, and limitations of the Marine rifle squad. It addresses the squad’s role within the platoon and that of the fire teams within the rifle squad. Emphasis is placed on basic offensive and defensive tactics, techniques, and procedures as well as the different types of patrols a squad might conduct.

3. SUPERSESSION

FMFM 6-5, Marine Rifle Squad. 2 December 1991.

4. CHANGES

Recommendations for improvements to this publication are encouraged from commands as well as from individuals. Forward suggestions using the User Suggestion Form format to--

Commanding General
Doctrine Division (C 42)
Marine Corps Combat Development Command
3300 Russell Road Suite 318A
Quantico, VA 22134

5. CERTIFICATION
# Marine Rifle Squad

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Organization and Armament

1001. General

The mission of the rifle squad is to locate, close with, and destroy the enemy by fire and
maneuver, or repel the enemy's assault by fire and close combat.

1002. Organization of the Rifle Squad

The rifle squad consists of three fire teams, each of which is built around an automatic weapon
and controlled by a fire team leader. The squad is composed of 13 men: a sergeant (squad leader)
and three fire teams of four men each. Each fire team normally consists of a corporal (fire team
leader/grenadier), two lance corporals (automatic rifleman and assistant automatic rifleman), and
a private or private first class (rifleman). (See fig. 1-1.)

fig. 1-1

1003. Weapons

a. Organic Weapons. The organic weapons of the squad are as follows:

(1) Squad Leader. M16A2 rifle and bayonet knife.

(2) Fire Team Leader/Grenadier. M16A2 rifle with a 40 mm, M203 grenade
launcher attached and bayonet knife

(3) Automatic Rifleman. Squad automatic weapon (SAW) and combat knife (K-bar).

(4) Assistant Automatic Rifleman. M16A2 rifle and bayonet knife.

(5) Rifleman. M16A2 rifle, bayonet knife.

b. Ammunition

(1) M16A2 Rifle

   (a) Cartridge, 5.56 mm, ball, A059.

   (b) Cartridge, 5.56 mm, tracer, A063.

   (c) Cartridge, 5.56 mm, blank, A080.

(2) Squad Automatic Weapon
(a) Cartridge, 5.56 mm, linked, 4 and 1, A064.

(b) Cartridge, 5.56 mm, blank, linked, A075.

(c) Unlinked A059/A063 (ball/tracer) cartridges may be fired from 30 round magazines, but reliability is greatly reduced.

(3) M203 Grenade Launcher

(a) Cartridge, 40 mm, high explosive dual purpose (HEDP), M433EI (antipersonnel/antiarmor).

(b) Cartridge, 40 mm, training practice, M407AI.

(c) Riot control and signaling cartridges.

(d) Cartridge, 40 mm, high explosive (HE), M406 (to be used until existing stocks are depleted).

(e) Cartridge, 40 mm, HE air burst, M397 (to be used until existing stocks are depleted).

(f) Cartridge, 40 mm, multiple projectile, M-576 (antipersonnel) (to be used until existing stocks are depleted)

(g) Cartridge, 40 mm, smokeless and flack less, M463 (anti armor) (to be used until existing stocks are depleted).

c. Supplementary Weapons and Munitions. The following is a list of weapons and munitions available to members of the squad:

· Demolitions.
· Claymore mines.
· Hand grenades (fragmentation, smoke, and gas [CS]).
· AT-4, 83 mm (antiarmor).
· Ground signals and flares.

d. The following weapons can be employed in support of (with) the squad:

· 7.62 mm machine gun, (M240G).
· Shoulder launched, multipurpose assault weapon (SMAW), 83 mm assault rocket launcher.
· .50 caliber machine gun (M2).
· 40 mm machine gun (MK19).
· 60 mm/81 mm mortars.
· Dragon/ Javelin and TOW antitank weapons.
· Artillery.
· Naval Surface Fires.
· Close air support from fixed and rotary wing aircraft

1004. Duties of Individuals

a. General. Every man of a fire team must know the duties of the other team members, and in turn, the fire team leader and the squad leader should be able to assume the duties of their next superior.

b. Squad Leader. The squad leader carries out the orders issued to him by the platoon commander. He is responsible for the discipline, appearance, training, control, conduct, and welfare of his squad at all times, as well as the condition, care, and economical use of its weapons and equipment. In combat, he is also responsible for the tactical employment, fire discipline, fire control, and maneuver of his squad. He takes position where he can best carry out the orders of the platoon commander and observe and control the squad.

c. Fire Team Leader/Grenadier. The fire team leader carries out the orders of the squad leader. He is responsible for the fire discipline and control of his fire team and for the condition, care, and economical use of its weapons and equipment. In carrying out the orders of the squad leader, he takes a position to best observe and control the fire team. Normally, he is close enough to the automatic rifleman to exercise effective control of his fires. In addition to his primary duties as a leader, but not to the detriment of them, he serves as a grenadier and is responsible for the effective employment of the grenade launcher, his rifle, and for the condition and care of his weapons and equipment. The senior fire team leader in the squad serves as assistant squad leader.

d. Automatic Rifleman. The automatic rifleman carries out the orders of the fire team leader. He is responsible for the effective employment of the automatic rifle and for the condition and care of his weapon and equipment.

e. Assistant Automatic Rifleman. The assistant automatic rifleman assists in the employment of the automatic rifle. He carries additional magazines and/or ammunition boxes for the automatic rifle and is prepared to assume the duties of the automatic rifleman. He is responsible for the effective employment of his rifle and for the condition and care of his weapon and equipment.

f. Rifleman. The rifleman in the fire team carries out the orders of the fire team leader. He is responsible for the effective employment of his rifle and for the condition and care of his weapon and equipment. The rifleman is trained as a scout.

1005. Fire Support for the Squad

Fires from supporting units assist the rifle squad in achieving combined arms effect and in accomplishment of the mission.

a. Platoon Support. The rifle platoon contains three rifle squads. Rifle squads within the rifle platoon may provide the suppressive fires (base of fire) for the maneuver of one or more squads.

b. Company Support. The weapons platoon of the rifle company contains 60 mm mortars, 7.62 mm machine guns, and SMAWs. These are organized into a mortar section of three mortars, a
machine gun section of six guns and an assault section with six SMAWs. The weapons platoon can:

(1) Employ 60 mm mortars to provide suppressive and obscuration fires and machine guns to provide suppressive fires (base of fire) in support of maneuvering elements conducting offensive, and defensive operations

(2) Employ SMAWS to provide effective assault fires against enemy fortified targets, and obstacles or motorized vehicles.

c. Battalion Support. The weapons company of the infantry battalion contains 81 mm mortars, .50 caliber and 40 mm machine guns, and DRAGON/JAVELIN and TOW antitank weapons. These are organized into a mortar platoon of eight mortars, a heavy machine gun platoon of six .50 caliber and six 40 mm machine guns, and an anti armor platoon of 24 Dragons. The JAVELIN is replacing the Dragon. The Javelin section has eight Command Launch Units (CLU) and a basic combat load of 24 Javelin missiles (3 per CLU).
Chapter 2
Technique of Fire
Section 1. Introduction

2101. General
When squad members have completed individual marksmanship training, and before they commence combat firing in tactical problems, they must learn the techniques of rifle, automatic rifle, and grenade launcher fire. Technique of fire refers to the application and control of the combined fire of a fire unit. A fire unit is a group of men whose combined fire is under the direct and effective control of a leader. The fire units discussed in this manual are the Marine rifle squad and its fire teams.

2102. Training
The steps in technique of fire training and the sequence in which they are given are listed below. Detailed information can be found in MCRP 3-01A, Rifle Marksmanship and MCWP 3-15.1, Machine Guns and Machine Gunnery.
a. Target detection.
b. Field firing positions.
c. Range estimation.
d. Rifle and automatic rifle fire and its effect.
e. Grenade launcher fire and its effect.
f. Fire commands.
g. Application of fire.
h. Field target firing.

Section II. Range Determination

2201. Importance and Methods
Range determination is a process of finding out the approximate distance from an observer to a target or any distant object. Accurate range determination allows the squad members to set their sights correctly and place effective fire on enemy targets. Three methods of determining ranges are estimation by eye, the five-degree method, and observation of fire.

2202. Estimation by Eye
There are two methods used in estimating range by eye: the mental unit of measure and the appearance of objects. With training and practice, accurate ranges can be determined and a high volume of surprise fire can be delivered on the enemy.
a. Mental Unit of Measure

(1) To use the mental unit of measure, the Marine visualizes a 100-meter distance, or any other unit of measure familiar to him. With this unit in mind, he mentally determines how many of these units there are between his position and the target. (See fig. 2-1.) In training, mental estimates should be checked by pacing off the distance. The average man takes about 130 steps per 100 meters.

(2) Distances beyond 500 meters can most accurately be estimated by selecting a halfway point, estimating the range to this halfway point, then doubling it. (See fig. 2-1.)

Figure 2-1
For Ranges Over 500 Meters Select The Halfway Point. Estimate The Range To That Point, Then Multiply This Estimate By Two.

b. Appearance of Objects.

When there are hills, woods, or other obstacles between the observer and target or where most of the ground is hidden from view, it is impractical to apply the mental unit of measure to determine range. In such cases, another method, based on appearance of objects, may be used. Through practice, the Marine learns how objects familiar to him appear at various known ranges. For example, watch a man when he is standing 100 meters away. Fix the appearance of his size and the details of his features and equipment firmly in mind. Watch him in the kneeling position, then in the prone position. By comparing the appearance of a man at 100, 200, 300, and 500 meters, a series of mental pictures is established. When time and conditions permit, accuracy can be improved by averaging a number of estimates by different men to determine the range.

2203. Five-Degree Method

If time and tactical conditions permit, a relatively accurate method of determining range is the five-degree method. All that is required is a lensatic compass and the knowledge of how to pace off distances.

a. Select and mark a start point.

b. From the start point, shoot an azimuth to the object (target point) to which you are trying to determine the range. Note the azimuth.

c. Standing at the start point, turn right (or left) until the reading on the compass is 90 degrees greater (or less) than the azimuth to the target point.

d. Walk at a right angle to the line between the start point and the target point; stop periodically to shoot an azimuth to the target point.
e. When the compass shows a difference of five degrees from the original start point to target
point azimuth, turn back toward the start point. It is critical that the reading of the compass be
precise.

f. Walk back toward the start point using a 36 to 40inch pace (approximately one meter); count
the number of paces to the start point.

g. When you reach the start point, multiply the number of paces you counted by eleven. For
example, if you counted 100 paces, multiply 100 by 11. The range to the object is approximately
1100 meters. (See fig. 2-2.)

**Figure 2-2 Five-Degree Method Range Determination**

2204. Observation of Fire

Accurate range determination can be made by observing the strike of tracer or ball ammunition.
An observer is necessary because it is difficult for a rifleman to follow his own tracer and see its
impact. If this method is used, the range may be estimated quickly and accurately, but
the possibility of achieving surprise is lost and the firing position may be revealed to the enemy.
This procedure requires that--

a. The Marine firing estimates the range by eye, sets his sight for that range, and fires.
b. The observer follows the path of the tracer and notes the impact of the round.
c. The observer calls out sight corrections in clicks of elevation and wind age necessary to hit
the target.
d. The Marine firing makes sight corrections, and continues to fire and make corrections until
a hit on the target is observed. The observer keeps track of the number of clicks of elevation
made in getting the round onto the target.
e. The final sight setting to hit the target (with consideration to the zero of the rifle) indicates the
range to the target. The Marine firing announces the range by voice or signal.

Section III. Rifle and Automatic Rifle Fire and Its Effect

2301. General

Rifle and automatic rifle fire and its effect comprise the second step in technique of fire training.
A knowledge of what the bullet does while it is in flight and an understanding of the effects of
fire on the enemy can assist the rifleman or automatic rifleman in obtaining maximum
effectiveness.

2302. Trajectory
Trajectory is the path of a bullet in its flight through the air. The trajectory is almost flat at short ranges, but as range increases, the height of the trajectory increases. (See fig. 2-3.)

Figure 2-3 Diagram Showing Maximum Ordinate (H) of Trajectory

The space between the rifle and the target, in which the trajectory does not rise above the height of an average man (68 inches), is called the danger space. (fig. 2-4.) A bullet fired from the rifle at ground level (prone) at a target located at relatively short-range gives continuous danger space, providing the ground is level or slopes uniformly. At greater ranges, only parts of the space between the rifle and the target are danger space because the trajectory of the bullet rises above the head of a man of average height. When the trajectory of the bullet does rise above the head of an average man, this is called dead space.

Figure 2-4. Danger Space/Dead Space.

2303. Cone of Fire

Each bullet fired from a rifle at the same target follows a slightly different path or trajectory through the air. The small differences in trajectories are caused by slight variations in aiming, holding, trigger squeeze, powder charge, wind, or atmosphere. As the bullets leave the muzzle of a weapon, their trajectories form a cone shaped pattern known as the cone of fire. (See fig. 2-5.)

Figure 2-5. Cone of Fire and Beaten Zone.

2304. Beaten Zone

The cone of fire striking a horizontal target forms a beaten zone that is long and narrow in shape. Beaten zones on horizontal targets vary in length. As range increases, the length of the beaten zone decreases. The slope of the ground affects the size and shape of the beaten zone. Rising ground shortens the beaten zone; ground sloping downward at an angle less than the curve of the trajectories lengthens the beaten zone. Ground that falls off at an angle greater than the fall of the bullets will not be hit and is said to be in defilade.

2305. Classes of Fire

Rifle fire is classified both with respect to the target (direction) and with respect to the ground.

a. Fire With Respect to the Target. (See figs. 2-6 and 2-7.)

(1) **Frontal Fires.** Fires delivered perpendicular to the front of a target.

(2) **Flanking Fires.** Fires delivered against the flank of a target.
(3) Enfilade Fire. Fire delivered so that the long axis of the beaten zone coincides or nearly coincides with the long axis of the target. Enfilade fire may be either flanking or frontal.

b. Fire With Respect to the Ground. (See fig. 2-8.)

(1) Grazing Fires. Grazing fires do not rise above the height of a standing man. Rifle fire from the prone position may provide grazing fire at ranges up to 600 meters over level or uniformly sloping ground.

(2) Plunging Fires. Plunging fires strike the ground at a high angle so that the danger space is practically confined to the beaten zone and the length of the beaten zone is shortened. Fire at longer ranges becomes increasingly plunging because the angle of fall of the bullets becomes greater. Fire from high ground to a target on low ground may be plunging fire. Fire into abruptly rising ground causes plunging fire at the point of impact.

(3) Overhead Fires. Overhead fires are delivered over the heads of friendly troops. Rifle fire is considered safe when the ground protects the friendly troops to the front or if they are in position at a sufficient distance below the line of fire.

2306. Effect of Rifle Fire

The best effects from rifle fire are obtained when the squad is close to the enemy. The squad should use cover and concealment offered by terrain and take advantage of the supporting fires of machine guns, mortars, and artillery to advance as near to the enemy as possible before opening fire.

Normally, it should not open fire at ranges greater than 550 meters, the maximum effective range of the rifle for individual/point targets. Under favorable conditions, the rifle may be used against enemy groups at ranges between 550 and 800 meters. The SAW can be used to engage individual/point targets out to 800 meters and area targets out to 1000 meters.

The area in which the enemy is located can usually be determined by the sound of his firing. Troops may distribute continuous fire in width and depth to cover the entire area, causing the enemy to keep his head down and making his fire ineffective.

2307. Rates of Fire

The rates of fire of squad weapons combine to form the firepower of the squad. Weapons employment and squad firepower are not determined by how fast Marines can fire their weapons but how fast they can fire accurately. The squad or fire team leader must be able to control the rate and effect of his men's fire, otherwise, ammunition is wasted.

The rate of fire for weapons is expressed in rounds per minute (RPM). The following rates of fire apply to the weapons of the rifle squad.
a. Average Rate. This term refers to the average rate of aimed fire a Marine can deliver with a semiautomatic rifle or with an M203 grenade launcher. The following average rates apply to squad weapons:

- M16: 10 to 12 RPM.
- M203: 5 to 7 RPM.

b. Sustained Rate. This term applies to automatic rifles and machine guns. It is the actual rate of well directed fire a weapon can deliver for an indefinite length of time without causing a stoppage or malfunction due to overheating. The sustained rate for the SAW is 85 RPM.

c. Rapid Rate. This term applies to automatic rifles and machine guns. It is the maximum amount of controlled fire which can be delivered on target for a short period of time (usually not more than two minutes) without causing a stoppage or malfunction due to overheating. The rapid rate for the SAW is 200 RPM.

Section IV. M203 Grenade Launcher

2401. General

The fire team leader/grenadier carries a weapon that is both rifle and grenade launcher, and he can use either or both as the situation dictates. In order for him to best employ the M203 portion of the weapon, he must understand the trajectory of the rounds, methods of firing, and effects of the rounds. The M203 is a primary method for achieving the combined arms effect.

2402. Employment

a. Offense. The fire team leader/grenadier employs the grenade launcher in the offense to suppress groups of enemy personnel and to provide close fire support in the assault in conjunction with, and to supplement, other supporting fires.

(1) The fire team leader/grenadier personally selects targets and delivers the fires of the grenade launcher during the attack. In the last 35 meters of the assault, when the fires of the grenade launcher may endanger friendly assaulting troops on the objective, the fire team leader/grenadier employs the multi projectile antipersonnel round. The multi projectile round can be fired from the assault skirmish line without endangering the other assaulting Marines. The fire team leader/grenadier can fire high explosive rounds at targets which are far enough away so that the exploding HE round will not endanger the assaulting squad. (HE rounds require an arming distance of approximately 30 meters.)

(2) During the assault, the fire team leader/grenadier may employ his rifle until suitable targets appear or until he has time to reload the M203. Suitable M203 targets are enemy automatic rifle positions, machine gun positions, and other crew served weapons within the fire team sector. This method of employment is used when a heavy volume of fire is needed.
b. **Defense.** In the defense, the fire team leader/grenadier's firing position should enable him to control his fire team and deliver grenade launcher fires over the entire fire team sector of fire. Primary and supplementary positions are prepared which provide maximum cover and concealment consistent with the assigned mission. Extreme care must be taken to ensure that fields of fire are cleared of obstructions that might cause premature detonation of the projectile. As the enemy approaches the defensive position, he is subjected to an ever-increasing volume of fire. Initially, the fire team leader/grenadier should use the rifle portion of the weapon. As the enemy gets nearer to friendly positions, he should use the grenade launcher. He will fire on enemy automatic weapons and enemy troops who are in defilade. This will silence an enemy base of fire and cause enemy troops to leave covered positions so the automatic riflemen can engage them, thereby achieving combined arms effects.

2403. **Trajectory**
The grenade launcher, at ranges up to 150 meters, has a trajectory that is relatively flat; thus, the grenade launcher is fired from the shoulder in the normal manner. As the range increases, the height of the trajectory and the time of flight of the projectile increase.

2404. **Firing Positions**

a. The most commonly used firing positions are the prone, kneeling, fighting hole, and standing positions. Supported positions add stability to the weapon and should be used whenever possible; however, the fire team leader/grenadier must ensure that no part of the launcher touches the support.

b. There are two methods for holding the weapon:

(1) The left hand grips the magazine of the M16 rifle with the left index finger positioned in the trigger guard of the M203, while the right hand grips the pistol grip.

(2) The right hand grips the magazine of the M16 rifle with the right index finger positioned in the trigger guard of the M203, while the left hand grasps the handgrip of the barrel assembly. (See fig 2-9.)

2405. **Methods of Firing**

a. **Aimed Fire.** At ranges up to 150 meters, the grenade launcher can be fired from the shoulder in the normal manner from all positions using the sight leaf of the quadrant sight. However, to maintain sight alignment at ranges greater than 150 meters, the following adjustments are required:

   (1) Use the quadrant sight at ranges in excess of 200 meters.
(2) In the modified prone position, the position of the butt of the rifle depends on the configuration of the shooter's body, the position of the shooter's hand on the weapon, and the range to the target.

(3) In other firing positions, lower the stock to an underarm position in order to maintain sight alignment.

b. Pointing Technique. The pointing technique is used to deliver a high rate of fire on area targets. Although the sights are not used in the pointing technique, the shooter must first be proficient in sighting and aiming, using the sight leaf and quadrant sight. He uses a modified underarm firing position, which enables him to use his left hand for rapid reloading. Although the pointing technique can be used by modifying any standard firing position, it is most frequently used during the assault. (See fig. 2-10)

2406. Effect of Grenade Launcher Fire

The high explosive grenade has an effective casualty radius of 5 meters. The effective casualty radius is defined as the radius of a circle about the point of detonation in which it may be expected that 50 percent of exposed troops will become casualties.

Section V. Fire Commands

2501. Purpose and Importance

Since enemy troops are trained in the use of cover and concealment, targets are often indistinct or invisible, seen only for a short time, and rarely remain uncovered for long. When a target is discovered leaders and squad members must define its location rapidly and clearly. Squad members are trained to identify the target area quickly and accurately and to place a high volume of fire on it even though no enemy personnel may be visible. A small point target like an enemy sniper might be assigned to only one or two riflemen, while a target of considerable width like an enemy skirmish line requires the combined fires of the entire squad. As an aid in designating various types of targets, all members of the squad must become familiar with the topographical terms frequently used in designating targets; e.g., crest, hill, cut, fill, ridge, bluff, ravine, crossroads, road junction, and skyline. (See fig. 2-11.) When the squad or fire team leader has made a decision to fire on a target, he gives certain instructions as to how the target is to be engaged. These instructions form the fire command. The leader directs and controls the fire of his fire unit by fire commands. With well-developed SOPs, voice commands can be supplemented by other methods of control such as use of tracers. In the attack, control is achieved by using whatever methods work for the unit leader.

2502. Elements

A fire command contains six basic elements that are always announced or implied. Fire commands for all weapons follow a similar order and include similar elements. Only essential elements are included. The six elements (ADDRAC) of the fire command are:
2503. Alert

This element alerts the fire unit to be ready to receive further information. It may also tell who is to fire. Usually, it is an oral command, SQUAD or FIRE TEAM. The leader may alert only a few individuals by calling them by name. The alert may also be given by signals, personal contact, or by any other method the situation may indicate.

2504. Direction

The direction element tells which way to look to see the target. The direction of the target may be indicated in one of the following ways:

a. Orally. The general direction to the target may be given orally and should indicate the direction to the target from the unit. Figure 2-12 shows the general directions used to indicate direction orally; for example, RIGHT FRONT.

b. Tracer Ammunition

(1) Tracer ammunition is a quick and sure way to indicate is the most accurate method of pinpointing targets. Whenever possible, the leader should give the general direction orally. This will direct the squad’s attention to the desired area; for example:

FRONT.

WATCH MY TRACER.

(Fire 1st round) RIGHT FLANK (of the target).

(Fire 2d round) LEFT FLANK (of the target).

(2) Firing tracer ammunition to designated targets may give away the Marine's position and it will most certainly alert the enemy and reduce the advantage of surprise. To minimize the loss of surprise, the leader may wait until all other elements of the fire command are given before firing his tracer. In this case, the firing of the tracer can be the signal to commence firing.

c. Reference Points
(1) To help the members of the fire unit locate indistinct targets, the leader may use reference points to give direction to the target. He selects a reference point that is near the target and easy to recognize.

(2) When using a reference point, the word REFERENCE in describing the reference point and the word TARGET in describing the target are used. This prevents the members of the fire unit from confusing the two; for example:

SQUAD.
FRONT.
REFERENCE: ROCK PILE IN DRAW.
TARGET: SNIPER IN FIRST TREE TO THE RIGHT, ONE. FIVE ZERO.

(3) When using a reference point, the direction refers to the reference point, but the range is the range to the target.

(4) Sometimes a target can best be located by using successive reference points; for example:

FIRST TEAM.
REFERENCE: STONE HOUSE. RIGHT OF STONE HOUSE. SMALL SHED.
TARGET: MACHINE GUN IN FIRST HAYSTACK RIGHT OF SHED, TWO FIVE ZERO.

d. Finger Measurement

(1) Distances across the front, known as lateral distances, are difficult to estimate in terms of meters. To measure the distance right or left of a reference point, or to measure the width of a target from one flank to another, finger measurements may be used.

(2) The method of using finger measurements is as follows:

(a) Hold the hand at arm's length directly in front of your face, palm facing away from you, index finger pointing upward.

(b) Close one eye.

(c) Select a reference point.

(d) Place one finger between the reference point and the target and then fill that space by raising more fingers until the space is covered.
(3) An example of the use of finger measurement is as follows:

SQUAD.
FRONT.
REFERENCE: TALL TREE AT EDGE OF HEDGEROW, RIGHT TWO FINGERS.
TARGET: MACHINE GUN. THREE HUNDRED.

2505. Target Description

The third element of the fire command is a brief and accurate description of the target.

2506. Range

Range gives the information needed to set the sight or to adjust the point of aim. The word RANGE is not used. Examples of range are ONE SEVEN FIVE, TWO FIVE ZERO, or FOUR HUNDRED.

2507. Target Assignment

The target assignment element tells who is to fire on the target and is broken down into two sub elements as follows.

a. First, the squad leader prescribes whether the entire squad will fire on the target or whether only one or two fire teams will fire. If the unit to fire is the same as announced in the alert element, it may be omitted from the target assignment element. When the squad leader intends to alert the entire unit, but plans to use only one or two fire teams to fire on a target, the target assignment element is included.

b. The squad leader also uses this element to determine what weapons will be fired and the rate of fire for the automatic rifle. Rifles and, when fired, the M203 always fire at the average rate. Fire team leaders normally do not fire their rifles unless it is absolutely necessary. Instead, they direct the fires of the members of their fire team on various targets within the assigned sector of fire and remain ready to transmit subsequent fire commands from the squad leader to their fire team. The following rules apply:

(1) Automatic Riflemen. If the squad leader wants the automatic rifles fired at the rapid rate he commands RAPID. If the command RAPID is not given, automatic rifles are fired at the sustained rate. In response to the command RAPID, the automatic riflemen fire initially at the rapid rate for two minutes and then change to the sustained rate. This prevents the weapon from overheating.
(2) Fire Team Leader Grenadier. If the squad leader desires grenade launcher fire, he commands GRENADIER. If the command GRENADIER is not given, the fire team leaders/grenadiers do not normally fire their rifles.

c. In the following examples of the target assignment element, let us assume that in the alert element, the command SQUAD was given.

(1) If the target assignment element is omitted completely, all three fire teams prepare to fire as follows:

(a) Riflemen and assistant automatic riflemen fire their rifles at the average rate.

(b) Automatic riflemen fire their weapons at the sustained rate.

(2) GRENADIER; RAPID. All fire teams prepare to fire as follows:

(a) Riflemen, and assistant automatic riflemen prepare to fire their rifles at the average rate.

(b) Fire team leaders/grenadiers prepare to fire their M203s at the average rate.

(c) Automatic riflemen prepare to fire their weapons at the rapid rate.

(3) FIRST TEAM; GRENADIER; RAPID. The first fire team prepares to fire as follows:

(a) Riflemen and assistant automatic riflemen fire their rifles at the average rate.

(b) Fire team leaders/grenadiers fire their M203s at the average rate.

(c) Automatic riflemen fire their weapons at the rapid rate.

2508. Fire Control

The fire control element consists of a command or signal to open fire. If surprise fire is not required, the command, COMMENCE FIRING normally is given without a pause as the last element of the fire command. When the leader wants all his weapons to open fire at once in order to achieve maximum surprise and shock effect, he will say, AT MY COMMAND or ON MY SIGNAL. When all men are ready, the leader gives the command or signal to commence firing.

2509. Signals

Since oral commands are likely at times to be unheard because of battle noise, it is essential that the members of fire units also understand visual and other signals. These signals must be used
constantly in training. Standard arm and hand signals applicable to fire commands are described in chapter 3.

**2510. Delivery of Fire Commands**

Examples of complete fire commands are as follows:

- **a.** In this example, the squad leader wants to place a heavy volume of surprise rifle and automatic rifle (sustained rate) fire of his entire squad on an easily recognized target:
  
  SQUAD.
  
  FRONT.
  
  TROOPS.
  
  THREE HUNDRED.
  
  AT MY SIGNAL.

- **b.** In this example, the squad leader desires to designate the target to his entire squad, but wants only the second fire team to engage it. He desires M203 fire on the target and the automatic rifleman to fire at the rapid rate. Because the target is indistinct, he uses reference point:
  
  SQUAD.
  
  RIGHT FRONT.
  
  REFERENCE: STONE HOUSE, RIGHT TWO FINGERS.
  
  TARGET: MACHINE GUN TWO FIVE ZERO.
  
  SECOND TEAM; GRENADIER; RAPID.
  
  COMMENCE FIRING.

**2511. Subsequent Fire Commands**

A subsequent fire command is used by the squad leader to change an element of his initial command or to cease-fire.

- **a.** To change an element of the initial command, the squad leader gives the alert and then announces the element he desires to change. Normally, the elements that will require changing are the target assignment and/or the fire control. The following example illustrates the use of a subsequent fire command.

  **(1) In the following initial fire command the squad leader alerts his entire squad but only assigns one fire team to engage the target with rifle and automatic rifle (sustained rate) fire:**

  SQUAD.
  
  FRONT.
TROOPS.

THREE HUNDRED.

SECOND TEAM.

COMMENCE FIRING.

(2) The squad leader now desires the entire squad to fire on the target, fire team leaders/grenadiers to fire their M203s, and automatic riflemen to fire at the rapid rate. Note that the squad leader does not repeat SQUAD in the target assignment since he alerted the entire squad and wants the entire squad to fire. The squad leader's subsequent command will be as follows:

SQUAD.
GRENADIER; RAPID.
COMMENCE FIRING.

b. To have the squad cease fire, the squad leader simply commands, CEASE FIRE.

c. In issuing subsequent fire commands, the squad leader must keep in mind that in most cases the noise of the battlefield will prevent the squad members from hearing him. In most cases the squad leader will pass subsequent fire commands through the fire team leaders. It is for this reason that fire team leaders do not normally fire their rifles but remain attentive to the directions of the squad leader.

Section VI. Application of Fire

2601. General

The potential firepower of the 13-man squad with all members firing is conservatively estimated at 400 well-aimed rifle and automatic rifle shots or 370 well aimed rifle and automatic rifle shots and 15 rounds from the grenade launchers per minute. The following terms are used when discussing application of fire.

a. Suppress. Fires placed in the vicinity of an enemy unit or individual that allows a friendly unit to move/maneuver to a position of advantage.

b. Neutralize. To render enemy personnel incapable of interfering with a particular operation.

c. Fire Support. Fire delivered by a unit to assist or protect another unit in combat.

d. Target of Opportunity. A target which appears in combat, within range, and against which fire has not been planned.

2602. Types of Unit Fire
a. General

(1) The size and nature of a target may call for the firepower of the entire fire unit or only parts of it. The type of target suggests the type of unit fire to be employed against it. The squad leader receives his orders from the platoon leader who usually designates a specific target or targets. It is usually desirable for each squad to cover the entire platoon target to ensure adequate coverage.

(2) A fire team distributes its fire as designated by the squad leader. Normally, the squad leader orders a fire team leader to limit the fire of his team to a sector of the squad target, to engage a separate target, or to shift to a target of opportunity.

b. Concentrated Fire. Concentrated fire is fire delivered from a deployed unit at a single point target. A large volume of fire delivered at the target from different directions, causes the beaten zones of the various weapons to meet and overlap giving maximum coverage of the target. An enemy automatic weapon that has gained fire superiority over an element of a particular unit, can often be neutralized by concentrated fire from the remaining elements, which are not under direct fire. (See fig. 2-13).

c. Distributed Fire

(1) Distributed fire is fire spread in width and/or depth to keep all parts of the target under fire. Each rifleman and assistant automatic rifleman fires his first shot on that portion of the target that corresponds to his position in the squad. He then distributes his remaining shots over the remainder of the target, covering that portion of the target on which he can deliver accurate fire without changing his position. (See fig. 2-14.)

(2) The fire team leader/grenadier fires the first round from his grenade launcher at the center of the mass of the target. He then distributes grenades over the remaining target area.

(3) In the attack, the automatic rifleman suppresses the enemy targets in order to allow members of the squad to move. In the defense, the automatic riflemen cover their respective fire team's sector of fire.

(4) Distributed fire permits fire unit leaders to place the fire of their units on target so that the enemy, whether visible or not, is kept under fire. Distributed fire is the quickest and most effective method of ensuring that all parts of the target are brought under fire. (See fig. 2-15.) When it becomes necessary to engage other targets, the squad leader shifts the fire of one or two fire teams as required.

d. Combinations of Concentrated and Distributed Fire. The fire team organization of the Marine rifle squad permits the squad leader to combine both concentrated and distributed fire in engaging two or more targets at the same time. As an example, the squad leader of a squad delivering distributed fire on a target could shift the fire of one or
two fire teams to engage a target of opportunity with concentrated fire. (See fig. 2-16.) Whether a fire unit (squad or fire team) delivers concentrated or distributed fire is determined by the target description element of the fire command. If the target description indicates a point target (i.e., machine gun, sniper, etc.) the fire unit will fire concentrated fire. If the target description indicates an area target (i.e., squad in open or dug in, or a target which the squad leader has marked the flanks), the fire unit will fire distributed fire. By assigning his fire teams fire missions using fire commands, the squad leader regulates the volume, density, and coverage of his squad's fire.

2603. Fire Delivery

a. Requirements of Position. In occupying a firing position, squads are located to achieve an advantage over an enemy unit and satisfy the following requirements:

- Be capable of delivering desired fire support.
- Possess good fields of fire to the front.
- Have adequate cover and concealment.
- Permit fire control by the fire unit leader.

b. In the Attack

(1) Base of Fire. A base of fire covers and protects the advance of maneuvering units with its fire. Whenever possible, the fire unit that is to establish the base of fire moves undetected into a firing position. A high volume of surprise fire from an unexpected direction has a much greater psychological and physical effect than fire delivered from a known position. The leader of the unit establishing the base of fire makes every effort to select a position that allows flanking or oblique fire to be delivered into the enemy position. When the base of fire unit is in position, the following usually takes place:

(a) A heavy volume of distributed fire is placed on the enemy position to gain fire superiority.

(b) When fire superiority has been gained and the enemy is fixed in position, the rate of fire is reduced. However, fire superiority must be maintained.

(c) When the maneuver unit closes with the enemy, the rate of fire is increased to cause the enemy to button up tightly, and allow the maneuver unit to move out of the assault position and initiate its assault before the enemy has time to react.

(d) When the assaulting maneuver unit reaches the final coordination line or on signal, the base of fire ceases, shifts its fire to another target area, or leads the assault unit across the objective and then ceases or shifts.
(2) **Assault Fire.** Successful advance by fire and movement may result in the assault of the enemy unit or position. Assault fire is that fire delivered by a unit during its attack on a hostile unit.

(a) **Riflemen and Assistant Automatic Riflemen.** Both fire well-directed shots from the prone or kneeling. They fire at known or suspected enemy locations on the portion of the objective that corresponds with their position in the assault formation.

(b) **Automatic Riflemen.** The automatic riflemen fire in three to five round bursts from the prone and kneeling. Then attempt to cover the entire squad objective. Priority of fire is given to known or suspected enemy automatic weapons.

(c) **Fire Team Leader.** The fire team leader's primary concern during the assault is the control of his fire team. If he is required to fire his rifle, he fires well-directed rifle fire using tracers or the pointing technique. Once a hardened or area target presents itself, the fire team leader will fire the grenade launcher until the target is suppressed or neutralized, or until he cannot place effective fire on the target without endangering friendly troops. During fire and movement the fire team leader should be leading his unit from a position where he can be seen by his men and where he can direct the fires of the automatic weapon. He uses any method he sees fit to control the movement and fires of his unit. The fighter-leader technique works well in fights where the noise prevents voice commands. The fireteam leader may discover that he cannot employ the M203 effectively in a heavy firefight. He may need to designate the rifleman to use the M203 while he employs the M16A2 with tracer.

c. **In the Defense.** The fire team is the basic fire unit of the rifle platoon and when practical, each individual's sector of fire covers the entire fire team sector of fire. The fire team delivers fire from positions that it must hold at all costs. Members of the unit are placed where they can obtain good fields of fire and take maximum advantage of cover and concealment. (See app. H.)

(1) **Riflemen, Assistant Automatic Riflemen, and Automatic Riflemen** The automatic rifles provide the bulk of the squad's firepower. They must be protected and kept in operation. These Marines are assigned to mutually support other fire teams. In addition, each automatic rifleman is assigned a principal direction of fire that best fires in support of the squads mission.

(2) **Fire Team Leader.** The fire team leader's primary concern in the defense is the control of his fire team. When required to fire his rifle, he will cover the entire fire team sector with a high volume of fire while the enemy is beyond the range of the M203. Unless restrictions are placed on firing the grenade launcher, he opens fire on profitable targets as they come in range. When the final protective fires are called for, he engages the largest mass of enemy infantry in the assigned sector.
2604. Reduced Visibility Firing

a. Rifle. Under conditions of reduced visibility, the rifle can be used to deliver preplanned fire by constructing a simple rest for the weapon. When the rifle is used for this purpose, all preparations are made during daylight. In addition to sighting the rifle and erecting the rest and stakes, sights are set and fire adjusted on the target in advance. (See fig. 2-17A.) Elevation stakes are needed to ensure weapons do not fire too high.

b. Grenade Launcher. In periods of reduced visibility, the grenade launcher can also be used effectively to deliver preplanned fires by constructing a stand. When planning these fires, the squad leader should give priority to likely avenues of approach and probable enemy assault positions. All preparations are made during daylight. The weapon is emplaced and sights adjusted prior to darkness. (See fig 2-17B.) Again, elevation stakes are required. Targets should be registered.

Figure 2-17. Field Expedients for Delivery of Preplanned Fires.

2605. Rate of Fire

The Marine is trained to fire approximately 10 to 12 aimed shots per minute (average rate). Difficulties encountered in battle usually make a slower rate advisable. The fastest rate at which any rifleman or automatic rifleman should fire is determined by his ability to select targets, align the sights, and squeeze off accurate shots.

The automatic rifle is particularly valuable against targets such as machine guns and automatic weapons. The rapid rate of fire for the automatic rifle is 100 rounds per minute. The sustained rate of fire is 85 rounds per minute. Determination of the rate of fire for the automatic rifle is governed by the nature of the target and available ammunition. When beginning a firefight, the first few rounds of automatic rifle fire should be delivered at the rapid rate in order to gain fire superiority and to fix the enemy. Thereafter, the rate should be slowed to the sustained rate, which is normally sufficient to maintain fire on ammunition available.

2606. Fire Control and Fire Discipline

In order for a unit's fire to be effective, the unit leader must exercise fire control. Fire control relates to the leader's ability to have his men open or cease fire at the instant he desires, to adjust fire onto a target, to shift all or part of the fire from one target to another, and to regulate the rate of fire. The leader must teach his men fire discipline so that he may exercise fire control. Fire discipline is achieved when the unit has been taught and pays strict attention to instructions regarding the use of the rifle, automatic rifle, and grenade launcher, and can collectively execute fire commands with precision. Using marksmanship fundamentals to deliver well-aimed fire provides better accuracy and saves more ammunition than wild firing into an area. Sometimes the need for well-aimed shots may be increased by the presence of noncombatants in close proximity to the target. (See MCRP 3-01A, Rifle Marksmanship)
The unit leader must supervise and control the fire of his men so that it is directed and maintained at suitable targets. Upon receipt of orders, commands, or signals from the platoon commander, a squad leader promptly orders his squad to perform the fire mission directed. He may be located at the rear of his squad during a firefight. He may give orders to the squad through the fire team leaders, but he does whatever is necessary to control the fire of his squad effectively. Squad and fire team leaders exercise fire control by means of voice commands hand and arm signals or by personal example. One technique used by the unit leader to achieve control and direction is called the fighter-leader. The unit leader leads and directs his units by positioning and moving himself so that subordinates can either see his signals, effects of his fires or his personal movement.
Chapter 3
Combat Formations and Signals

Section I. Combat Formations

3101. General
Fire team and squad combat formations are groupings of individuals and units for efficient tactical employment. The factors influencing the leader's decision as to the selection of a particular formation are the enemy disposition, terrain, situation, weather, speed, and degree of flexibility. Combat formations and signals enable the leader to control the fire and maneuver of his unit when moving to and assaulting an enemy position. These formations are not designed to be restrictive in nature or to stifle individual initiative by forcing unit members to focus inward, away from the enemy. Formations should be used to enhance the situational awareness, decision-making ability and implicit communications required of all squad members to rapidly and aggressively execute the mission.

3102. Basic Combat Formations
a. Fire Team. Normally each fire team leader will determine the formation for his own unit. Dispersion should be maximized according to terrain, vegetation, visibility, or mission. Thus, a squad may contain a variety of fire team formations at any one time and these formations may change frequently. The relative position of the fire teams within the squad formation should be such that one will not mask the fire of the others. It is not important that exact distances and intervals be maintained between fire teams and individuals as long as control is not lost. The unit leader will decide on a formation based upon the criteria of speed, firepower, flexibility and solvability. Sight or voice contact will be maintained within the fire team and between fire team leaders and squad leaders. All movement incident to changes of formation is usually by the shortest practical route. The characteristics of fire team formations are similar to those of corresponding squad formations. The characteristics of the fire team formations are as follows: (See figs. 3-1 through 3-4.)

(1) Column
   (a) Permits rapid, controlled movement.
   (b) Favors fire and maneuver to the flanks.
   (c) Vulnerable to fire from the front and provides the least amount of fire to the front.

Figure 3-1. Fire Team Column.

(2) Wedge
(a) Permits good control.

(b) Provides all-around security.

(c) Formation is flexible.

(d) Fire is adequate in all directions.

(3) Skirmishers Right (Left)

(a) Maximum firepower to the front.

(b) Used when the location and strength of the enemy are known, during the assault, mopping up, and crossing short open areas.

Figure 3-2. Fire Team Wedge.

Figure 3-3. Fire Team Skirmishers.

(4) Echelon Right (Left)

(a) Provides heavy firepower to front and echeloned flank.

(b) Used to protect an open or exposed flank.

b. Squad. The squad leader prescribes the formation for his squad. The platoon leader and squad leader may prescribe the initial formation for their respective subordinate units when the situation dictates or the commander so desires. Subsequent changes may be made by the subordinate unit leaders. The characteristics of squad formations are similar to those of the fire team. The fire team is the maneuver element in squad formations. (See figs. 3-5 through 3-11.)

Figure 3-4. Fire Team Echelon

(1) Squad Column. Fire teams are arranged in succession one behind the other.

(a) Easy to control and maneuver.

(b) Excellent for speed of movement or when strict control is desired.

(c) Especially suitable for narrow covered routes of advance, maneuvering through gaps between areas receiving hostile artillery fire, moving through areas of limited observation, and moving under conditions of reduced visibility.

(d) Vulnerable to fire from the front.
(e) Used for night operations.

(2) **Squad Wedge.** See discussion under fire team formations for the wedge in paragraph 3102a(2).

![Figure 3-5. Squad Column](image)

(FOR TEAMS IN WEDGE. TEAM LEADERS POSITIONED FOR EASE IN COMMUNICATING WITH SQUAD LEADER)

![Figure 3-6. Squad Wedge.](image)

(FIRE TEAMS IN WEDGE. TEAM LEADERS POSITIONED FOR EASE IN COMMUNICATING WITH SQUAD LEADER.)

![Figure 3-7. Squad Vee.](image)

(3) **Squad Vee**
   (a) Facilitates movement into squad line.
   (b) Provides excellent fire power to front and flanks.
   (c) Provides all-round security.
   (d) Used when the enemy is to the front and his strength and location are known. May be used when crossing large open areas.

(FIRE TEAMS IN SKIRMISHERS)

![Figure 3-9. Squad Line.](image)

(4) **Squad Line.** See discussion under fire team formations for skirmishers right (left) in paragraph 3102a(3).

(5) **Squad Echelon.** See discussion under fire team formations for echelons right (left) in paragraph 3102a(4).

![Figure 3-10. Squad Echelon Right.](image)
3103. Changing Formations (Battle Drill)
The squad leader may change formations to reduce casualties from hostile fire, present a less vulnerable target, or get over difficult or exposed terrain. Formation changes in varying or rough terrain are frequent in order to get the squad over manmade obstacles and natural obstacles such as rivers swamps, jungles, woods, and sharp ridges.

Directions of movement for members of the fire team when the leader signals for changes of formation are shown in Figure 3-12 a through u. Figure 3-12 is provided only as a guide to assist fire teams in developing the most rapid means of moving from one formation to another. When the team is to execute a movement, the fire team leader signals with his arms and hands, indicating the movement and direction. The squad leader signals the squad formation to the fire team leaders. Remember, the fire team may be in any fire team formation within the squad formation.

COLUMN TO WEDGE
Figure 3-12 a. Changing Formations

COLUMN TO SKIRMISHERS RIGHT
Figure 3-12b. Changing Formations

COLUMN TO ECHELON RIGHT
Figure 3-12c. Changing Formations.

COLUMN TO ECHELON RIGHT
Figure 3-12d. Changing Formations

COLUMN TO ECHELON LEFT
Figure 3-12e. Changing Formations.

WEDGE TO COLUMN
Figure 3-12f. Changing Formations

SKIRMISHERS RIGHT

WEDGE TO SKIRMISHERS RIGHT
Figure 3-12g. Changing Formations.

WEDGE TO SKIRMISHERS LEFT

Figure 3-12h. Changing Formations.

WEDGE TO ECHELON RIGHT

Figure 3-12i. Changing Formations.

WEDGE TO ECHELON LEFT

Figure 3-12j. Changing Formations.

SKIRMISHERS RIGHT TO COLUMN

Figure 3-12k. Changing Formations.

SKIRMISHERS LEFT TO COLUMN

Figure 3-12l. Changing Formations.

SKIRMISHERS RIGHT TO WEDGE

Figure 3-12m. Changing Formations

SKIRMISHERS LEFT TO WEDGE

Figure 3-12n. Changing Formations

SKIRMISHERS RIGHT TO ECHELON

Figure 3-12o. Changing Formations.

SKIRMISHERS LEFT TO ECHELON LEFT

Figure 3-12p. Changing Formations.

ECHELON RIGHT TO COLUMN

Figure 3-12q. Changing Formations.

ECHELON RIGHT TO WEDGE

Figure 3-12r. Changing Formations

ECHELON LEFT TO WEDGE
Figure 3-12s. Changing Formations.

ECHELON RIGHT TO SKIRMISHERS RIGHT

Figure 3-12t. Changing Formations.

ECHELON LEFT TO SKIRMISHERS LEFT

Figure 3-12u. Changing Formations.

Section II. Signals

3201. General

Signals are used to transmit commands or information when voice communications are difficult, impossible, or when silence must be maintained. Subordinate leaders repeat signals to their units whenever necessary to ensure prompt and correct execution.

3202. Whistle

The whistle is an excellent signal device for the small unit leader. It provides a fast means of transmitting a message to a large group. However, unless the signal is prearranged and understood, it may be misinterpreted, and there is always the danger that whistle signals from adjacent units may cause confusion. Battlefield noises will reduce the whistle's effectiveness.

3203. Special

Special signals consist of all special methods and devices used to transmit commands or information. The squad leader, operating at night, may use taps on his helmet or rifle butt to signal halt, danger, move forward, or assemble here. These signals must be understood and rehearsed prior to their use. Various pyrotechnics and smoke signals may be used as signals to attack, withdraw, mark front lines, indicate targets, and cease or shift fire. Before leaders devise others, they should check with their platoon commander to make sure that they are not using a signal that already has a set meaning.

3204. Hand-and–Arm

a. Signals Used With Combat Formations. Explanation and diagrams of standard hand and arm signals used with combat formations are given in figure 3-13. See FM 21-60, Visual Signals, for detailed information concerning arm-and-hand signals.

1. DECREASE SPEED. Extend the arm horizontally side ward, palm to the front, and wave arm downward several times, keeping the arm straight. Arm does not move above the horizontal.
2. CHANGE DIRECTION; OR COLUMN (RIGHT OR LEFT). Raise the hand that is on the side toward the new direction across the body, palm to the front; and then swing the arm in a horizontal arc, extending arm and hand to point in the new direction.

3. ENEMY IN SIGHT. Hold the rifle horizontally, with the stock in the shoulder, the muzzle pointing in the direction of the enemy. Aim in on the enemy target and be ready to engage him if he detects your presence.

4. RANGE. Extend the arm fully toward the leader or men for whom the signal is intended with fist closed. Open the fist exposing one finger for each 100 meters of range.

5. COMMENCE FIRING. Extend the arm in front of the body, hip high, palm down, and move it through a wide horizontal arc several times.

6. FIRE FASTER. Execute rapidly the signal COMMENCE FIRING. For machine guns, a change to the next higher rate of fire is prescribed.

7. FIRE SLOWER. Execute slowly the signal COMMENCE FIRING. For machine guns, a change to the next lower rate of fire is required.

8. CEASE FIRING. Raise the hand in front of the forehead, palm to the front, and swing the hand and forearm up and down several times in front of the face.

9. ASSEMBLE. Raise the hand vertically to the full extent of the arm, fingers extended and joined, palm to the front, and wave in large horizontal circles with the arm and hand.

10. FORM COLUMN. Raise either arm to the vertical position. Drop the arm to the rear, describing complete circles in a vertical plane parallel to the body. The signal may be used to indicate either a troop or vehicular column.

11. ARE YOU READY? Extend the arm toward the leader for whom the signal is intended, hand raised, fingers extended and joined, then raise the arm slightly above horizontal, palm facing outward.

12. I AM READY. Execute the signal ARE YOU READY.

13. ATTENTION. Extend the arm sideways, slightly above horizontal, palm to the front; wave toward and over the head several times.

14. SHIFT. Point to individuals or units concerned; beat on chest simultaneously with both fists; then point to location you desire them to move to.

15. ECHELON RIGHT (LEFT). The leader may give this signal either facing towards or away from the unit. Extend one arm 45 degrees below the horizontal, palms to the front. The lower arm indicates the direction of echelon. (Example: for echelon right, if the leader is facing in the
direction of forward movement the right arm is lowered; if the leader is facing the unit, the left is
lowered.) Supplementary commands may be given to ensure prompt and proper execution.

16. SKIRMISHERS (FIRE TEAM), LINE FORMATION (SQUAD). Raise both arms lateral
until horizontal, arms and hands extended, palms down. If it is necessary to indicate a direction,
move in the desired direction at the same time. When signaling for fire team skirmishers, indicate
skirmishers right or left by moving the appropriate hand up and down. The appropriate hand does
not depend on the direction the signaler is facing. Skirmishers left will always be indicated by
moving the left hand up and down; skirmishers right, the right hand.

17. WEDGE. Extend both arms downward and to the side at an angle of 45 degrees below the
horizontal, palms to the front.

18. VEE. Extend arms at an angle of 45 degrees above the horizontal forming the letter V with
arms and torso.

19. FIRE TEAM. The right arm should be placed diagonally across the chest.

20. SQUAD. Extend the hand and arm toward the squad leader, palm of the hand down;
distinctly move the hand up and down several times from the wrist, holding the arm steady.

21. PLATOON. Extend both arms forward, palms of the hands down, toward the leader(s) or
unit(s) for whom the signal is intended and describe large vertical circles with hands.

22. CLOSE UP. Start signal with both arms extended side ward, palms forward, and bring palms
together in front of the body momentarily. When repetition of this signal is necessary, the arms
are returned to the starting position by movement along the front of the body.

23. OPEN UP, EXTEND. Start signal with arms extended in front of the body, palms together,
and bring arms to the horizontal position at the sides, palms forward. When repetition of this
signal is necessary, the arms are returned along the front of the body to the starting position and
the signal is repeated until understood.

24. DISPERSE. Extend either arm vertically overhead; wave the hand and arm to the front, left,
right, and rear, the palm toward the direction of each movement.

25. LEADERS JOIN ME. Extend arm toward the leaders and beckon leaders with finger as
shown.

26. I DO NOT UNDERSTAND. Face toward source of signal; raise both arms side wards to the
horizontal at hip level, bend both arms at elbows, palms up, and shrug shoulders in the manner of
the universal I don’t know.

27. FORWARD, ADVANCE, TO THE RIGHT (LEFT), TO THE REAR (USED WHEN
STARTING FROM A HALT). Face and move in the desired direction of march; at the same
time extend the arm horizontally to the rear; then swing it overhead and forward in the direction of movement until it is horizontal, palm down.

28. **HALT**. Carry the hand to the shoulder, palm to the front; then thrust the hand upward vertically to the full extent of the arm and hold it in that position until the signal is understood.

29. **FREEZE**. Make the signal for **HALT** and make a fist with the hand.

30. **DISMOUNT, DOWN, TAKE COVER**. Extend arm side ward at an angle of 45 degrees above horizontal, palm down, and lower it to side. Both arms may be used in giving this signal. Repeat until understood.

31. **MOUNT**. With the hand extended downward at the side with the palm out, raise arm side ward and upward to an angle of 45 degrees above the horizontal. Repeat until understood.

32. **DISREGARD PREVIOUS COMMAND; AS YOU WERE**. Face the unit or individual being signaled, then raise both arms and cross them over the head, palms to the front.

33. **RIGHT (LEFT) FLANK (VEHICLES, CRAFT, OR INDIVIDUALS TURN SIMULTANEOUSLY)**. Extend both arms in direction of desired movement.

34. **INCREASE SPEED, DOUBLE TIME**. Carry the hand to the shoulder, fist closed; rapidly thrust the fist upward vertically to the full extent of the arm and back to the shoulder several times. This signal is also used to increase gait or speed.

35. **HASTY AMBUSH RIGHT (LEFT)**. Raise fist to shoulder level and thrust it several times in the desired direction.

36. **RALLY POINT**. Touch the belt buckle with one hand and then point to the ground.

37. **OBJECTIVE RALLY POINT**. Touch the belt buckle with one hand, point to the ground, and make a circular motion with the hand.

b. Signals Used With Helicopter Operations. Explanations and diagrams of standard arm and hand signals used during helicopter operations are given in figure 3-14.

1. **TO PREPARE FOR HELICOPTER GUIDANCE**. Extend arms above the head, palms facing inboard.

2. **TO DIRECT THE HELICOPTER FORWARD**. Extend the arms and hands above the head, palms facing away from the helicopter. Move the hands in such a motion as to simulate a pulling motion.
3. TO DIRECT THE HELICOPTER BACKWARD. Extend the arms and hands, palms to the waist, facing the helicopter. Move the hands to simulate a pushing motion.

4. TO DIRECT THE HELICOPTER TO EITHER SIDE. Extend one arm horizontally sideways in direction of movement and swing other arm over the head in the same direction.

5. TO DIRECT THE HELICOPTER TO LAND. Cross and extend arms downward in front of the body.

6. TO DIRECT THE HELICOPTER TO TAKE OFF. Circular motion of right hand overhead, ending in a throwing motion toward the direction of takeoff.

7. TO DIRECT THE HELICOPTER TO HOVER. Extend arms horizontally sideways, palms downward.

8. TO DIRECT THE HELICOPTER TO WAVE OFF. Arms rapidly waved and crossed over the head.

9. TO DIRECT THE HELICOPTER TO HOOK UP EXTERNAL LOAD. Place the fists in front of body, left fist over the right fist in a rope climbing action.

10. TO DIRECT THE HELICOPTER TO RELEASE EXTERNAL LOAD. Left arm extended forward horizontally, fist clenched, right hand making horizontal sliding motion below the left fist, palm downward.

Figure 3-14
Chapter 4
Offensive Combat

Section 1. General

4101. Purpose
The purpose of offensive combat is to destroy the enemy or his will to fight.

4102. Offensive Combat
The offensive purpose of the squad is to attack. Offensive combat may be conducted by three
events: preparation, conduct, and exploitation. Each event is subdivided according to the
mission and/or unit involved. In planning and execution, some of the events may be shortened,
omitted, or repeated. Events and other actions pertinent to the squad are as follows:

a. Preparation
   · Reconnaissance and rehearsals.
   · Movement to the assembly area.
   · Movement to the line of departure.

b. Conduct
   · Movement forward of the line of departure to the assault position.
   · Advance by fire and maneuver.
   · Arrival at the assault position.
   · Fire and movement through the enemy unit or assigned enemy position.

c. Exploitation
   · Continuation of the attack.
   · Pursuit by fire or movement.
   · Consolidation and reorganization. (Note: Consolidation and reorganization are contionous
     actions for combat leaders and should be SOP upon completion of each fire and manuever
     event.)

Section II. Preparation
4201. General

Preparation begins with the receipt of the warning order. It ends when the lead element crosses
the line of departure or when contact is made with the enemy—whichever comes first. It is usually
accomplished in three steps: movement to the assembly area, final preparations in the assembly
area, and movement to the line of departure.

4202. Movement to the Assembly Area

The disposition of the squad during the movement to the assembly area is influenced by the size
and proximity of the enemy, as well as the squad's location in the column. The route column,
tactical column, and approach march (see par. 4204a) are troop formations used in the
movement to the assembly area.

a. Route Column. When probability of contact with the enemy is remote the movement is made
in route column. Units within the column are administratively grouped for ease of control and
speed of movement. Commanders normally march at the head of their units. This formation may
be called an administrative column.

b. Tactical Column. The tactical column is adopted when the enemy situation changes from
contact remote to contact possible. Units within the column are grouped to permit prompt
movement into combat formations. The rifle squad may be used as:

(1) Part of the Main Body. When the squad marches as part of the main body, the squad
leader's primary duties involve the supervision of march discipline within his squad.

(2) Connecting Elements. Connecting elements are files or groups which are used to maintain
contact between the units of the command. Connecting files are individuals who are sent out to
maintain contact between units. A connecting group consists of one or more fire teams. They
may be classified as either flank or column connecting files or groups, depending upon their
mission. (See fig. 4-1.) The use of connecting files or groups is governed primarily by visibility.
(a) **Flank Connecting Files or Groups.** Connecting files or groups that maintain contact with units, guards, or patrols on the flanks are called flank connecting files or groups. The primary mission of the connecting files or groups is to report the location and situation of the unit on the flank with which they are maintaining contact. They may also cover any gaps which exist between the units, giving warning of and resisting any hostile penetration.

(b) **Column Connecting Files or Groups.** Individuals or fire teams used to maintain visual contact between elements in the tactical column are called column connecting files or groups. Contact between the point and the advance party is provided by either connecting files or a connecting group consisting of one fire team. Between larger units of the advance guard, main body, and rear guard, a connecting group may consist of a squad.

(3) **Point of Advance Guard**

(a) The point precedes the advance party along the axis of advance (the general direction of movement for a unit). The distance between the point and advance party is prescribed by the commander of the advance party. Its mission is to prevent an enemy in the immediate vicinity of the route of march from surprising the following troops, and to prevent any undue delay of the column. Possible ambush sites such as stream crossings, road junctions, small villages, and defiles are thoroughly probed by the point.

(b) Formations for the point are prescribed by the squad leader. Generally, the squad uses a wedge or open column formation depending on the terrain. (See fig. 4-2.) When the squad is advancing in the wedge formation, the leading fire team moves on the edges of the road or trail. The two fire teams in the rear march off the road or trail, one team on either side of it. When the road or trail is bound by thick vegetation, or there is a need for haste, the formation of the point is usually a squad column. The fire teams may also be in column formation and advance along alternate sides of the road or trail. In any case, the formation for the point is prescribed by the squad leader, and it is his responsibility to change the formation when the need arises.

Figure 4-2. The Point in Open Terrain.

(c) The squad leader assigns each fire team a sector of observation and the fire team leaders assign each individual a sector of observation. Individual sectors of observation should overlap, so there are no gaps in the squad or fire team sectors of observation. This ensures the all round observation essential for the proper security of the point. (See figs. 4-3 and 4-4.)
(d) The squad leader of the point generally places himself just to the rear of the leading fire team. From this position, he can most effectively control his squad. He is far enough to the rear to avoid being pinned down by the initial burst of any enemy fire, and yet far enough forward for continuous reconnaissance which enables him to make his estimate of the situation and decision in a minimum of time. The squad leader of the point and the fire team leaders must continually check to see that all members of the squad are alert and vigilant at all times. Weapons are carried ready for instant use. Whenever possible, the point uses armandhand signals for communication.

(e) The point engages all enemy elements within effective range. The squad leader reports contacts to the advance party commander and informs him of the enemy situation and the action he is taking. If the enemy resistance is weak in comparison to the strength of the point, the squad leader initiates a plan to close immediately with the enemy and destroy him. If the enemy resistance is greater than the strength of the point, the squad attacks in a manner that forces the enemy to open fire and disclose his disposition and strength. Such aggressive action materially assists the advance party commander in arriving at a correct estimate of the situation. When the point makes visual contact with an enemy along the route of march but beyond effective range, the advance party commander is notified and the advance continues until contact is made with the enemy. When the enemy is observed beyond effective range to aflank, the point does not proceed to make contact with the enemy, but instead notifies the advance party commander.

(4) Rear Element. In the same manner that the advance party dispatches a point forward, the rear party employs a unit to cover its rear. The formation of the squad serving as the rear element is similar to that of the point of the advance guard, but in reverse order. The squad generally employs a vee or a column formation. The squad leader positions himself at the head of the rear most fire team. This formation is easy to control, provides allround security, favors fire and maneuver to the flanks, and the fire is adequate in all directions. (See fig. 4-5.) The rear unit stops to fire only when enemy action threatens to interfere with the march. Any observed enemy activity is reported to the rear party commander. The rear point cannot expect reinforcement by other troops. It repels all enemy attacks vigorously. If the enemy threatens to overrun the rear unit, a covering force from the rear party takes up a position to cover the rear point. When forced back, the rear unit withdraws around a flank or along a designated route so as not to mask the fire of the covering force. (See fig. 4-6.)
(5) **Point of a Flank Guard.** The missions, actions, and formations of a squad when serving as the point of a flank guard are the same as when the squad is acting as the point of an advance guard.

**Figure 4-5. The Squad as Rear Element.**

**Figure 4-6. Withdrawal of the Rear Element.**

(6) **Flank Patrol**

(a) Rifle squads are often detailed as flank security patrols. A flank patrol may be ordered to move to and occupy an important terrain feature on the flank of the advance, or to move parallel to the column at a prescribed distance from it, the distance depending on the speed of the column and the terrain. When vehicles or helicopters are available and terrain permits their use, it is highly desirable to provide the patrol with transportation.

(b) When moving on foot parallel to the column, the patrol adopts formations based upon considerations of terrain, speed, and self protection. In open terrain, a wedge formation is usually the best. In heavily wooded terrain, the patrol might use the squad column. The leading fire team serves as the scouting element of the patrol.

(c) The patrol moves so as to prevent the enemy from placing effective small arms fire on the column. It investigates areas likely to conceal enemy elements or provide them good observation. The patrol observes from commanding ground and moves rapidly from point to point, keeping between the protected unit and possible enemy locations.

(d) Enemy patrols moving away from the main body are reported, but are not fired upon unless otherwise directed. All other hostile forces within effective range are engaged immediately by the patrol. If the enemy opens fire on either the patrol or the column, the patrol determines the strength and dispositions and reports this information promptly to the unit or column commander. The patrol resists any enemy attack until ordered to withdraw.

(7) **Security for the Halted Column; March Security**

(a) March security is always established by a marching unit making any temporary halt. It is established by the advance, flank, and rear guards who occupy critical terrain features controlling the approaches to the halted column. Special attention is given to the flanks.
(b) The mission of the march security is to protect the halted column from surprise attack by the enemy. If attacked, the march security engages the enemy, thus allowing the column time to take up a position from which to repel the attack.

(c) The squad is often detailed as an element in march security. When the squad is so detailed, the platoon commander informs the squad leader of the situation, the security position to be occupied, to whom and where reports of enemy activity are to be sent, and the anticipated duration of the halt.

(e) Upon arriving at the prescribed location and making a hasty reconnaissance, the squad leader positions his fire teams where they can observe and defend all avenues of approach leading into the squad area of responsibility. He ensures alert observation by detailing sentinels in pairs and arranging for frequent reliefs. The squad does not abandon its outpost until it receives explicit orders to rejoin its unit. (See fig. 4-7.)

Figure 4-7. The Squad as an Element of March Security.

(8) Termination of the Tactical Column. The tactical column normally ends when a unit occupies an assembly area to prepare for the attack. However, the enemy situation may cause a unit to deploy into the approach march from the tactical column without occupying an assembly area.

4203. Final Preparations in the Assembly Area

a. Assembly Area. An assembly area is an area where units assemble prior to further tactical action. An assembly area should provide cover, concealment, and security from ground or air attack; it should be large enough to allow for unit dispersion and have ready access to suitable routes forward. When possible, the assembly area should be located beyond the effective range of hostile flat trajectory weapons. Final preparations for the attack are normally completed when the squad is in the assembly area. Those not completed may be accomplished in the attack position. These preparations include reconnoitering, formulating plans, and issuing orders. Also, but not limited to, the following should occur:

. Rehearsals

. Additional ammunition is drawn and distributed.

. Weapons, equipment, and personnel are checked for readiness.

. Equipment not required for the attack is collected and staged for later pickup.
· Extra or special equipment needed for the operation is obtained and issued.

· Personnel are allowed to rest as much as possible.

· Communication equipment is checked. Leaders must ensure that the required frequencies and call signs are on hand.

b. The six troop-leading steps: Begin Planning, Arrange for Reconnaissance and Coordination, Make Reconnaissance, Complete Plan, Issue Order, Supervise Activities (BAMCIS) are the sequence by which a leader receives, plans, and executes his mission. It can be viewed as elements of planning and decision making. These steps are also contained in the observe, orient, decide, action decision making cycle. Combat orders are developed along with the troop-leading steps. The development of the combat order begins at the receipt of the mission and does not end with combat, but continues throughout and after the fight in anticipation of the next mission. It includes the techniques by which orders and instructions are organized, sequenced, and transmitted from leaders to subordinates. The combat order is a continuing process with accomplishment of the mission as its main goal. Among combat orders, there are: the Warning Order, the Operation Order, and the Fragmentary Order. Orders generally adhere to the five-paragraph (SMEAC) format though each will differ due to time available and information available or required. (Explanation of these procedures is included in appendix C).

c. Attack Plan. Following a brief time of mission analysis (METT-T), arranging for and making reconnaissances, the squad leader completes his attack plan. There are two methods of attack for a squad: (I) (a flanking attack) (see par. 4302h[1]), and (2) a frontal attack (see par. 4302h[2]).

d. Issue Attack Order. Once the leader completes the tactical plan, he issues his order to his subordinates. A five-paragraph order gives subordinates the essential information needed to carry out the operation. It sets forth the Situation, the Mission, the plan and method of Execution, Administration and logistics, and Command and signal information. This format is commonly referred to and remembered by the acronym SMEAC. The order converts the leader's plan into action, gives direction to the efforts of his unit, and provides specific instructions to subordinate elements. At the rifle company level and below, orders are most commonly issued orally with the aid of a terrain model. The following contains information that might be included in a squad leader's order.

**ORIENTATION.** Prior to issuing an order, the unit leader orients his subordinate leaders to the planned area of operation using a terrain model, map, or when possible, the area of operation. The purpose of the orientation is to simply orient subordinates prior to the issuing of the order. Keep the orientation simple and brief. Orientations typically include:
- Direction of north
- Present location (grid)
- Unit objectives (grid, terrain feature and designator)
- Key features and their potential effects on your mission to include:
  - Land forms (hill, valley, finger, draw, depressions, etc.)
  - Streams, rivers and lakes (names and general direction of flow)
- Roads (names and general direction)
- Firebreaks, trails and power lines
- LZs, and beaches (grid and designator)
- Vegetation and its potential effect on the mission (forest, jungle, desert, etc.)
- Boundaries outlining your planned area of operation
- Weather forecast and its potential effect on terrain, personnel, equipment, and mission
- Astronomical data that is applicable to the mission (BMNT, sunrise, sunset, EENT, lunar and tidal data)
- Time zone (when applicable)

1. SITUATION. The situation paragraph contains information on the overall status and disposition of both friendly and enemy forces. The information provided is that deemed essential to the subordinate leader's understanding of the current situation. The situation paragraph contains three subparagraphs: Enemy Forces, Friendly Forces, Attachments and Detachments.

a. Enemy Forces. Information about the enemy contained in this subparagraph includes intelligence provided by higher headquarters and information gathered (facts and assumptions) which pertain to the accomplishment of the mission. Analysis of the enemy is conducted during your estimate of the situation (METT-T). The Enemy Forces subparagraph has three subparagraphs within it.

(1) SALUTE. This information is usually obtained directly from your higher commander's order and should be tailored to what is needed by subordinates. This subparagraph provides information on such things as known and suspected enemy locations, current/recent activities, what type of unit the friendly force is facing, (i.e., light infantry, mechanized, armored) the strength estimate with respect to equipment, personnel and support capabilities (mortar, artillery, air, NBC, recon, patrols, etc.). A helpful acronym to remember when developing this paragraph is SALUTE. In relation to enemy forces, this acronym stands for: Size of the enemy force, their Activity, last known Location, Unit type/designation, Time the enemy was last observed, and Equipment they possess. The purpose of SALUTE is to focus thinking about identifying and locating enemy weaknesses that can be exploited.
MCRP 3-11.2, Marine Rifle Squad (DRAFT)

(2) **DRAW-D.** An acronym to assist the leader in determining the enemy's capabilities and limitations is DRAW-D, which stands for: **Defend**, **Reinforce**, **Attack**, **Withdraw**, and **Delay**. There is no requirement to mention every action the enemy might possibly take, only those that are likely.

(3) **Enemy most probable course of action.** (EMPCOA) Anticipating the EMPCOA is based on DRAW-D. EMPCOA includes combining pertinent information provided by higher with other facts and assumptions about the enemy. Considering the enemy most probable course of action is an essential element in the development of the scheme of maneuver. This is also called war gaming.

**b. Friendly Forces.** Information contained in this subparagraph is obtained directly from your higher commander's order. It contains the missions and locations of higher, adjacent, and supporting units, and the next higher commander's intent for the operation. Information should be limited to that which subordinate leaders need to know to accomplish their assigned mission. It can be remembered by the acronym **HAS** and includes in order:

1. **Higher.** The location, mission and intent of the next higher unit (for a squad leader's order, the platoon's mission and the platoon commander's intent).

2. **Adjacent.** The mission and location of units to the left, right, front and rear having effect on the unit's mission, as well as units tasked with a reserve mission. Listed is the unit providing security, their mission and general location.

3. **Supporting.** Nonorganic units providing fire support or combat service support are addressed here. Listed are the units providing support, the location of the supporting unit, the command relationship (DS, GS, etc.), priority of the support and the unit being supported, if known.

**c. Attachments and Detachments.** Nonorganic units attached, and/or organic units detached from the issuing unit by higher headquarters are addressed here. The unit and effective time of attachment/detachment are given. If there are no attachments or detachments state "none."

2. **MISSION.** The mission statement is a clear and concise statement of what the unit is to accomplish. The mission statement is derived from the leader's mission analysis. It expresses the unit's primary task and purpose by addressing the "five Ws" -- **Who** (unit), **What** (task), **When** (time), **Where** (grid), and **Why** (purpose...in order to...) for the mission assigned. The mission statement should also include the type of operation (attack or defend) and the control measures that will be used (such as "objective" and "battle position"). The task describes the action to be taken while the purpose describes the desired result of the action. Of the two, the purpose is predominant. While the situation may change, making the
3. EXECUTION. The execution paragraph contains the "how to" information needed to conduct the operation. This paragraph consists of Commander's Intent, Concept of the Operation, Tasks to subordinate unit leaders, and Coordinating Instructions.

3.1. Commander's Intent. The commander's intent is a vision provided to subordinates which enables them to act in a changing environment in the absence of additional orders. It describes the commander's long term purpose of the operation with respect to the relationship among friendly forces, the enemy and terrain. At the tactical level, intent is conveyed throughout the order because the commander personally drafts and delivers the order; he can therefore emphasize key points that he believes are vital to the success of the mission.

3.2. Concept of the Operation. The concept of operation includes the scheme of maneuver, fire support plan, and when applicable, the employment plan of other combat multipliers such as obstacles used in the defense.

(1) Scheme of Maneuver. Using a graphic, sketch, or terrain model, the leader explains his plan to accomplish the unit's assigned mission. It should be described in general terms without identifying specific units. Brief the scheme of maneuver in logical sequence; begin at the current location and brief the unit's actions through completion of your mission. For an offensive operation the scheme of maneuver includes: form of maneuver, planned distribution of forces (including main effort and supporting effort), direction of movement, tactical control measures, and consolidation instructions. For a defensive operation, the scheme of maneuver includes: defensive technique, planned distribution of forces, general direction of fires/location of planned engagement areas, counterattack plan, and security plan. When applicable, reserve forces are also briefed.

(2) Fire Support Plan. Describes how fire support will be used to complement the scheme of maneuver. The fire support plan ties in directly with the scheme of maneuver. Organic, attached and supporting indirect fires may be included. In some instances, this paragraph can also be used to describe how direct fires will be used to support the scheme of maneuver. Included in the fire support plan may be:

- the purpose/concept of fire support and how it will integrate with and support the scheme of maneuver.
- the priority of fires and when priority shifts within the unit
- the location, description and target designation of preplanned targets that support the scheme of maneuver.
- the location of firing units (if not already covered in friendly forces
subparagraph)
- permissive and restrictive control measures on the use of fires
- allocation of targets (i.e., in the offense - priority targets; in the defense -
final protective fires)
- target precedence, assignment of targets to be engaged.

c. Tasks. The specific missions to be accomplished by each subordinate element
of the unit will be listed in a separate numbered subparagraph, including reserves.
Task statements are your subordinate unit's mission statements, and as such,
should be written in the same manner as any mission statement. Just as your
mission statement from higher, your subordinate task statements should answer
the "5 Ws," Who, What (task), When, Where, and Why (purpose/in order to ...)
for the missions you assign. When tasks are multiple, they are itemized with
subparagraphs. If there is a priority or sequence of accomplishment, it is stated.
When a subordinate unit is designated the main effort, state it in the tasking
statement. Anticipated (be prepared to...) missions should be included (i.e.,
pursuit, defense). Subordinate unit tasks should be listed in a logical sequence (i.e.,
from start to finish; or most important to the least important missions,
followed by anticipated missions). Leaders should not leave to interpretation of
subordinates tasks must be accomplished.

d. Coordinating Instructions. Coordinating instructions are those specific
instructions that tie the plan together. Included are details of coordination and
control applicable to two or more units in the command. Items commonly
addressed in coordinating instructions include:

1. Order of movement and planned formations during movement
2. Movement into the defense (used for deliberate occupation of the defense only).
3. Location/grids for tactical and fire control measures--these control measures
should also be depicted on your terrain model/operational graphic.
   Examples include: check points, phase lines, release points, battle positions,
   SP/LP, TRPs, etc. When briefing tactical control measures, point out the
   location on your terrain model and then give grid coordinates.
4. Target precedence--assigned to specific units/weapon systems to provide
guidance on what targets to engage when multiple targets are presented.
5. Security plan--the plan to provide early warning/protection to the unit to
prevent surprise upon enemy contact.
6. Engagement and disengagement criteria and instructions
7. Priority of work (used for defensive operations)
8. Reporting requirements
9. Rules of engagement (if applicable)
10. MOPP level
11. Planning and execution time lines
4. ADMINISTRATION AND LOGISTICS. This paragraph contains all the information necessary for subordinate units to coordinate their resupply, recovery of equipment, and evacuation of wounded and prisoners. This paragraph addresses the "FIVE Bs" -- BEANS (chow), BULLETS (ammunition), BATTERIES (COMM/NVG), BAND-AIDS (MEDEVAC) & BAD GUYS (EPWs) and is divided into two subparagraphs.

a. **Administration**
   1. Medical evacuation plan for wounded (Band-aid)
   2. Enemy prisoners of war (EPW) handling procedures and evacuation plan (Bad-guys) * Admin subparagraphs should outline POCs at your level and at least one level up. Specific instructions such as when to evacuate casualties and location of collection point are also included.

b. **Logistics**
   1. Initial issue and resupply plan (ammo, chow, water, batteries) (Beans, Bullets, Batteries)
   2. Any other logistical concerns to include transportation, etc. * Also included in logistic subparagraphs should be who is responsible for drawing, who gets special gear and any POCs necessary for coordination.

5. COMMAND AND SIGNAL. This paragraph contains instructions and information relating to command and communications (control) functions. It contains two subparagraphs--signal and command.

   a. **Signal.** Specifies the signal instructions for the operation. Include both the primary and alternate signal plans as well as methods of communication in priority (example: primary means of communication is land line, alternate is radio, then messenger). Also included are the times when the signal plan changes.
   (1) Communication plan to include primary and alternate call signs/frequencies (CEOI index number if applicable) should be specified as well as time of change.
   (2) Visual signals required to coordinate the concept of operations (examples include: signals to commence, shift, and cease the base of fire; signal for displacement of the base of fire force; signals to commence, and cease the FPF; signal to break contact).
   (3) Challenge/Password (primary & alternate)/running password and time of change.
   (4) Brevity codes and code words

   b. **Command.** Identifies leader location and the location of other leaders as required.
      1. Location of the higher commander. (key leaders)
      2. Leader location before, during and after the battle.
      3. Succession of command (i.e., sqd leader, 1st fire team leader, etc.)
4204. Movement to the Line of Departure

Upon leaving the assembly area, the squad makes a rapid and continuous advance to the line of departure. If necessary, a brief halt to effect last minute coordination and to assume initial combat formations may be made in the attack position. If the squad is subjected to artillery or mortar fire along the route, it moves quickly through or around the impact area. See figure 4-8 for tactical control measures used by the squad in an attack.

Figure 4-8. Typical Control Measures Used by Rifle Squad on a Dismounted Daylight Attack (Schematic)

a. Approach March. The squad leaves the assembly area and continues the movement toward the enemy in the approach march formation. The approach march formation is used when enemy contact is imminent. The column establishes guards to the front, flanks, and rear, as appropriate. Elements within the column may be fully or partially deployed in the attack formation. Recognizable terrain features to coordinate the advance. During the approach march, the squad and fire teams take maximum advantage of cover and concealment along the route. (See fig. 4-9.)

Figure 4-9. Rifle Platoon from Assembly Area to the Assault Position

(1) Initial Formation. Upon assuming an approach march formation, the platoon commander may prescribe initial squad formations. As the march progresses, however, the squad leaders order formation changes in accordance with the terrain, the frontages assigned, and the likelihood of enemy contact.

(2) Base Squad. A base squad is designated by the platoon commander to assist in maintaining direction, position, and rate of march. Other squads will guide on the base squad. When applicable the Main Effort is assigned to the base squad.

(3) Duties of the Squad Leader. The squad leader regulates his squad's advance on the base squad, or if his squad is the base squad, he advances it as directed by the platoon commander. As he moves, he studies the ground to the front in order to take advantage of cover and concealment and to control the movement of his fire teams. He also maintains direction and makes minor detours to take advantage of better terrain.

(4) Scouting Fire Team

(a) When a rifle platoon in the approach march is not preceded by friendly troops, it uses its own scouting elements. The scouting element is usually one fire team; however, an entire squad may be used. A fire team used as a scouting element is called a scouting fire team and is controlled by the platoon commander, assisted by the squad leader. A squad leader whose squad is
providing the scouting fire team normally marches near the platoon commander to assist in the control of the scouting fire team. A scouting fire team moves aggressively to cover the front of the advancing platoon and to force the enemy to disclose his position. Formations generally used by a scouting fire team are the wedge or skirmishers. Normally, a scouting fire team scouts a frontage of 50 to 75 meters. If a wider frontage must be covered, the entire squad must be employed, normally using the vee or wedge formation. Scouting fire teams are covered by the platoon or, when the platoon is masked, the fire team covers its own advance. The fire team leader watches constantly for signals from the platoon commander, remaining in visual contact at all times. The distance that the scouting fire team moves ahead of the platoon varies with the terrain. This distance is normally the limit of visibility. In open terrain, the platoon commander usually directs the scouting fire team to move by bounds along a succession of objectives.

(b) When a scouting fire team is directed to advance over open ground to the edge of a wood line, two members go inside the wood line for 50 to 60 meters while the other men of the fire team cover them. When it is determined that the area near the edge of the woods is clear, the fire team leader signals the platoon commander that it is safe to move forward and then moves the remainder of the fire team into the woods. The scouting fire team then occupies and holds a line 50 to 75 meters within the woods and observes toward the front until the platoon comes up. The scouting fire team leader awaits further word from the platoon commander before moving the team further into the woods. When directed, he moves the team forward until they reach the far edge of the woods. The team holds at the edge of the woods and notifies the platoon commander of the situation. The platoon commander moves the platoon to a position where it can cover the scouting fire team and directs the team leader to move out and continue his scouting mission.

(c) When a scouting fire team is fired upon, the individuals immediately take cover, locate targets, and return fire. The scouting fire team leader then determines:

· Location of enemy (range and reference points).

· Extent of position (location of flanks).

· Types of positions (fighting holes, bunkers, obstacles, etc.).

· Number of enemy.

· Enemy weapons (mortars, tanks, etc.)

(d) The platoon commander contacts the leader of the scouting fire team to obtain as much information as possible. The platoon commander then returns control of the scouting fire team to the squad leader. The platoon commander may bring up the remainder of his squads, set up a base of fire, and assault the
enemy position. Should the enemy position prove too strong for the platoon, the platoon usually remains engaged with the enemy as a base of fire while units of the advance party are committed to clear the enemy resistance.

b. Attack Position. The attack position is the last concealed and covered position occupied by assault echelons before crossing the line of departure. It is the location where final coordination, last minute preparations, and, if not already accomplished, deployment into initial attack formations are effected. When all preparations for the attack are completed in the assembly area, there should be no delay when passing through the attack position. (See figs. 4-8 and 4-9.)

4205. Special Situation
Paragraph 4102 states that in planning and execution, some of the phases of offensive combat may be shortened, omitted, or repeated. An example of this would be when a unit that is occupying defensive positions is in contact with the enemy and is ordered to conduct an attack. Since the unit is already in contact with the enemy, the advance to contact would be omitted. Due to the danger of enemy observation, direct fire weapons and ability to mass indirect fire weapons (artillery and mortars), it is not always possible to move the unit out of the defensive positions back to an assembly area. In this situation, the unit's present defensive positions become the assembly area, attack position, and line of departure. All of the actions and final preparations, which under normal circumstances would be accomplished in the assembly area and attack position, will be accomplished while the majority of the unit remains in place.
Section III. Conduct

4301. General

The conduct of offensive combat begins when one of the following occurs:

- The squad is forced to fire on the enemy in order to advance.
- The leading troops cross the line of departure.

4302. Movement From the Line of Departure to the Assault Position

When the squad leader believes he has reached a point where his squad can no longer advance without sustaining casualties, he orders one or two fire teams to fire on the enemy positions while the remainder of the squad moves forward under the protection of this covering fire. The squad leader based on his rapid estimate of the situation decides the maneuver used in a particular situation. When the enemy position is isolated and has exposed flanks, the squad leader attempts to maneuver over a covered and concealed route so as to strike the enemy position in the flank or rear. When this is not possible, a frontal attack requiring fire and maneuver is executed.

a. Fire and Maneuver. Fire and maneuver is the process whereby elements of a unit establish a base of fire to engage the enemy, while another element maneuvers to an advantageous position from which to close with and destroy or capture the enemy. Supporting fires from weapons not organic to the unit may be provided. Supporting fires should be followed closely by the advancing troops of the maneuver unit so that the shock effect of the fire upon the enemy will not be lost.

b. Fire and Movement. Once the maneuver element meets enemy opposition and can no longer advance under the cover of the base of fire, it employs fire and movement to continue its forward movement to a position from which it can assault the enemy position. In a maneuvering squad, fire and movement consists of individuals or fire teams providing covering fire while other individuals or fire teams advance toward the enemy or assault the enemy position.

c. Squad Employment. The squad is normally employed as part of the rifle platoon and will be assigned a mission as a base of fire or as a maneuver element. Thus, operating as part of the platoon, a squad assigned as the maneuver element will execute fire and movement, not fire and maneuver. A squad will be required to fire and maneuver when, for example, given a mission such as point squad, flank patrol, or flank guard during a movement to contact, enemy contact is made. The organization of the rifle squad into three fire teams provides the squad leader with the ability to execute fire and maneuver with one or two fire teams employed as the base of fire and one or two fire teams as the maneuver element.

d. Fire Team. The fire team, as the basic fire unit, conducts fire and movement.

e. Base of Fire Element. The base of fire element covers the maneuver element’s advance toward the enemy position by engaging all known or suspected targets. Upon opening fire, the base of fire seeks to gain fire superiority over the enemy. Fire superiority is gained by subjecting the enemy to fire of such accuracy and volume that the enemy fire ceases or becomes ineffective.
f. Maneuver Element. The mission of the maneuver element is to close with and destroy or capture the enemy. It advances and assaults under covering fire of the base of fire element. The maneuver element uses available cover and concealment to the maximum. Depending upon the terrain and effectiveness of the covering fire, the maneuver element advances by team movement; within the team, by fire and movement, employing rushes, or creeping and crawling as necessary. Regardless of how it moves, the maneuver element must continue to advance. If terrain permits, the maneuver element may be able to move forward under cover and concealment to positions within hand grenade range of the enemy.

g. Control of the Squad

(1) Fire team leaders initiate the action directed by the squad leader. In the attack, fire team leaders act as fighter leaders, controlling their fire teams primarily by example. Fire team members base their actions on the actions of their fire team leader. Throughout the attack, fire team leaders exercise such positive control as is necessary to ensure that their fire teams function as directed. The squad leader is usually with his base unit, and locates himself where he can best control and influence the action. In controlling the squad when taken under enemy fire, the squad leader takes into account the fact that the battlefield is a very noisy and confusing place. If enemy fire is light he may be able to control his fire team leaders by voice, whistle, or arm and hand signals. As the volume of enemy fire increases, this type of control becomes impossible. In this situation the squad leader must rely on the skill and initiative of the fire team leader to carry out the instructions he previously gave them. To maintain control of the squad under heavy enemy fire, the squad leader positions himself near the fire team leader of the designated base fire team. By regulating the actions of the base fire team leader, the squad leader retains control of the squad. The base fire team leader controls the actions of his fire team; the other fire team leaders base their actions on those of the base fire team. This type of control must be practiced and perfected in training if the squad is to be effective in combat.

(2) The base fire team is used by the squad leader to control the direction, position, and rate of movement of the squad. It is not intended that the other fire teams maintain rigid positions in relation to the base fire team; the base fire team is used as a general guide. If another fire team can move forward more rapidly than the base fire team, it should do so. For instance, if the base fire team is receiving enemy fire, but the terrain in front of another fire team provides cover from enemy fire, the latter team should move rapidly forward to a position where they can deliver fire on the enemy. Covering the base fire team’s movement by fire takes pressure off them and permits them to move forward.

h. Use of Maneuver. Once fire superiority has been gained, the squad continues its advance. Fire superiority is maintained throughout the attack in order to ensure the success of any maneuver. Before advancing any part of his squad, the squad leader should assure himself that there is sufficient fire on the enemy position to render return fire ineffective. Two forms of maneuver for the rifle squad are the single envelopment and the frontal attack using rushes. In a single envelopment, the maneuver element attacks against the flank or immediate rear of the enemy's position. The frontal attack exerts pressure against the enemy's front and either him off the position or allows an attach from the flank or rear.

(1) Single Envelopment. A squad maneuvering against the enemy's flank is normally covered by a supporting attack conducted by another squad acting as the base of fire. The maneuvering
squad moves toward the flank of the enemy so as to place itself in a position to make an assault. The maneuvering squad takes advantage of available cover and concealment, keeping the enemy unaware of its movements until the assault begins. When the maneuvering squad commences the assault, the base of fire shifts to another part of the enemy position or ceases firing entirely. If observation permits, it is desirable to have the base of fire lead the maneuvering squad across the objective by fire. The single envelopment splits the enemy's defensive fires; part focuses on the base of fire (supporting attack) and part on the maneuvering squad (main attack), and allows the maneuvering squad to attack over ground of its own choice. The flank attack is the preferred movement against the enemy position.

(2) Frontal Attack. When there is no opportunity for maneuver to either flank of the enemy, the maneuvering squad moves directly to the front. The squad leader orders one fire team to advance under cover of fire of the remainder of the squad. Fire teams advance as rapidly as possible to new firing positions, using the cover and concealment available. When a fire team reaches a new firing position, that fire team opens fire. The part of the squad that was providing the covering fire ceases fire and under cover of this newly established covering fire moves forward, using the available cover and concealment. This process is continued until the squad is in position to assault the enemy. The squad leader moves to successive positions from where he can best maintain effective control of his squad. The frontal attack requires less time and coordination and is easier than the single envelopment. However, the attack moves against the enemy's strength and prepared fires and there is little chance he will be surprised. Therefore it may be the last preferred. The object is to always take the enmy in the flank.

i. Method of Advance. When making either a single envelopment or a frontal attack, a rifle squad has three methods by which it may move. The squad may move as a unit in a series of squad rushes, as fire teams in a series of alternating fire team rushes, or the members of the squad may move forward singly by individual rushes. The volume of the enemy's fire will determine which method the squad will use. In all three, the element of speed is necessary.

4303. Movement From the Assault Position Through the Objective
The primary object in advancing the attack by fire and maneuver and/or fire and movement is to get part or the entire attacking unit in position to assault the enemy. The position from which the final assault is launched is called the assault position. As the attacking squad closes with the enemy, covering fires delivered by both direct and indirect fire weapons on the enemy position increase in intensity. In order to avoid casualties by friendly fire these supporting fires are ceased or shifted just prior to reaching the objective.

a. Assault Position. The assault position is tentatively established during the squad leader's planning and reconnaissance. It is the position between the line of departure and the objective, from which the assault on the enemy position is launched. The assault position is located as close as the assaulting element can move by fire and maneuver without sustaining casualties from or masking covering direct (base of fire) or indirect fires (artillery and mortar). The assault position should be easily recognizable on the ground and ideally should offer concealment and cover to the attacking force. Here, the final steps are taken to ensure a coordinated assault, and only a minimum amount of time should be spent in this position to preclude the enemy from fixing the assault element in place.
When the squad reaches the assault position the squad leader, fire team leaders, and squad members must quickly make final preparations for the assault. Unit leaders issue last minute instructions to their men.

The amount of time the assaulting element spends at the assault position must be kept to the absolute minimum in order to deny the enemy the opportunity to bring fire to bear on the assaulting troops and to keep the momentum of the attack going. It was previously stated that the ideal assault position should offer concealment and cover to the attacking force. What is considered concealment and cover to the attacking force is considered dead space by the defender (see par. 2302). Since dead space is normally covered by indirect fire from mortars and artillery, the enemy can still bring fire to bear on the assaulting force producing casualties, breaking up the attack, and fixing the attackers in position. **REMEMBER: DO NOT DELAY AT THE ASSAULT POSITION.**

**b. Squad in the Assault.** The assault must be launched close under the covering fires and begin when the leading assault elements have advanced as close to the enemy as possible without moving into friendly covering fires. The assault is started on order or signal of the platoon commander or on the initiative of the squad or fire team leader. Supporting weapons cover the assault by firing on adjacent or deeper enemy elements. The assault is launched aggressively and vigorously IMMEDIATELY upon the shifting from or cessation of covering fires on the objective. The squad advances rapidly and aggressively from the assault position, using fire and movement to close with and destroy the enemy.
Section IV. Exploitation

4401. Exploitation. Exploitation occurs immediately after a successful assault and seizure of the objective. It begins immediately upon achieving success. It is a continuation of the attack aimed at destroying the enemy's ability to conduct an orderly withdrawal or organize a defense. Pursuit by fire and/or continuation of the attack are methods used to exploit success. When directed, a unit can go directly to consolidation/reorganization.

a. Pursuit by Fire. When the assault through the assigned objective is completed, the squad fires upon the withdrawing enemy forces until they are no longer visible or are beyond effective range.

b. Continuation of the Attack. The purpose of continuing the attack is to maintain pressure on the retreating enemy and destroy his combat power. When ordered, the rifle squad continues the attack. The squad leader repeats all the steps performed for previous attacks. Frequently, the urgent need of a higher command to maintain momentum requires that these steps be done rapidly so that the attack can be continued with minimum delay.

4402. Consolidation

a. General. Consolidation is the rapid organization of a hasty defense in order to permit the attacking unit to hold the objective just seized in the event of an enemy counterattack.

b. Hasty Defense. In receiving the attack order, the squad leader was assigned the mission of seizing and defending an objective or a sector of an objective. The task now is to place sufficient firepower into position to defend that sector. In positioning the fire teams in the hasty defense, there is not sufficient time to prepare standard fighting holes. The squad must use natural depressions, shell craters, or old enemy positions, if available, and quickly improve them to provide minimum adequate cover. This is important since it is expected the enemy will use artillery, mortars, and machine guns to support his counterattack. The emphasis here must be to effectively defend the assigned sector by fire and to get the squad under cover quickly, not perfectly. Fire team sectors of fire are designated and principal directions of fire for automatic rifles are assigned. Each fire team leader must take the initiative to ensure that his team's sector of fire is interlocked with that of adjacent teams. Movement of squad members within the objective should be kept to an absolute minimum in order to reduce exposure to the enemy's artillery, mortar, machine gun, and small arms fire. If a Marine must be moved to a position where he can better cover the fire team sector of fire, he should move by rushes, seeking cover as he moves. During consolidation, there is usually enough time to redistribute ammunition within the fire team. When redistributing ammunition, priority goes to the automatic rifleman. Many of the steps associated with the hasty defense are actually taking place while the enemy is counterattacking. Because of the rapid tempo of events, the full attention of the squad and fire team leaders must be dedicated to the preparation of the hasty defense. Care of casualties must take second priority to the preparation of the hasty defense. Enemy prisoners must be disarmed, searched for other weapons, and guarded. If the squad leader or a fire team leader has become a casualty, the next senior Marine must quickly assume control and carry out the necessary tasks.

4403. Reorganization
Once the enemy counterattack has been defeated or it has been determined by the senior unit leader on the objective that the danger from immediate enemy counterattack has passed, reorganization of units commences. Reorganization is a continuous process, but it is given special emphasis upon seizure of the objective. The squad leader accomplishes the following during reorganization:

- Makes spot assignments to replace fire team leaders and automatic riflemen who have become casualties.
- Redistributes ammunition, magazines, and grenades.
- Removes casualties to covered positions.
- Notifies the platoon commander of the situation, the position of the squad, the casualties incurred, and the status of ammunition supply.
- Delivers enemy prisoners to the platoon commander. Prisoners and enemy dead are searched for weapons, papers, documents, and identification. Such material is immediately sent to the platoon commander. (See app. G.)
- Ascerts the situation of the units to his flanks.

4404. Enemy Counterattack

It is safe to say that it is not a question of whether or not the enemy will counterattack, but rather a question of when. In trying to determine when the counterattack will take place, it must be realized that the enemy knows that his chances of success are better if he counterattacks quickly before there is time to build a strong defense. By launching his counterattack quickly, he also knows that the forces now holding the objective will be somewhat disorganized and under strength due to casualties. Additionally, the other unit may have needed its casualty collection point; at which it is extremely valuable to the other friendly forces. By striking quickly, the enemy will not give the new defenders time to bring up fresh troops. All things considered, if the enemy acts quickly, his chances of taking the objective back with a relatively small force are better than if he delays while assembling a larger counterattack force. The prudent Marine will expect an enemy counterattack even before the last enemy positions on the objective have being neutralized. Preparations to repel the counterattack must commence immediately after taking the enemy position.

Section V. Night Attack

4501. General
a. **Purpose.** A night attack is made to gain surprise, to maintain pressure, to exploit a success in continuation of daylight operations, to seize terrain for subsequent operations, or to avoid heavy losses by using the concealment afforded by darkness.

b. **Characteristics.** Night combat is characterized by a decrease in the ability to place aimed fire on the enemy; a corresponding increase in the importance of close combat, volume of fire, and the fires of weapons registered during daylight; difficulty of movement; and difficulty in maintaining control, direction, and contact. Despite these difficulties, the night attack gives the attacker a psychological advantage in that it magnifies the defender's doubts, apprehensions, and fear of the unknown. Careful planning and preparation for the attack can overcome the difficulties mentioned. The demand for time consuming detailed planning and reconnaissance at all levels normally requires the assignment of night attack missions to units not in physical contact with the enemy. However, a well-trained unit will be able to take advantage of enemy dispositions and surprise by being able to conduct night attacks immediately.

4502. **Tactical Control Measures**

The degree of visibility will determine the measures necessary to assure control. Terrain features used as tactical control measures, if not easily identifiable at night, may be marked by artificial means. The following control measures may be used in a night attack. (See fig.4-10.) One method of conducting, night attacks is called a bent L technique.

**Figure 4-10. Control Measures for Night Attacks.**

a. **Assembly Area.** The assembly area may be closer to the line of departure than for a daylight attack.

b. **Attack Position.** The attack position should be in defilade, but need not offer as much concealment as in daylight. The area selected should be easy to move into and out of at night.

c. **Line of Departure.** The line of departure is a line established to coordinate attacking units when beginning the attack.

d. **Release Point.** Release points are clearly defined points on a route where units are released to the control of their respective leaders.

e. **Probable Line of Deployment (PLD).** The probable line of deployment is an easily recognized line selected on the ground where attacking units deploy in line formation prior to beginning a night attack.

f. **Limit of Advance.** A line of advance is generally designated beyond the objective to stop the advance of attacking units. It should be easily recognizable in the dark (a stream, road, edge of woods, etc.) and far enough beyond the objective to allow security elements space to operate.

4503. **Security Patrols**
Members of the squad may be used as security patrols to assist night attacks. These patrols confirm enemy disposition, eliminate enemy security elements, and prevent attacking forces from being ambushed while en route to the PLD. They may also act as guides to lead units forward from the release points to the PLD.

4504. Preparation for the Night Attack

Preparation for the night attack is generally the same as for the daylight attack. The squad leader will follow the same format outlined in appendix C when preparing for and executing assigned missions. Special emphasis is placed on--

· Reconnaissance by squad and fire team leaders to locate assigned control features and terrain features for night orientation. Such reconnaissance should be conducted during three conditions of visibility: daylight, dusk, and dark.

· Rehearsals conducted both during daylight and darkness. Rehearsals should include formations, audible and visual signals, and the actions of the squad from the assembly area to the objective.

· Carrying only that equipment absolutely essential for the success of the attack.

· Camouflaging individuals and equipment. Equipment which rattles is padded or tied down.

· Avoiding test firing of weapons and unnecessary movement, or doing this in a way which will not prematurely disclose the forthcoming attack.

· Ensuring that the night vision of the squad members is not destroyed prior to the attack.

4505. Conduct of the Night Attack

a. Movement to the Probable Line of Deployment

(1) Security patrols sent out by higher commanders destroy enemy listening posts and security patrols enabling the unit to move to the PLD undetected. They confirm enemy disposition.

(2) The platoons move in column formation or in simple file from the assembly area to the platoon release point. At the platoon release point, the platoons meet their guides from the security patrol and continue to move along their respective routes to their squad release points.

(3) Once the squad crosses the line of departure, movement to the PLD is continuous. The rate of advance is slow enough to permit silent movement.

(4) If flares are fired during the movement forward, all hands quickly assume the prone position until the flares burn out. If a flare is fired after the squad leaves the PLD, the squad ignores the flare and continues the movement toward the assigned objective. Close coordination is required on the use of flares. Indiscriminate use of flares results in loss of surprise. If the attack is to be illuminated, the illumination is started on signal from the attacking elements (usually after reaching the PLD).
(5) On arrival at the squad release point, the rifle squads are released from the platoon column formation to deploy on line at the probable line of deployment. The squad leader is normally the first member of his squad in the column. When the rifle squad reaches the squad release point; he leads the column, sets the pace, and maintains the direction of movement. Members of the security patrols assist the squad leaders in, positioning the squads on the probable line of deployment.

(6) On order, the squad moves forward silently from the PLD, maintaining the squad line formation and guiding on the base squad.

b. Assault. Once the enemy has discovered the attack and firing has commenced, then and only then is the assault commenced. The signal for the assault can take any form, but it must be simple and reliable. The importance of developing a great volume of fire during the assault cannot be overemphasized. It is at this time that fire superiority must be established and maintained. The assault is conducted aggressively. Tracer fires should be used to increase accuracy of fire and to demoralize the enemy. Preplanned fires are used by higher commanders to isolate the objective. The assault is conducted in the same manner as discussed in paragraph 4303. The assault is carried forward to the forward military crest of the objective or to some other prescribed limit, short of the limit of advance.

4506. Consolidation and Reorganization of the Night Attack
When the objective has been seized, the plans for consolidation and reorganization are carried out as described in paragraphs 4305 and 4306.

Section VI. Attack by Infiltration

4601. General
Infiltration is a technique by which a force moves as individuals or small groups over, through, or around enemy positions without detection. Although primarily offensive in nature, an infiltration can be conducted in conjunction with defensive or retrograde operations. The purpose of an infiltration is to gain a more favorable tactical position from which to perform a subsequent mission. The impact of infiltration will be the best when the enemy unit has our forces in its rear or flank.

4602. Planning and Preparation
a. Organization. The size of the infiltrating group depends primarily on the need for control between infiltrating groups, and the number and size of the gaps in enemy defenses. Normally, units will be broken down into infiltration groups of platoon or squad size.

b. Order. A detailed order is issued for the infiltration. Each infiltrating group is issued the following information at a minimum:

- Release point.
- Time of release.
- Point of departure.
- Time of infiltration.
c. Preparation. Upon receipt of the order, the infiltration group leaders follow the troop leading procedures as discussed in appendix C. While the group leaders accomplish their troop leading steps, their assistants prepare their groups for infiltration. Necessary equipment is drawn, checked, and secured for silent movement. Each man prepares himself and his equipment for the operation. Whenever possible, each infiltration group should carry the necessary special equipment to accomplish the mission of the infiltration force. This ensures the accomplishment of the mission in the event all groups do not successfully complete the infiltration. After the group leaders issue their orders, rehearsals are conducted. Rehearsals should address the passage of lines, signals, actions at danger areas, actions upon enemy contact, and actions to be taken at the rendezvous points and the objective. Everyone should be required to memorize the route, azimuths to, and location of rendezvous points. The accomplishment of the mission rests primarily on the ability of the small unit leaders. The planning and preparation must be as thorough and as detailed as time and facilities will permit. Fires are planned by higher headquarters to create diversions and to protect and support the unit during the infiltration, in the rendezvous area, and during any subsequent attack, consolidation, or withdrawal.

d. Control Measures

(1) Infiltration Lanes. Infiltration lanes extend through known or likely gaps in the enemy defenses and are often located in rough, swampy, or heavily forested areas. (See fig. 4-II.)

(2) Rendezvous Points. Rendezvous points should be concealed from possible detection by enemy observation and patrols. They are secured by the first group into the area. Escape routes should be designated to alternate rendezvous points.

(3) Time of Infiltration. The time of infiltration is selected to take advantage of conditions of reduced visibility, such as darkness, rain, snow, fog, and so forth. It is the time when infiltration groups enter their assigned infiltration lanes.

(4) Routes. Routes to the objective from the rendezvous points should be concealed for surprise and for protection.

(5) Objectives. Objectives may be enemy reserves, artillery units, or command and logistic installations. Infiltrating forces may also seize key terrain or establish roadblocks to restrict enemy movement, isolate the battle area, and facilitate the movement of friendly mechanized forces.

4603. Conduct of the Attack by Infiltration

a. Movement of Groups. The unit conducting the infiltration will assemble the infiltration groups to the rear of friendly lines. The unit will then move forward, usually in a column, until it reaches the release point. At the release point, the infiltration groups are released to their leaders. The infiltration groups move by stealth to avoid detection. They cross the line of departure
(usually friendly front lines) at the specified time, normally during darkness. Artillery or mortar fires are used as necessary to distract enemy attention. The infiltration groups pass through the gaps in the enemy lines by using the infiltration lanes. If detected, groups avoid engagement by withdrawing or moving around the enemy. Speed of movement is limited by the requirement for stealth. Groups that are unable to reach their rendezvous point in time follow the previously announced alternate plan.

b. Assembly of Groups. At the rendezvous point, groups assemble and assault preparations are completed. The first infiltration group to reach the rendezvous point secures it. The assembled force leaves the rendezvous point to assault the objective at the designated time. The main body may be preceded by a small security element (scouting fire team). Its mission is to prevent the main body from being detected or surprised.

c. Assault. The force is halted short of, or behind, the enemy unit for final reconnaissance and coordination. This assault position should be the last safe, covered, and concealed area before reaching the objective. The assault on the objective is characterized by surprise and maximum firepower at the objective's weakest point to quickly destroy or capture it. If plans are to link up with other friendly forces, previously designated visual and sound recognition signals prevent firefights between friendly units. If the objective is not retained, the assaulting force withdraws to an assembly area for further assaults or withdraws to friendly lines. The withdrawal to friendly lines may be by air or by exfiltration, either as an intact unit or by exfiltration groups. Upon reaching friendly lines, the unit is again reassembled.

**Figure 4-11. Attack Using Infiltration Techniques.**
Chapter 5

Defensive Combat

Section I. General

5101. Purpose

The purpose of defensive action is to develop more favorable conditions for offensive action, to economize forces to allow the concentration of force elsewhere and retain or control terrain, and gain time. The rifle squad should have an *ambush mentality* in which they seek to surprise and trap the enemy in away that sets him up for the decisive counter-attack.

5102. Mission

The mission of the infantry in the defense is, with the support of other arms, to delay / harass the enemy by fire as he approaches the battle position, to repel his assault by close combat if he reaches the battle position, and to destroy him by counterattack. For the rifle squad, this mission can be divided into three parts:

a. To delay or suppress the enemy by fire once he comes into small arms range of the squad's fighting position. Depending on the mission, the enemy is delay or taken under fire as far forward of the squad's fighting position as possible. The closer the enemy comes to the squad's fighting position, the more friendly casualties he will inflict. Another technique is to deliver massed surprise fires by withholding fires until the enemy can be surprised and trapped e.g. ambush.

b. If the enemy continues to press the attack to the point where he launches an assault, the squad repels this assault by continuing to deliver fire as part of their unit's final protective fires and, if necessary, by hand-to-hand combat.

c. If the enemy succeeds in penetrating the platoon battle position, the squad either holds its fighting position, delivering fire on the intruding enemy, or fights from supplemental or alternate positions participates in counterattacks to destroy the enemy and restore the battle position if the battle position gets penetrated.

5103. Definitions

a. *Sector of Fire*. A sector of fire is an area that is required to be covered by fire by an individual, a fire unit (squad or fire team), or a crew-served weapon. It is a pie-shaped area enclosed by two lateral limits and a forward limit. (See [fig. 5-1](#)) Within a rifle platoon, a sector of fire is assigned to individual weapons, fire teams, and squads. Squad leaders are not normally assigned individual sectors of fire since their primary duty during the conduct of the defense is directing and controlling the fires of their units. The sector of fire is used to clearly indicate the
area to be covered by fire and to provide for the best distribution of available firepower and complete coverage of the area to the front. It is also employed to ensure mutual support by the overlapping of adjacent sectors of fire. Rifle platoons are assigned battle positions to be defended. The rifle platoon battle position is defended by the overlapping sectors of fire of the squads. The squad sector of fire is covered by the overlapping sectors of fire of the fire teams.

**Figure 5-1. Sector of Fire.**

1. **Lateral Limits.** Readily identifiable terrain features are selected to indicate the line of sight along each side of the sector. These terrain features should be located near the forward limit of the sector so that all fire team members assigned to cover this sector use the same limiting features. Two stakes, placed near the position of the weapon, are used to indicate the lateral limits during periods of restricted visibility. These should be emplaced prior to darkness.

2. **Forward Limit.** The forward limit is established at the range at which the weapon will open fire. For rifles and automatic rifles, this may extend up to their maximum effective ranges. When possible, a terrain feature is selected to locate the forward limit. As the attacker passes this limit, he is brought under fire. This allows the squad leader a positive means to control the commencement of small arms fire.

**b. Fighting Position.** A fighting position is a location on the ground from which fire is delivered by an individual, a fire unit (squad or fire team), or a crew served weapon. Before selecting a firing position, the assigned sector of fire must be carefully examined from various locations using the prone position to ensure effective coverage of the sector of fire. The exact fighting position is then designated on the ground prior to digging in. The position must allow for good fields of fire, make maximum use of available cover and concealment, and facilitate exercise of fire control by the unit leader.

1. **Primary Fighting Position.** The primary position is the best available position from which the assigned sector of fire can be covered. Individuals, fire teams, squads, and crew served weapons are assigned primary positions.

2. **Alternate Fighting Position.** Alternate positions are not normally assigned to individuals or units within the platoon. They are used primarily by crew-served weapons. An alternate position is located so that a crew-served weapon can continue to accomplish its original mission when the primary position becomes untenable or unsuited for carrying out that mission.

3. **Supplementary Fighting Position.** One of the greatest threats to either the attacker or the defender lies in being surprised. The attacker seeks to surprise the defender by concealing his movements until the moment of the assault. The defender seeks to surprise the attacker by concealing the exact location and extent of his dispositions, thus leading his opponent into a false estimate of the situation and consequently, a faulty decision. Supplementary positions are prepared to guard against attack from directions other than those from which the main attack is expected. A supplementary position is a secondary position and does not cover the same sector of fire as the primary position. *In some situations, the most likely avenue of approach may vary between daylight and darkness or other periods of low visibility. Thus, the requirement to shift*
positions becomes an absolute necessity. This situation is more the rule rather than the exception. Supplementary positions actually provide security. When occupied, they ensure protection against attack from directions other than those covered by primary positions. Movement to supplementary positions should be made by covered and concealed routes when available movement to and from must be rehearsal.

c. Battle Position. A position on which the main effort of defense is concentrated. A battle position is assigned to battalions, companies, and platoons. A battle position is made up of a series of sectors of fire that support one another. Platoon battle positions are assigned a right and a left limit of fire. A limit of fire is a boundary marking the area in which gunfire can be delivered. The limits of fire should be indicated by readily identifiable terrain features located at or beyond the limit of effective small arms fire. (See fig. 5-2.)

Figure 5-2. Frontline Platoon Battle Position.

d. Forward Edge of the Battle Area (FEBA). The foremost limits of a series of areas in which ground combat units are deployed. The FEBA is a control measure that divides the security area from the main battle area. The FEBA need not be physically occupied, but it should be controlled by friendly fire.

e. Main Battle Area. The main battle area extends from the FEBA to the rear. It is here that the decisive defensive battle is fought. The main battle area is organized into sectors of defense that are assigned to subordinate units. A company may be assigned a sector to defend or be directed to occupy a battle position.

f. Security Area. The security area is located forward of the FEBA. The squad may be assigned as part of a larger security force or may only be responsible for local security in front of the platoon battle position.

.g. Principal Direction of Fire. A principal direction of fire is a specific direction within the sector of fire given to a flat trajectory weapon and which is designated as its primary fire mission. Within a rifle squad, a principal direction of fire is assigned to automatic rifles. Units are not assigned principal directions of fire. Riflemen may be assigned principal directions of fire for periods of reduced visibility. Squad leaders and fire team leaders are not assigned a principal direction of fire, nor can an automatic rifle be assigned more than one principal direction of fire. The principal direction of fire is indicated by pointing out a readily identifiable terrain feature. This terrain feature may be the target itself or it may indicate the line of sight when no target is assigned. The limits of the target should be pointed out on the ground when distributed fire is required along the principal direction of fire. A stake near the firing position is used to indicate the principal direction of fire during periods of restricted visibility. The principal direction of fire is employed to--

· Cover a gap in a final protective line of a machine gun.

· Cover a specific terrain feature endangering the company or platoon battle position,
Such as a draw that may serve as an avenue of approach, or hill top which may
serve as a possible enemy vantage point. (See fig. 5-3.) This terrain feature is
not necessarily a point on which fixed fire is placed; however, it is intended that coverage
of the feature should require little distribution of fire. The principal direction of fire may be:

- Protect a crew served weapon by firing across its front.
- Augment the band of flanking fires placed immediately in front of the battle position
  when targets of opportunity to the front are not visible.

**Figure 5-3. Principal Direction of Fire.**

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**504. Defense Planning Considerations**

The following fundamentals of defense are applicable to all tactical levels (fire team, squad,
platoon, company, etc.). Application of these fundamentals by all unit leaders increases the
chances for a successful defense.

a. **Preparation.** Normally, the defender will arrive at the battlefield before the attacker. Upon his
arrival at the position he is to defend, the squad leader must ascertain from the platoon
commander how much time is available to prepare his defensive position. If time is available to
prepare the position the squad leader must use it wisely; if not, he prepares a hasty defense. He
conducts a METT-T analysis.

b. **Concentration.** Forces must be concentrated to prepare for attacks at the most likely spots.
For the squad leader, this means he will establish his position as directed by the platoon
commander. This is called main effort.

c. **Flexibility.** At the squad level, flexibility is achieved through the continuous development of
various courses of action to meet the enemy threat. The squad leader should continuously be
asking himself, “What do I do if the enemy does this...?” This is called wargaming.

d. **Maximum Use of Offensive Action.** The squad will normally be tasked by the platoon
commander to conduct various types of patrols to maintain contact with the enemy. Additionally,
the squad leader must instill in his men an offensive state of mind and aggressive spirit.
Collecting extra equipment to provide for creature comforts must not be allowed as it can affect
the physical and mental ability of the squad to move out quickly and aggressively. Squads may
be tasked to conduct delaying type actions in the unit’s security area.

e. **Proper Use of Terrain.** Take maximum advantage of the military aspects of terrain—key
terrain, observation, cover and concealment, obstacles, and avenues of approach (KOCOA).
Considerations include employment of weapons, fighting positions and units in such a way to
both surprise the enemy and provide protection.

f. **Mutual Support.** Units and supporting weapons are located and employed so that they can
assist one another. The enemy easily destroys an isolated unit. Positions should be located so that
when attacking one, the enemy comes under fire from at least one other. The idea is to create a combined arms dilemma for the enemy so that whatever he does, he is presented with another problem to solve.

g. **Defense in Depth.** The squad may employ all three fire teams on line when deployed. The squad may engage the enemy at maximum small arms range and continue to fire until the enemy is stopped. If the attacker penetrates the front line squads, squads may move to supplementary positions to continue to engage the enemy, or they may be part of a counterattack to drive the enemy back. Defense in depth may also be achieved by a defense that is parallel to the line of attack, setting up a series of ambush style battle positions through which the enemy must fight. Defense in depth can also be achieved by a series of patrols, delays, ambushes, and movement from one battle position to another.

**h. Surprise.** The squad leader must employ every means available to mislead the enemy as to the true locations of his positions, his strength, and the disposition of his organic weapons as well as any crew served weapons located in his sector. He should plan to ambush and trap the enemy whenever possible.

**i. Knowledge of the Enemy.** Since the defense reacts largely to what the attacker does, the squad leader should find out from the platoon commander, the capabilities of the enemy facing him. Having an idea as to what the enemy can do, what weapons he will employ, and what his strength is, will help the squad leader organize his defense to meet that threat. This is an element of METT-T.

### 5105. Defensive Missions of the Squad

The squad will be assigned one of three types of missions:

**a. Front line Squad.** The squad may defend as part of a front line platoon. Its mission is to stop the enemy by fire forward of the platoon battle position and to repel him by close combat if he reaches the platoon battle position. The mission requires that the squad be assigned a fighting position and a sector of fire. The squad may hold its fighting position, withdraw or occupy other fighting positions in order to accomplish missions. Orders to withdraw usually come from higher.

**b. Squad as Part of the Reserves.** The squad may be part of the reserve platoon during the defense. As part of the reserve platoon, the squad is normally assigned a fighting position to the rear of the front line units and supports them by fire. The fighting position and sector of fire is assigned to concentrate fire in the rear, on the flanks, or into a gap between front line platoons. The squad as part of the reserve platoon may also be assigned a fighting position and sector of fire to limit enemy penetrations of the platoon battle position. The squad as part of the company's reserve platoon may participate in a counterattack.

**c. Squad as a Security Element.** During the defense the squad may serve as part of the security element located forward of the platoon or company battle position. The squad's mission in this capacity is to gain information about the enemy and to deceive, delay, ambush and/or disorganize his advance.
5106. The Fire Team in the Defense

a. Organization of the Ground. The squad leader organizes the fire team in the defense by specifying a sector of fire and principal direction of fire for the automatic rifle. He selects terrain features to indicate lateral and forward limits of the sector of fire. He points out on the ground the general location of fire team fighting positions to be occupied. (See fig. 5-4.)

Figure 5-4. The Fire Team Sector of Fire.

b. Fire Plan. The fire team leader formulates the team's fire plan to cover the entire sector assigned by the squad leader with the heaviest possible volume of fire. (See fig. 5-5.) The fire plan includes assignment of individual sectors of fire, individual fighting positions, firing positions and a principal direction of fire for the automatic rifles as assigned by the squad leader, and the position of the fire team leader.

Figure 5-5. Fire Team Fire Plan.

(1) Individual Sectors of Fire

(a) The fire team is the basic fire unit of the rifle platoon and, when practicable, each individual's sector of fire covers the entire fire team sector of fire. The same terrain features are used to indicate the limits. In this way mutual support can be achieved.

(b) In the defense, it is impractical for each automatic rifleman to cover the entire squad sector of fire. He is assigned to cover only the fire team sector.

(b) The fire team leader is assigned an individual sector of fire for the employment of the M203 grenade launcher. He covers the entire fire team sector.

(2) Individual Fighting Position

(a) The fire team leader designates individual fighting positions which will enable the fire team to cover the assigned sector by fire.

(b) Positions may be prepared as single or double fighting holes. The interval between fighting holes within a fire team may vary. In close terrain, single fighting holes are usually prepared and may be as close as 5 meters in open or desert terrain double positions are prepared and may be as far apart as 30-50 meters.

(c) If double fighting holes are prepared, the automatic rifleman and assistant automatic rifleman will pair off.

(3) Automatic Rifleman

(a) Since the automatic rifles are the backbone of the squad's defense, the squad leader selects the exact fighting position for the automatic rifle. The remainder of the fire team is then positioned around it.
(b) The squad leader will indicate the principal direction of fire for the automatic rifle. This principal direction of fire, under some conditions, may have been selected by the platoon commander himself. (See par. 5107a.)

(4) **Rifleman.** The rifleman is positioned so he can cover the entire fire team sector, if possible. His position must provide support and protection for the automatic rifleman.

(5) **Assistant Automatic Rifleman.** Normally, the assistant automatic rifleman participates in the defense as a rifleman. He is positioned near or with the automatic rifleman because he must be prepared to assume the duties of the automatic rifleman.

(6) **Position of the Fire Team Leader.** Usually the fire team leader's position is at the center of the fire team. It must be a position from which he can--

- Observe the entire fire team and its sector of fire.
- Direct the fire of the automatic rifle.
- Deliver effective M203 grenade launcher fire.
- Observe the squad leader, if possible.

(7) **M203 Employment**

(a) In assigning the sectors of fire for employing his M203 grenade launcher, the fire team leader must consider the overall fire plan. Specifically, he must consider the sectors of fire assigned to the automatic rifleman and the need to furnish support to the automatic rifleman and to adjacent units. The fire team leader then positions himself where he can best control the fire team and deliver the most effective M203 fire. This is usually in the center of the fire team position. (See fig. 5-5.) The idea is to employ the M203 in that its fires are mutually supporting, cover dead space and assist in creating a dilemma for the enemy.

(b) As the enemy approaches the platoon battle position, he is subjected to an ever increasing volume of fire from weapons in the battle position and from supporting arms. Unless restrictions are placed on the firing of the M203, the fire team leader opens fire with the M203 on profitable targets as they come in range. In some situations, the squad leader or platoon commander may desire to withhold M203 fires until the enemy has reached a specified area, at which time the fire team leader opens fire. The surprise fire from the grenade launcher, in conjunction with the fires of the other squad and platoon weapons, will have a combine arms effect upon the enemy, particularly in the assault phase of the enemy attack. When final protective fires are called for, the fire team leader engages the largest mass of enemy infantry within his assigned sector with the M203.

(c) The fire team leader's fighting position should enable him to cover the entire fire team sector of fire. Primary and supplementary firing positions are prepared. Firing positions are selected to provide maximum cover and concealment consistent with the assigned mission. Extreme care must be taken to ensure that fields of fire are cleared of obstructions that might cause premature detonation of the projectile, thereby endangering
friendly personnel. The M203 is employed to cover the most likely avenues of approach for enemy infantry into the defensive position.

(8) Fire Team Sectors of Fire. Sectors of fire are selected for the fire teams so that when combined they will cover the entire squad sector of fire. The fire team sectors of fire overlap so as to provide mutual support.

(9) Fire Plan Sketch. A sketch of the fire plan is submitted by the fire team leader to the squad leader. It should include the individual sectors of fire and primary fighting positions, the principal direction of fire for the automatic rifleman, and the fighting position of the fire team leader. At times, irregularities within the terrain may prevent one of the individuals from covering the entire fire team sector of fire. Such is the case of the assistant automatic rifleman in the example shown in figure 5-6. Note that the symbol for the automatic rifleman's fighting position points along the principal direction of fire. The magnetic north line provides a reference to show the direction the fire team is facing. A line is drawn around the fire team fighting position and follows the general trace of the forward edge, flanks, and rear of the individual fighting positions of the fire team members. The symbol indicating the size of the unit is placed within a break along the rear edge. The numbers show this to be the 2d fire team of the 3d squad. Figure 5-7 illustrates the meaning of the various symbols.

Picture

Figure 5-6. Fire Plan Sketch.

Figure 5-7. Sketch Symbols.

5107. The Rifle Squad in the Defense

a. Organization of the Ground. The platoon commander organizes the fire team in the defense by specifying a sector of fire and a primary fighting position. He selects terrain features to indicate the lateral and forward limits of the squad sector of fire. He points out, on the ground, the general location of the squad fighting position to be occupied. He designates the general fighting positions and principal directions of fire for specific automatic rifles that are critical to the defense of the entire platoon. He may assign a supplementary fighting position for the squad to protect the flanks or rear of the platoon battle position. (See fig. 5-8.) He should plan to fight with an all around mindset.

Figure 5-8. Squad Fighting Position.

b. Fire Plan. The squad leader formulates the squad fire plan so as to physically occupy the assigned primary fighting position and to be able to cover by fire the sector of fire assigned by the platoon commander. (See fig. 5-6.) The fire plan includes the assignment of fire team sectors
of fire, fire team fighting positions, principal directions of fire for the automatic rifles, and the squad leader's fighting position.

c. Fire Team Positions

(1) The squad leader distributes his fire teams so that they physically occupy the assigned fighting position and are able to cover by fire the assigned squad sector of fire.

(2) Fire teams are placed generally abreast. They face the expected direction of enemy attack so as to be able to deliver their heaviest volume of fire against the enemy forward of the platoon battle position. Fighting positions of individual fire team members may be staggered in an irregular line to take advantage of the terrain; however, care must be taken not to mask the fires of members of the fire team.

(3) Selection of fire team fighting positions must be coordinated with the location of crew served weapons in the squad fighting position so as to provide for the close in protection of these weapons.

d. Automatic Rifles

(1) The platoon commander designates the general fighting positions and principal directions of fire for specific automatic rifles.

(2) The squad leader will assign a principal direction of fire for each automatic rifle not assigned by the platoon commander.

(3) The squad leader selects the exact fighting position for each automatic rifle.

e. Position of the Squad Leader. The squad leader's fighting position is usually slightly to the rear of the fire teams and in the center of the squad fighting position. It must be a position from which the squad leader can--

· Observe his squad's assigned sector of fire.

· Observe as much of the squad fighting position as possible, particularly the positions of the fire team leaders.

· Maintain contact with the platoon commander.

f. Fire Plan Sketch. The squad leader prepares the squad fire plan sketch in duplicate. He gives one sketch to the platoon commander for his approval and keeps a copy for himself. The sketch should include fire team fighting positions and sectors of fire, fighting positions and principal directions of fire of the automatic rifles, and the squad leader's fighting position. If the rifle squad is providing protection for a crew served weapon, its position and primary fire mission (final protective line for machine guns and principal direction of fire for other crew served weapons) should be included as part of the sketch. Figure 5-6 is an example of a squad fire plan sketch.
Section II. Defensive Procedures

5201. Troop Leading Procedures in the Defense

a. General. Upon receiving the platoon defense order, the squad leader follows the troop leading steps to make the best use of time, equipment, and personnel. Utilizing these steps and satisfactorily completing an estimate of the situation, he issues his squad defensive order. This follows the five-paragraph order format that includes--

- Information about the enemy, the location and identification of adjacent units, and the location of supporting weapons within the squad area.
- The mission of the squad.
- The fighting positions and sectors of fire for each fire team and the principal direction of fire for each automatic rifleman.
- The assignment of light anti-tank or assault weapons to squad members whose fighting positions will cover avenues of approach for armored vehicles.
- Organization of the ground, priority of work, squad security, and any other instructions the squad leader believes necessary.
- The administrative and supply details such as ammunition resupply and the location of medical corpsmen and the aid station.
- Prearranged signals such as pyrotechnics or audible signals, designating when to open fire or deliver final protective fires. The location of the squad leader and platoon commander is also given.

b. Guidance. For troop leading procedures, see appendix C; for estimate of the situation, see appendix D; for the five-paragraph order, see appendix E.

5202. Squad Plan of Defense

After issuing the squad defensive order, the squad leader positions his fire teams to cover the assigned sector of fire. Before detailed preparations of fighting positions are begun, the squad leader verifies the sector of fire of each fire team and the ability of the fire team to observe its assigned sector. During his supervision of the fighting positions, he ensures the sectors of fire overlap and that the desired density of fire can be delivered on avenues of approach. The squad leader's responsibilities during the preparation of the fighting position include--

- In conjunction with fire team leaders, inspecting the fighting position for each fire team member, verifying each man's ability to cover the fire team sector of fire.
- Selecting fighting positions for the automatic riflemen, verifying each one's ability to cover the assigned fire team sector of fire and have mutual support.
· Assigning each automatic rifleman a principal direction of fire (PDF) covering a likely avenue of enemy approach, ensuring the PDF is within the sector of fire assigned to the fire team.

· Coordinating with crew served weapons personnel located in the squad position.

· Supervising the preparation of fighting holes.

· Supervising the clearing of fields of fire.

· Providing security by assigning sentinels or observation posts.

· Coordinating all security measures with adjacent squads and the platoon commander.

· Inspecting fighting positions to ensure that camouflage and overhead cover are satisfactory.

· Supervising the preparation of supplementary fighting positions.

· Establishing a system of signals for fire control.

a. Signal to Commence Firing. Normally, a forward limit is established to designate the range at which the fire teams are to engage selected targets. For rifles and automatic rifles, this may extend as far forward as their maximum effective range. A terrain feature should be selected to locate the forward limit. As the attacker passes this limit, he is brought under fire. This establishes a positive means of fire control to ensure that small arms fire does not commence prematurely or is withheld too long. The squad leader may desire the fire teams to hold their fire until the enemy gets closer than maximum effective small arms range, and then deliver a heavy volume of surprise fire. In this case, he will establish a signal for commencing fire. When the squad commences fire, rifles and M203s are fired at the average rate; automatic rifles are normally fired at the sustained rate. The squad leader determines what rate of fire is appropriate for the situation. As the enemy comes closer, the rate of fire is increased. Another option is to deliver massed surprise fires on signal to surprise and trap the enemy e.g. ambush.

b. Signal to Commence Final Protective Fires. Final protective fires consist of machine gun fires, mortar and artillery fires, automatic rifle and rifle fires, and M203 fires. The signal to commence these fires is a prearranged pyrotechnic or audible signal and is normally passed to the squad from the platoon commander. When this signal is given, the rifles and M203s are fired at the average rate; automatic rifles are normally fired at the sustained rate. The squad leader determines what rate of fire is appropriate for the situation. As the enemy comes closer, the rate of fire is increased. Another option is to deliver massed surprise fires on signal to surprise and trap the enemy e.g. ambush.

c. Signal to Cease Final Protective Fires. Predetermined signals are used to cease final protective fires. When the enemy assault is repulsed, the signal to cease final protective fires is given. When this signal is given, rifles and M203s may continue to fire at the average rate; the automatic rifles may return to the sustained rate. The rates of fire will be determined by the squad.
leader and must be sufficient to destroy the enemy remaining to the squad front. The squad leader will determine when it is safe to cease-fire entirely.

5203. Squad Security

The rifle squad provides for its own local security by maintaining constant observation to the front, flanks, and rear. Enough men are kept alert at all times to maintain an effective warning system against enemy air and ground activity. In open terrain during daylight, one sentinel per squad is usually sufficient. Under conditions of reduced visibility, one sentinel per fire team is usually assigned. Sentinels should be relieved every two hours, day or night, in order to ensure they remain alert and effective. Prior to posting, they must be briefed on the location and activity of friendly and known enemy forces (including patrols), the password and countersign, the location of the squad leader, and the location of the platoon and company command posts. Sentinels normally man the automatic rifle.

5204. Organization of the Ground

a. General. The organization of the ground begins as soon as individual members of the squad have been assigned sectors of fire. It includes the following tasks and or remembered by the acronym SAFE:

- Security
- Automatic weapons
- Fields of fire
- Entrench

· S - Posting security (listening posts, observation posts, patrols). Security is continuous.

· A - Positioning automatic weapons.

· F - Clearing fields of fire.

· E - Digging fighting holes.

· Constructing obstacles.

· Selecting supplementary fighting positions.

· Camouflage measures.

b. Posting Security. Local security consists of measures taken to prevent surprise and to deny the enemy information concerning the plan of defense. All round security and protection against surprise are achieved by--

· Posting a sentinel for surveillance.

· Enforcing noise and light discipline.
· Keeping movement within the squad fighting position to minimum.

"Establishing a listening/observation post LP/OP.

c. Positioning Automatic Rifles. Automatic rifles are positioned to cover the most likely avenues of approach into the squad area. Their positions should enable them to cover the fire team's sector of fire, provide support for adjacent fire teams, and effectively deliver final protective fires.

d. Clearing Fields of Fire. In clearing fields of fire forward of each fighting position, the following guidelines should be observed:

(1) Do not disclose the squad's fighting position by excessive or careless clearing. (See fig. 5-9.)

Figure 5-9. Clearing Fields of Fire.

(2) Start clearing near the fighting position and work forward to the limits of effective small arms fire.

(3) In all cases, leave a thin natural screen of foliage to hide fighting positions.

(4) In sparsely wooded areas, remove the lower branches of scattered large trees. It may be desirable to remove entire trees that might be used as reference points for enemy fire.

(5) In heavy woods, complete clearing of the field of fire is neither possible nor desirable. Restrict work to thinning undergrowth and removing lower branches of large trees. In addition, clear narrow lanes of fire for automatic weapons.

(6) If practical, demolish buildings and walls forward of the fighting position which may obstruct fields of fire or provide cover and concealment to the enemy.

(7) Move cut brush to locations where it will not furnish concealment to the enemy or disclose the squad's fighting position.

(8) Extreme care must be taken by the fire team leader to ensure that fields of fire are cleared of obstructions that might cause premature detonation of the M203 projectile. The leader must always look at his position from the anticipated enemy direction to see how well the position is camouflaged.

e. Digging Fighting Holes. Fighting holes are dug by Marines at their fighting positions. Fighting holes provide excellent protection against small arms fire, shell fragments, airplane strafing or bombings, the effects of nuclear detonations, and the crushing action of tanks. If not prescribed by higher authority, the squad leader will designate either one or two-man fighting holes. The type of fighting hole used is based upon squad strength, fields of fire, size of squad
sector of fire, and morale. However, the two-man fighting hole permits one Marine to rest while
the other maintains security over the assigned frontage.

(1) One-man Fighting Hole

(a) Dimensions. The size and shape of the fighting hole are affected by certain
important considerations. It is as small as practicable, exposing a minimum target to enemy fire;
wide enough to accommodate the shoulders of a man sitting on the fire step; long enough to
permit the use of an entrenching tool; and at least 4 feet deep to the fire step. Standing on the
fire step, the Marine should be able to aim and fire his weapon.

  1 Water Sump. A water sump, below the fire step, is dug at one side of the fighting hole to
collect water and provide a space for the Marine's feet while he's seated on the firing step. (See
figs. 5-10 and 5-11.)

Figure 5-10. One-Man Fighting Hole
(Horizontal View)

Figure 5-11. One-Man Fighting Hole.
(Vertical View)

  2 Grenade Sump. A circular grenade sump is dug into the wall of the fighting hole facing the
enemy, at the lower part of the water sump. The grenade sump should be cone shaped, with the
opening measuring approximately as wide as the spade of the entrenching tool, narrowing to
about five inches in diameter at the end; it should be sloped downward at an angle of 30 degrees;
and it should be as deep as the Marine can make it. (See fig. 5-10.)

(b) Details of Construction. In most types of soil the fighting hole gives protection against the
crushing action of tanks, provided the occupant crouches at least 2 feet below the ground surface.
(See fig. 5-12.) In sandy or soft soils it is necessary to revet the sides to prevent caving in. The
soil is piled around the hole as a parapet, approximately 3 feet thick and 1/2 foot high, leaving a
berm or shelf wide enough for the Marine to use as an elbow rest while firing. If turf or topsoil is
used to camouflage the parapet, the Marine first removes sufficient ground cover and sets it aside
until the fighting hole is completed. Once complete, the ground cover can then be laid on the top
and sides of the parapet, so that it will better blend in with the surrounding ground.

Figure 5-12. One-Man Fighting Hole Protects Against Tanks.

(c) Fighting Hole With Camouflaged Overhead Cover. It is desirable that the soil be
removed to an inconspicuous place and a camouflaged overhead cover be improvised. Branches,
supporting sod, or other natural material in the vicinity may be used for this purpose. The
overhead cover may be reinforced to provide protection from overhead bursts of artillery fire.

(2) Two-man Fighting Hole. The two-man fighting hole consists essentially of two adjacent
one-man fighting holes. Since it is longer than the one-man type, the two-man fighting hole
offers somewhat less protection against a tank crossing along the long axis, as well as less protection against strafing, bombing, and shell fragments. (See **fig. 5-13**.) Some advantages of the two-man fighting hole are that it allows continuous observation, mutual assistance and reassurance, and the redistribution of ammunition between the occupants.

**Figure 5-13. Two-Man Fighting Hole.**

**f. Constructing Obstacles.** The squad may be ordered to construct obstacles such as barbed wire, log and brush barriers, ditches, and hasty protective mine fields; and may be ordered to improve natural obstacles such as creek beds and river banks. Usually antitank and other extensive obstacles are constructed by engineers. When obstacles that affect the squad’s fighting position are constructed, the squad leader ensures that--

- The obstacle is located beyond hand grenade range of the individual fighting positions of squad members.
- The obstacle is covered by fire.

**g. Selecting Supplementary and Alternate Fighting Positions.** The squad prepares supplementary fighting positions organized the same as the primary fighting positions but oriented in a different direction. If crew served weapons are attached to the squad or employed in the squad fighting position, alternate fighting positions should also be prepared for the crew served weapons.

**h. Camouflage Measures.** Concealment from enemy ground and aerial observation is very important in selecting and organizing each fighting position. The squad must take advantage of natural concealment whenever possible. Camouflage measures are begun from the moment the position is occupied and are continued as long as the Marines are there. Specific camouflage measures are:

1. Do not disclose the position by excessive or careless clearing of fields of fire.
2. Use the same turf or topsoil that has been removed from the area of the fighting hole to camouflage the parapet.
3. Dispose of all soil from the fighting hole not used on the parapet. Carry the soil away in sandbags or shelter halves. Dispose of it under low bushes, on dirt roads or paths, in streams or ponds, or camouflage it.
4. Avoid digging in next to an isolated bush, tree, or clump of vegetation.
5. Conceal the fighting hole from observation by the use of a camouflaged cover. Construct the cover from natural materials.
6. Replace natural material used in camouflage before it wilts or changes color.
(7) Avoid creating fresh paths near the position. Use old paths or vary the route followed to and from the position.

(8) Avoid littering the area near the position with paper, tin cans, and other debris.

5205. Squad Defense Order

The squad leader follows the standard five paragraph order format in presenting his squad defense order. (See app. E.) A sample defense order given by the squad leader, 3d squad, commencing with a terrain orientation, follows:

(Terrain Orientation) "That direction is north (pointing). Notice the streambed to the front, that road on the left, that destroyed bridge, and the woods on the left.

(Situation) "An enemy force supported by tanks, artillery, and aircraft is expected to attack from that direction (pointing), sometime after midnight tonight.

"Our platoon will defend this high ground from just this side of the road (pointing) to a point 500 meters to the right (pointing). Our fighting position runs along the forward slope of the high ground (pointing).

"The 2d squad is on our right and the 2d platoon on our left.

"There is a machine gun squad in the 2d platoon area that fires to the right, across our front, and another in the 1st squad area that fires to the left, across our front. Two SMAW teams are located in our area just to the right of the road and fire down the road. Mortar final protective fires will fall in the streambed to our front and an artillery final protective fire will fall in the vicinity of the road.

"A platoon size security force now in position to our front will withdraw along the road, probably sometime tonight, if the expected enemy contact proves too strong. I'll get the word to you as soon as I find out. Make sure all your men know they're out there.

(Mission) "The mission of our squad is to organize and defend a part of the platoon battle position from the right side of the road over to and around this finger, over to and including the draw to the right. Our sector of fire is the area between that bend in the stream on our right (pointing) and the break in the woods on our left (pointing).

(Execution) "Our squad will organize our defense with three fire teams on line. One automatic rifle's principal direction of fire will be down the drainage ditch along the right side of the road. One automatic rifle PDF will fire down the path in the center of the finger. The PDF of the other automatic rifle will be down the draw to the right.

"that fire team, on the right, will defend from that draw (pointing), around the right side of the finger to, and including, that tree stump. Your sector of fire will extend from that bend in the stream in second squad's area (pointing), left to the other side of that large rock (pointing). Your
automatic rifleman will fire his PDF down the draw. I want it to be fired from this position (pointing) to that old dead tree there (pointing).

"2d fire team, in the center, will defend from that tree stump, to and including, that bush (pointing) at the left center of the finger. Your sector of fire is from the demolished bridge on the left to that clump of cattails there in the streambed (pointing). Place your automatic rifleman here and have him fire his principal direction of fire down the path running the center of the finger. Your fire team will post one-man to act as security for the squad while we are digging in. Have him remain on this high ground, and have him watch that streambed in particular. Give him the automatic rifle. I will have him relieved in one hour.

"3d fire team, on the left, will defend from that bush at the left center of the finger to the road. The road itself is in 2d platoon's area. Your sector of fire is from that large rock in the streambed (pointing) to that large tree in 2d platoon's area (pointing). The PDF for your automatic rifle is down the drainage ditch on the right side of the road.

"I will point out supplementary fighting positions protecting the rear later.

"After I have checked each man's fighting position and his coverage of the fire team's sector of fire, we'll clear fields of fire, dig one-man fighting holes with overhead cover, and camouflage them at the same time. Fire team leaders assign tasks. I have already coordinated the overlap of sectors of fire with 2d squad on the right and 2d platoon on the left.

"Open fire on the enemy when they come out of the woods to our front. We will use the woods as the forward limit.

(Administrative/Logistics) "Water and rations will be issued before sunset. Make sure all hands have four grenades.

"The battalion aid station is along that road about 800 meters to the rear. The platoon corpsman is near the platoon CP over there (pointing).

"Send POWs back to me.

(Command and Signal) "The challenge is 'September' and the password is 'Beacon'.

"Signal to commence firing the final protective fires is a red star cluster. Signal to cease firing the final protective fires is a green star cluster.

"The platoon commander is in the edge of the woods to our right rear (pointing).

"My position will be here on this finger just behind the 2d fire team.

"Any questions?

"It is now 1400.
"Move out!"

5206. Conduct of the Defense

a. Enemy Preparatory Bombardment. The enemy may precede his attack with fire from any or all of the following weapons, artillery, naval gunfire, mortars, machine guns, tanks, and aircraft. During this incoming enemy fire, the squad will take cover in its fighting holes, maintaining surveillance to the front, flanks, and rear to determine if the enemy is advancing closely behind their supporting fires.

b. Opening Fire and Fire Control. The squad withholds its fire on approaching enemy troops until they come within effective small arms range of the squad's fighting position. Squad members open fire on the approaching enemy on command of the squad leader, or when the enemy reaches a predetermined line, normally the forward limit of the fire team sector of fire. When the squad opens fire, rifles are fired at the average rate. When the enemy enters the range of the M203, the fire team leader delivers grenade launcher fire at the average rate. Automatic riflemen normally fire at the sustained rate. The squad leader determines the appropriate rate of fire for the situation. Automatic riflemen's priority of fire goes to enemy automatic weapons, rocket launchers, and other crew-served weapons. Once the squad opens fire, direct control passes to the fire team leaders. The fire team leaders, in accordance with the squad leader's previous plan, designate new targets, change rates of fire when necessary, and give the order to cease-fire when the attack is defeated. The goal of the squad may be to defeat the enemy attack as far forward of the squad fighting position as possible. If the enemy is not stopped and he continues to close on the squad fighting position, the automatic riflemen will continue to increase their rate of fire as the enemy comes closer.

c. Final Protective Fires. If the enemy's attack is not broken and he begins his assault, final protective fires are called. Final protective fires are the final attempt to stop the enemy attack before he reaches the platoon's battle position. When final protective fires are called for, all squad members fire in their assigned sectors (normally the fire team's sector of fire). Rifles and M203s continue to fire at the average rate; the automatic riflemen will increase their volume of fire to the rapid rate, if they have not yet reached this rate prior to the calling for final protective fires. Riflemen engage enemy personnel within the fire team sector; fire team leaders fire the M203 at the largest concentration of enemy personnel within the fire team sector. Normally, the largest concentrations will be along the PDFs of the automatic rifles if the PDFs were properly positioned.

d. Enemy Reaches the Fighting Squad's Position. Enemy infantry reaching the squad's fighting position are driven out by fire, grenades, the bayonet, and hand-to-hand combat. The success of the defense depends upon each rifle squad defending in place. A stubborn defense by front line squads breaks up enemy attack formations and makes him vulnerable to counterattack by reserve units. The squad does not withdraw except when specifically directed by higher authority. The squad is prepared to fight from all around when the enemy has penetrated.

5207. Defense Against Mechanized Attack
When tanks or other armored vehicles support an enemy infantry attack, the primary target of the squad is the hostile infantry. This holds true whether the enemy infantry is on foot (dismounted), mounted in armored personnel carriers (APCs) or in trucks. If the enemy infantry is mounted in trucks, they can be engaged with small arms; if in APCs, they can be engaged with small arms using armor piercing ammunition (if available) and anti-tank weapons. The goal is to slow down the infantry movement by making them dismount. This will either separate the enemy infantry from the tanks or force the tanks to slow down to keep pace with the dismounted infantry. When hostile infantry does not afford a target, the squad may direct its small arms fire and anti-tank weapon against the aiming devices and vision slits of enemy armor. Anti-tank weapons are used to destroy enemy tanks or to damage the tracks and suspension system to the point where the tank can no longer move (mobility kill). Under no circumstances will the squad be diverted from its basic mission of engaging and destroying the hostile infantry. Every effort is made to separate the enemy tanks from the enemy infantry because the tanks, even if they pass through the squad defensive position, are very vulnerable to crew served antitank weapons once they are stripped of the supporting infantry. Tanks are vulnerable from the rear.

5208. Movement to Supplementary Fighting Positions
If the fighting position of an adjacent squad is penetrated by the enemy, the squad leader shifts a part of the squad's fire into the penetrated area, and, if necessary, moves some men to supplementary fighting positions protecting the threatened flank. If the squad fighting position is threatened by attack from the rear, the squad leader moves some men to supplementary fighting positions protecting the rear. In open flat terrain, the squad leader simply orders his men to shift their fire to the rear. Prior to moving men to supplementary fighting positions, the squad leader, if possible, requests the approval of the platoon commander. When it is not possible to request permission, the squad leader notifies the platoon commander of his action as soon as possible. The squad leader avoids moving an entire fire team to supplementary fighting positions, but instead moves one or two men from each fire team, depending on the number required to protect the flank or rear. In any case, men moving to supplementary fighting positions follow the route that affords the best cover.

5209. Local Security for Platoons and Companies
The squad often furnishes local security for the platoon and company. Security posts from two to four men are stationed by the platoon commander or company commander up to 460 meters (effective small arms range) forward of the platoon battle position. Small patrols are often used to cover the ground between security posts or as a substitute for security posts. The company commander or platoon commander designates the general positions to be occupied by the security posts and the routes to be covered by the patrols. The squad leader may find his squad divided into small security posts and patrols covering the platoon or company front and flanks. His duties then include--

• Checking to see that security posts are well concealed and permit observation of the ground over which the enemy is expected to advance.

• Checking to see that patrols are following the prescribed routes.

• Passing on to his men all available information regarding both friendly and enemy forces.
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· Instructing his men as to what action to take in case of enemy attack.

· Informing the platoon commander or company commander immediately of enemy activity.

When the enemy approaches, security posts and patrols take the following actions:

· Notify the platoon commander or company commander immediately of the enemy's strength, actions, direction of advance, and weapons and equipment.

· On order, withdraw along a predetermined route to the platoon battle position in sufficient time to prevent being engaged in close combat. After reaching the platoon battle position, report all information regarding the enemy to the commander who originally ordered the patrol or security element.

5210. Security Forces

a. The squad may serve as part of a security force. Security forces are assigned one of three types of missions—screen, guard, or cover.

(1) A screen is a security element whose primary task is to observe and report information, avoiding decisive engagement with the enemy. A screen accomplishes the following tasks:

· Provides early warning of enemy approach.

· Gains and maintains enemy contact and reports enemy activity.

· Within capabilities, destroys or repels enemy reconnaissance units.

· Impedes and harasses the enemy with indirect fires.

· Guides reaction forces.

(2) A guard protects the main force from attack, direct fire, and ground observation by fighting to gain time, while also observing and reporting information. A guard accomplishes the following tasks:

· Provides early warning and maneuver space to the front, flanks, and rear of the main force.

· Attacks, defends, or delays, within its capabilities, to protect the main force.

(3) A covering force is a force that operates apart from the main force for the purpose of intercepting, engaging, delaying, and deceiving the enemy before he can attack the main force. A covering force accomplishes the following tasks:

· Gains contact with the enemy.

· Protects the main force from engagement.
Denies the enemy information about the size, strength, composition, and objective of the main force.

Destroys enemy reconnaissance and security forces.

Develops the situation to determine enemy disposition, strengths, and weaknesses.

b. The location and composition of the security force is determined by the commander of the main force. He will organize the security force according to the mission he gives it--screen, guard, or cover.

c. Generally, the role of the rifle squad as part of a security force will be the same, regardless of the mission assigned to the security force. The squad will report enemy sightings, take the enemy under fire, and withdraw only on orders from the platoon commander or the commander of the security force.

d. Withdrawal routes will have been previously determined and reconnoitered. Upon withdrawal and passage through the forward friendly unit, the squad will return to its parent platoon (if the squad had been operating independent of the platoon), which is normally part of a reserve unit.
Chapter 6
Amphibious Operations

6001. Introduction
The purpose of an amphibious operation is to launch an attack from the sea on a hostile shore.

6002. Preembarkation
Preembarkation encompasses those functions that must be performed to prepare the squad for an amphibious operation. The following guidelines are to be used by the squad leader in preparation for embarking aboard ship:

· Supervise individual and unit training.
· Ensure fire team leaders are proficient in fire team and squad tactics.
· Conduct critiques of squad training and initiate corrective action.
· Conduct inspections of weapons, clothing, and equipment to ensure readiness for embarkation and the operation.
· Supervise the marking/tagging of weapons, equipment, and baggage for embarkation.
· Assemble squad in proper uniform with required equipment for mission accomplishment at designated time for embarkation.

6003. Duties Aboard Ship
The squad leader performs the following duties while the ship is underway:

a. Assigns fire team berthing areas and supervises the stowage of gear.
b. Ensures squad attends all briefings, ship's drills, and periods of instruction.
c. Ensures squad area is in good state of police.
d. Enforces applicable ships' regulations.
e. Assists in conducting and supervising physical conditioning and military subjects' training.
f. Directs and supervises care and cleaning of weapons.
g. Supervises security of individual weapons.
h. Ensures correct conduct and appearance of squad.
i. Conducts operational planning.

(1) Briefs squad on:
   · Platoon mission.
   · Scheduled rehearsals.
   · Debarkation procedure.
   · Ship-to-shore movement.
   · Enemy situation.

(2) Makes a detailed study of:
   · Maps.
   · Aerial photographs.
   · Mockups and sketches.
   · Enemy dispositions if known.

(3) Makes a preliminary estimate of the situation.

(4) Formulates tentative plan of attack.

(5) Submits tentative plan of attack to platoon commander.

(6) Completes tentative plan.

j. Issues the order and ensures thorough understanding by all members of the squad.

k. Additional duties may be prescribed for the squad leader and members of his squad.

6004. Debarkation

Debarkation is characterized by rapid and effective unloading of men and material in the shortest possible time.

a. Organization of a Boat Team. A boat team includes the personnel, equipment, and supplies assigned to one landing craft or amphibious vehicle. They are normally organized as follows:

(1) Landing Craft
   · Boat team commander.
   · Assistant boat team commander.
   · Remaining troops and equipment.

(2) Assault Amphibious Vehicle (AAV)
   · Boat team commander.
   · Assistant boat team commander.
b. Duties of Boat Team Personnel

(1) Boat Team Commander. The senior commissioned or noncommissioned troop officer of the boat team is designated the boat team commander. He has the following responsibilities:

(a) Appointing the assistant boat team commander, loaders, net handlers, and boat sign handler.

(b) Assigning personnel and equipment to positions in the landing craft or AAV.

(c) Reconnoitering routes from assigned troop assembly area to debarkation station or assigned AAV.

(d) Mustering boat teams in assembly area at the required time.

(e) Inspecting each man for uniform, equipment, and adjustment of equipment while in the assembly area.

(f) Ensuring that lashing lines are present for each piece of equipment that is to be lashed.

(g) Forming his boat team at the debarkation station (not applicable to AAVs).

(h) Supervising the debarkation of personnel and the loading equipment during debarkation (not applicable to AAVs).

(i) Maintaining boat team discipline during the ship-to-shore movement. The boat team commander has no control over the coxswain or boat crew during the ship-to-shore movement.

(j) Debarking boat team personnel and equipment from the landing craft or AAV at the beach or objective area.

(2) Assistant Boat Team Commander. The second senior commissioned or noncommissioned troop officer present normally is assigned duty as assistant boat team commander. His duty is to assist the boat team commander in carrying out duties outlined in paragraph (1), above.

c. Individual Equipment Preparations. Equipment, except for body armor, is rigged so that it may be quickly dropped from the shoulders and discarded in
the event that the individual falls into deep water while debarking from the ship. Equipment is rigged on the individual in the boat team assembly area as follows:

(1) Protective mask is slung over the right shoulder (not around the neck), riding on the right hip with the body strap unfastened and wrapped around the cartridge belt.

(2) Canteen well back on the left hip. If two canteens are worn, one is carried on each hip.

(3) This procedure can be performed at the debarkation station. The shoulder weapon is slung on the right shoulder with the muzzle up, sling loosened and to the front. The weapon is carried across the pack with the sling around the pack, bringing the weapon to a vertical position behind the left shoulder. The sling is secured in this position. The weapon should fit snugly. Men pair off to adjust weapons; one man placing the weapon on the other's pack, the other reaching down with his left hand grasping the butt of his weapon to test it for snugness and to hold it in position in order that proper sling adjustment may be made. The sling will be fastened after the weapon has been properly adjusted.

(4) The lanyard of the pistol is placed over the right shoulder (not around the neck and fastened securely to the pistol.

(5) Suspender straps attached to flak jacket; cartridge or pistol belt is left unfastened.

(6) Helmet chin strap is loose but fastened.

(7) Body armor is unfastened.

(8) Life jacket:

(a) Inherently Buoyant e.g. Kapok. This life jacket is put on after all other individual equipment is adjusted. The jacket is placed around the man's neck; crotch and waist straps are brought under the individual equipment, over the body armor, care being taken not to entangle the straps with any other equipment; crotch and waist straps are drawn tight; the tie tie straps are tied. This type is not used in AAVs.

(b) Inflatable Type. This type of life jacket is put on over the body armor before other individual equipment is put on. The back, body, and crotch straps are fastened, leaving sufficient looseness to allow for inflation.

(9) All equipment, except for life jacket, is adjusted so that it can be dropped quickly from the shoulders.
(10) Gloves are removed.

d. Movement From Assembly Area to Debarkation Station. The boat team commander leads his boat team in single file to its assigned debarkation station.

6005. Movement From Ship To Shore

a. Duties Aboard Landing Craft. When the landing craft departs the ship for designated positions in the landing area, the boat team commander performs the following:
(1) Checks to see that men and equipment are in assigned boat spaces.
(3) Upon crossing the line of departure, ensures boat paddle is removed, orders protective covers removed from weapons and equipment, unlashes equipment, fastens all cartridge belts and chin straps, and locks and loads weapons.
(4) Conducts a visual reconnaissance of the beach from the landing craft, observing enemy installations, beach condition, and objective.

b. Duties Aboard AAVs. Duties aboard an AAV are the same as those listed in paragraph 6005a.

c. Debarkation From Landing Craft. Personnel debark on order when the landing craft beaches. Life jackets are removed when personnel reach a good covered position.

d. Debarkation From AAVs. Squads debark as a unit to maintain tactical unity. When units reach a good covered position life preservers are removed.

e. Emergency Abandonment From Landing Craft and AAVs

(1) Landing Craft. If a landing craft is in danger of sinking, combat equipment is discarded by the individual. Leaders must set the example and maintain control of members of the boat team. When the landing craft has sunk beneath the boat team, personnel stay together and swim toward the nearest refuge. If the boat is a fire, members of the boat team, on order, debark over the side quickly.

(2) AAV. The primary principle in escape operations from amphibious vehicles is strict attention to the orders of the vehicle crew chief and maintenance of discipline among the boat team.

(a) Debarkation From a Sinking AAV. On order of the vehicle crew chief, the boat team will jettison equipment, move topside, inflate life jackets and abandon the vehicle, usually from the front.

(b) Debarkation From a Sunken AAV. In the event of rapid sinking,
MCRP 3-11.2, Marine Rifle Squad (DRAFT)

...may not be possible to evacuate personnel before the vehicle slips under the surface of the water. Some air will be trapped within the personnel and cargo compartment of the sunken AAV, and will serve as a pocket of air when the vehicle has settled. This pocket of air should be sought by all personnel aboard until internal and external pressures have equalized, that is, when the water level in the troop compartment has risen to a level equal to the top of the rear personnel hatch. When equalization has taken place, the amphibious vehicle crew members will open the personnel hatch or vehicle ramp. No attempt should be made to release the hatch until they are totally submerged. Boat team personnel are then led to the hatch by crew members. Life preservers of the inflatable type will not be inflated until the hatch has been cleared.

6006. Amphibious Assault

a. Action Upon Landing. The first priority for the assault wave is the destruction of the enemy on the beach. Each squad is assigned a specific objective. The squad seizes its objective as rapidly and aggressively as possible, regardless of the progress of other elements of the platoon. Whether attacking a beach objective or pressing inland, the action of the squad must be rapid and decisive. Prompt follow up of the preliminary bombardment will give the best results. Installations and terrain features may often be seized quickly by immediate attack, whereas, a delay may require a later and more difficult attack.

b. Support Units. Machine gun, SMAW, and mortar squads are normally boated with the assault rifle squads to form the boat teams of the leading wave. These personnel are assigned definite objectives against which they will deliver supporting fire. The squad leader must know how to employ these weapons, and the entire squad must be trained to operate with them.

c. Future Actions during OMFTS. The centerpiece of the preparations for the future of expeditionary warfare is known as Operational Maneuver From the Sea. The heart of Operational Maneuver from the Sea (OMFTS) is the maneuver of amphibious forces at the operational level where Marines have the ability to operate over-the-horizon, aimed at objectives behind an enemy defense either on a shoreline or inland. OMFTS will require rapid movement, not merely from ship to shore, but from ship to objectives that may be miles away from blue waters and from inland positions back to offshore vessels. This evolutionary development in expeditionary operations comes from significant enhancements in communications, mobility of the AAV and MV-22 and the lethality of conventional weapons. Technological developments will enable OMFTS to become reality by 2015. What does this mean to the Marine rifle squad leader? OMFTS means that small units will have unprecedented combat power and will require our squads to be dispersed, aggressive and fast-moving. Small unit leaders must be comfortable in uncertain situations and be able to make rapid decisions under stress. In the future, amphibious operations may look different then those of our past due technological innovations and changes in the way the Corps approaches tactical situations. Leaders at all levels must be able to make informed judgments.
with little information, take decisive action and thus ensure that OMFTS can be successfully executed.
Chapter 7
Helicopterborne Operations

7001. Introduction

Helicopterborne operations are tactical movements by helicopter to support the ground tactical plan. A helicopterborne assault is a landing of helicopterborne forces behind, within or adjacent to an enemy for the purpose of controlling key terrain that gives the helicopterborne force a position of advantage relative to the enemy. In maneuver warfare tactics, helicopterborne forces typically land behind, within, or adjacent to the enemy positions while pressure is being applied to the enemy flanks or front by mechanized or footmobile forces.

7002. Concept of Employment

Infantry units can be organized and equipped to conduct helicopter borne operations. Helicopter borne forces can be employed to seize key terrain; to isolate pockets of resistance; to conduct link ups with other forces; and to conduct diversionary actions, raids, combat patrols, deep reconnaissance, observation and surveillance, and operations against guerrillas.

7003. Basic Definitions

a. Helicopter Team. A helicopter team is commonly called a heliteam. A heliteam is the tactical unit, equipment, and supplies lifted in one helicopter at one time. Each heliteam is identified by an assigned serial number, which also identifies that aircraft with its helicopter flight or wave. In forming heliteams, tactical integrity is preserved to the maximum extent possible (A heliteam must retain the ability to fight upon disembarkation). The size of the heliteam is determined by the tactical mission, the weight carrying capacity of the helicopter, and the weight of the troops and equipment to be transported. For planning purposes, the weight of a combat loaded Marine is 240 pounds. The senior man in the heliteam is designated the heliteam leader and is placed in charge of the heliteam.

b. Helicopter Flight/Wave. A helicopter flight consists of the helicopters that arrive together and land at approximately the same time in the same landing zone. During amphibious operations, helicopter flights are called helicopter waves. Normally, a rifle platoon is the smallest tactical unit transported in a single wave. The size of the unit that is transported in a wave usually depends on the number of helicopters available.

c. Landing Zone. A landing zone is a specified ground area for landing helicopters to embark or disembark troops and/or cargo. A landing zone is designated by a code name. It may include one or more landing sites. (See fig. 7-l.)

d. Landing Site. A landing site is a specific location within a landing zone, in which a single flight of helicopters may land to embark or disembark troops and/or cargo. Landing sites are designated by a color, such as landing site red. A landing site contains one or more landing points.
e. Landing Point. A landing point is a point within a landing site where one vertical assault aircraft can land. Landing points are designated by two digit numbers, such as landing point 12. (See fig. 7-1.)

Figure 7-1. Helicopter Landing Zone.

7004. Helicopterborne Operations Training

The objective of helicopterborne operations training is to familiarize personnel with its techniques and ensure that these operations are conducted with maximum speed, flexibility, and timeliness.

a. Heliteam Organization. Heliteams are organized as follows:
   · Heliteam leader.
   · Assistant heliteam leader.
   · Remaining members of the heliteam and their equipment.

b. Heliteam Leader's Responsibility. The senior commissioned or noncommissioned troop officer of the heliteam is the heliteam leader. His responsibilities are as follows:
   · Inspect each individual for proper uniform, equipment, and proper adjustment of equipment while in the assembly area.
   · Muster and organize the heliteam in the assigned assembly area.
   · Ensure that equipment assigned the heliteam is properly located before the team is called to the holding area or pickup zone.
   · Lead his heliteam from the assembly area to the holding area, pickup zone, and loading point.
   · Supervise enplaning of his heliteam.
   · Supervise deplaning of heliteam personnel and equipment at the landing site.

c. Assistant Heliteam Leader's Responsibility. The second commissioned or noncommissioned troop officer is the assistant heliteam leader. He assists the heliteam leader. He must be thoroughly familiar with all duties of the heliteam leader and assumes leadership when necessary.

d. Loading Procedure. Troops will be assembled into an assembly area. Here orders are issued and administrative matters are completed. Troops are assembled into heliteams and briefed. When directed, the heliteams are moved to the holding area. The assembly area may also serve as the holding area. From the holding area, heliteams are moved to a pickup point within the pickup zone. (See fig. 7-2.)
Figure 7-2. Pickup Zone Operation.

e. Loading. Loading is conducted with the maximum speed commensurate with safety. Specific procedures for loading, by type of aircraft and according to the situation, will be prescribed in local SOPs. To assist in loading drills, the following procedures may be used as guides:

(1) On signal from the pickup zone control officer or NCO in the pickup zone, the heliteam approaches the aircraft on the double with the heliteam leader leading and the assistant heliteam leader bringing up the rear.

(2) The heliteam leader ensures that team members are in proper sequence within the column to facilitate rapid loading of personnel and equipment.

(3) Upon reaching the entrance to the aircraft, the heliteam leader takes a position outside, slings his rifle, and assists team members in loading.

(4) Personnel enter the aircraft carrying rifles in their hands.

(5) The passenger manifest is passed from the heliteam leader to the troop loading assistant within the pickup zone control team. See *(MCWP 3-11.4) Tactical Fundamentals of Helicopterborne Operations,* for details concerning passenger manifesting.

(6) When seated, each Marine places his rifle between his knees, fastens his safety belt, and raises his right arm to signal the heliteam leader that he is ready for takeoff.

(7) When the heliteam is strapped in and ready for takeoff, the heliteam leader gives the crew chief a ready signal that has previously been agreed upon by the lifted troop unit and the helicopter unit. Some aircraft have been modified to provide voice radio communications between the pilot and the heliteam leader.

f. Loading Aboard Ship. Loading aboard ship is the same as that ashore. The organization and physical appearance of amphibious assault ships differ according to the ship's class, but general heliteam loading procedures remain the same.

g. Landing. When approaching the landing zone, but shortly before touchdown, the pilot or crew chief will orient the heliteam leader with relation to direction. Besides identifying north, south, east, and west, he must establish for the leader his position in relation to an object that is well known to him on the ground. When the aircraft has landed, the pilot, copilot, or the crew chief will give the signal to unload. Personnel will unfasten safety
belts and unload quickly. This is necessary to ensure that aircraft are not exposed for a long period in the landing zone.

7005. Conduct of the Helicopterborne Assault

a. Planning. The principles of offensive combat are the same for the employment of helicopter borne forces as for normal land combat. The squad leader prepares for the helicopter borne assault by carrying out the following duties:

(1) Makes a preliminary estimate of the situation.

(2) Conducts map and aerial photograph reconnaissance.

(3) Coordinates with adjacent squad leaders.

(4) Formulates a tentative plan of attack to include:

   · Heliteam organization.

   · Scheme of maneuver (clearing squad sector of landing site and seizure of objectives).

   · Fire support.

(5) Submits his tentative plan of attack to platoon commander.

(6) Briefs the members of the squad on the platoon mission.

(7) Completes the plan, issues the order, and supervises

b. Initial Ground Action

(1) Initial Assault. The initial assault involves seizing and establishing landing sites. Each squad of the first wave will be assigned a sector of responsibility for all or part of the landing site. Upon landing, the squads will seize their sectors.

(2) Seizure of the Landing Site. When the area is seized, the squad sets up a hasty defense to ensure initial landing zone security. Concurrent with operations, the squad leader accomplishes reorganization and control. Contact with friendly units is established as rapidly as possible.

(3) Follow up. Units landed in succeeding waves are employed, as necessary, to ensure seizure of the landing zone.
Chapter 8
Patrolling

Section 1. Patrol Organization

8101. General
A patrol is a detachment of ground forces sent out by a larger unit for the purpose of gathering information or carrying out a destructive, harassing, or security mission. Patrols may range in size from fire team to platoon, depending on the type patrol, its mission, and its distance from the parent unit. While most combat patrols should be platoon sized, reinforced with crew served weapons, the Marine rifle squad is ideally suited for reconnaissance patrols. For more detailed information on patrolling, see MCWP 3-11.3, Scouting and Patrolling.

8102. General Organization

The platoon commander designates a patrol leader, who is normally one of his squad leaders, and gives him a mission. The patrol leader then establishes his patrol headquarters and the task organizes the units required to accomplish the mission.

a. Patrol Headquarters. The patrol headquarters is composed of the patrol leader and personnel who provide support for the entire patrol, such as a forward observer, corpsman, and radio operator.

b. Patrol Units. Patrol units are subdivisions of patrols. Personnel are assigned to units based on the mission of the patrol and the mission of individuals within the patrol.

c. Reconnaissance Patrol. A reconnaissance patrol collects information about the enemy, terrain, or resources. It relies on stealth and fights only when necessary to accomplish the mission or defend itself. A reconnaissance patrol maybe organized into two units:

(1) The reconnaissance unit reconnoiters or maintains surveillance over the objective.

(2) The security unit secures the objective rally point, gives early warning of enemy approach, and protects the reconnaissance unit.

d. Combat Patrol. A combat patrol is a fighting patrol. Because the patrol is assigned a mission that may require it to engage the enemy, a combat patrol is stronger and more heavily armed than a reconnaissance patrol. A combat patrol is assigned a mission to destroy enemy troops, equipment, or installations; capture enemy documents, equipment, or installations; and, as a secondary responsibility, gather information. A combat patrol maybe organized into three units.

(1) The assault unit engages the enemy at the objective.
(3) The security unit secures the objective rally point, isolates the objective, and covers the patrol's withdrawal from the objective area.

(4) The support unit provides supporting fires for the assault unit attack, and covering fires, if required, for its withdrawal. The support unit usually is task organized to include automatic weapons in order to provide a high volume of fire to support the assault units.

8103. Special Organization

Patrol units are further subdivided into teams, each of which performs essential, designated tasks.

a. The reconnaissance unit may be divided into reconnaissance and security teams.

b. The assault unit is usually divided into an assault team and one or more search/demolition teams.

c. If the support unit is to be divided into teams, each team must be given clear instructions as to what type support must be provided, at what location, and during what phase of the patrol.

d. The patrol leader may divide the security unit into reconnaissance or security teams as deemed necessary.

8104. Task Organization

The patrol leader must task organize the patrol in such a manner as to make sure that each individual, team, and unit is assigned a specific task or tasks. In addition, it is imperative that all the patrol members know how to perform the tasks assigned to all members of the patrol. This may not be possible in cases where trained technicians are required to perform certain tasks; however, the requirement for those technical tasks to be performed will almost certainly be the exception rather than the rule. The patrol leader must plan for maximum flexibility to take care of an emergency and ensure that the patrol's mission is not put in jeopardy with the loss of a couple of key members, a team, or an entire element.

Section II. Patrol Preparations

8201. Mission

The mission assigned to a patrol must be clear and oriented on one objective; more than one primary objective or an indefinite mission invites confusion, casualties, and failure.

8202. Platoon Commander's Responsibilities
a. Provide Information. The platoon commander, having received his guidance from the company, will conduct a briefing with the squad leader who will be leading the patrol. During that briefing, the platoon commander will provide all the instructions, information, and guidance the patrol leader needs to plan and conduct his patrol. The briefing will include information such as--

- The mission of the patrol.
- General routes to be followed and/or areas to be avoided.
- Known or suspected enemy dispositions.
- Location and activities of friendly troops.
- Outposts or other security elements through which the patrol must pass.
- Terrain and weather conditions.
- Missions and routes of other patrols.
- Time patrol is to depart and return.
- Method of reporting information while on patrol (radio or messenger), place where messengers are to be sent, and where the patrol leader is to report upon completion of the patrol.
- Challenge and password to be used during the time the patrol is on its mission.
- Any special instructions such as essential elements of information sought by higher headquarters.
- Time and place the Patrol Leader can plan and rehearse (prepare for combat) with his patrol.

b. Provide Required Personnel and Equipment. The platoon commander will also inform the patrol leader of nonorganic personnel and equipment available to him, such as--

- Machine gun and/or antiarmor teams.
- Mortar, artillery forward observers and/or TACP personnel.
- Radio operator(s).
- Demolition men.
c. Provide Other Support. The platoon commander will ensure that the patrol is provided with the necessary rations, water, ammunition, radios and batteries, maps, and any other items the patrol (including attachments) will require to complete the mission.

d. Review the Patrol Leader's Plan. Once the patrol leader has completed his plan, he will then brief the platoon commander on its contents. This discussion between the two should satisfy the platoon commander that the patrol leader has completely understood the mission and desired results of the patrol as it was briefed to him, and that the patrol order provides a workable means of accomplishing the desired goals. Also at this time the platoon commander will advise the patrol leader if he desires to inspect the patrol prior to its departure.

e. Debrief the Patrol. Upon the patrol's return, the platoon commander, company commander, or battalion S2 officer debriefs the patrol leader and other patrol members. The debriefing should be conducted as soon as possible after the patrol's return, while information is still fresh in the minds of patrol members.

f. Control of the Patrol. It must be remembered that movement of troops outside friendly lines while in the defense, or away from the main body while in the offense or on a march, is conducted only with the approval of the company commander. The company commander controls the patrol through the platoon commander.

8203. Patrol Leader's Preparation

During planning, the patrol leader uses the patrol steps, a series of mental and physical processes to ensure that all required events are planned for and all patrol members know their duties. The patrol steps incorporate the troops leading procedures discussed in appendix C, but are addressed in greater detail. The normal sequence for the patrol steps is listed below, but the sequence may vary depending on availability of personnel, times at which a reconnaissance can be conducted, and the extent of coordination already made by the platoon commander or company commander.

* Begin Planning (METT-T)
  * Study the mission
  * Enemy
  * Plan use of time.
  * Study the terrain and enemy situation.
  * Task organize the patrol.
  * Select men, weapons, and equipment.
  * Arrange for reconnaissance and coordination.
  * Issue the warning order.
  * Coordinate (continuous throughout).
· Make a reconnaissance.
· Complete detailed plans.
· Issue the patrol order.
· Supervise (continuous), inspect, rehearse, and reinspect.
Execute the mission.

8204. Begin Planning/Study the Mission

The patrol leader carefully conducts a METT-T analysis. He studies the mission and all other information provided him by the platoon commander, making notes as he does so. In so doing, he identifies other significant tasks (implied missions), which must be accomplished, in order for the patrol to accomplish its primary mission. These implied missions are further identified as missions for the patrol's elements and teams that may require special preparation, planning, personnel, and/or equipment.

8205. Plan Use of Time

In order for the patrol leader to properly use the time allotted to him from receipt of the platoon commander's order until departure from friendly lines, he prepares a schedule which includes every event which must be done prior to departing friendly lines. In preparing the schedule, the patrol leader works backwards from the time of departure of friendly lines to the present. Some of the key events he knows must be done are rehearsals (day and night), issuing the patrol order to the patrol, inspecting the patrol, and, if the situation permits, making a reconnaissance of the patrol routes and the objective. An example of a patrol leader's schedule could be as follows:

0239- Return to friendly lines/area.
2400-0230 Movement to friendly lines/area.
2330-2400 Accomplish mission and reorganize.
2230-2330 Recon objective area.
2000-2230 Movement to objective rally point.
2000-Depart friendly lines/area.
1945-2000 Movement to departure point.
1930-1945 Final inspection.
1845-1930 Night rehearsals.
1800-1845 Day rehearsals.
1745-1800 Inspection.
1700-1745 Chow.
1630-1700 Issue patrol order.
1530-1630 Complete detailed plans.
1430-1530 Make reconnaissance.
1330-1415 Preliminary planning.
- Coordinate.
- Issue warning order.
- Select personnel, weapons, equipment.
- Organize the patrol.
- Study terrain and situation.
- Plan use of time.
- Study the mission.
- 1330-Receive platoon commander's order.

8206. Study the Terrain and Enemy Situation

The patrol leader makes a thorough map study of the terrain over which the patrol will operate. The terrain in the vicinity of the objective influences the patrol organization, the manner in which the patrol leader will conduct his reconnaissance, and the disposition of his patrol at the objective. The terrain also influences the size, organization, and equipment of the patrol.

The patrol leader studies the friendly and enemy situations and determines the effects that troop dispositions, strengths, and capabilities may have on his mission. These factors influence the routes he will use, organization of the patrol, and the weapons and equipment to be taken. The patrol leader must look from the enemy’s perspective and determine how the enemy will most likely react in order to exploit enemy weaknesses.

8207. Task organize the Patrol

Organization consists of determining the units and teams required to accomplish essential tasks. Organization is a two-step process--general organization and special organization.

8208. Select Men, Weapons, and Equipment

a. Patrol Members. Normally, the patrol leader is limited to selecting patrol members from within his own squad, with the addition of those personnel/teams made available by the platoon commander. As a rule of thumb, if the patrol leader is a squad leader, everyone in the squad will participate in the patrol. If the entire squad will not be going on the patrol, the patrol leader maintains fire team integrity whenever practicable.

b. Weapons. Patrol members are armed with organic weapons. The patrol leader should request the support of specific weapons teams when required for tasks beyond the capability of the squad. The patrol leader can task, organize his squad weapons. (ie: saw heavy support unit)

c. Equipment. There are five general purposes or areas for which the patrol leader chooses equipment.

(1) In the Objective Area. This is the equipment with which the patrol accomplishes its mission. It includes such items as ammunition (number of rounds per man), demolitions (type and amount), binoculars, night vision devices, listening devices, trip flares, and flashlights.

(2) En Route. This is the equipment which enables or assists the
patrol in reaching its objective. It includes such items as maps, compasses, binoculars, wire cutters, ropes, flashlights, ammunition (number of rounds per man), and boats.

(3) **Control.** This equipment is used in assisting the patrol leader and unit leaders in controlling the patrol while moving and during actions at the objective area. It includes such items as whistles, pyrotechnics, radios, flashlights, and luminous tape.

(4) **Routine Equipment.** This is the equipment carried by all patrol members. It includes the uniform to be worn and individual clothing and equipment to be carried.

(5) **Water and Food.** The patrol leader will specify the number of full canteens to be carried by all patrol members. Rations are rarely issued for use on patrol; however, on long patrols rations may be specified.

8209. **Issue the Warning Order**

Thus far the patrol leader has been going through the mental processes necessary for him to arrive at some initial conclusions about the patrol. He has determined how he will organize the patrol, what attachments he will need, determined a time schedule, made a thorough map reconnaissance, and has identified some implied missions that will have to be accomplished if the patrol's mission is to succeed. Now, he must alert his patrol members so they can begin their preparations.

Ideally, the patrol leader issues the warning order to all patrol members, including attachments. Often that is not possible. In that case the patrol leader must ensure that all unit leaders are present to receive the warning order.

The minimum items of information for inclusion in the warning order and a convenient format for arranging the information are shown in **figure 8-1**.

**PATROL WARNING ORDER**

1. A brief statement of the situation.
3. General instructions:
   a. General and special organization.
   b. Uniform and equipment common to all.
   c. Weapons, ammunition, and equipment.
   d. Chain of command.
   e. A time schedule for the patrol's guidance.
   f. Time, place, uniform, and equipment for receiving the patrol order.
   g. Times and places for inspections and rehearsals.
4. Specific instructions:
   a. To subordinate leaders.
   b. To special purpose teams or key individuals.
Figure 8-1. Patrol Leader's Warning Order.


b. Mission. The patrol leader reads the mission exactly as he received it.

c. General Instructions
(1) General and Special Organization. General tasks are assigned to units and teams. Specific details of tasks are given in the patrol leader's order.

(2) Uniform and Equipment Common to All. The patrol leader specifies camouflage measures to be taken and the identification to be carried.

(3) Weapons, Ammunition, and Equipment. These items are assigned to units and teams. Subordinate leaders make further assignments to teams and individuals.

(4) Chain of Command. A chain of command is established when the patrol includes personnel from outside the squad.

(5) Time Schedule. The patrol leader addresses all events from the present until the patrol departs. He also designates the place and uniform for receiving the patrol order, conducting inspections, and rehearsals.

d. Specific Instructions
(1) To Subordinate Leaders. The patrol leader gives out all information concerning the drawing of ammunition, equipment, ordnance, water, and rations; identifies the personnel he wants to accompany him on his reconnaissance; and gives guidance on any special preparation he believes will be necessary during the conduct of the mission, such as practicing stream crossings.

(2) To Special Purpose Teams or Key Individuals. The patrol leader should address requirements of designated personnel or teams, such as having point men, pacers, and navigators make a thorough map study and check their equipment.

8210. Arrange for Reconnaissance and Coordination (Continuous Throughout)
The patrol leader begins his coordination from the time he receives the order. He is primarily concerned with:
a. **Movement in Friendly Areas.** The patrol leader finds out the location of other friendly units or patrols so his patrol will not be restricted or endangered in its movement; he plans his routes and fires accordingly.

b. **Departure and Reentry of Friendly Lines/Areas.** The patrol leader checks with the small unit leaders occupying the areas through which the patrol will depart and return. He ensures that they know about his patrol, times of its departure and return, and whether or not guides from their units will be required to lead the patrol through any friendly obstacles, such as mines or wire.

c. **Fire Support.** During his briefing with the platoon commander, the patrol leader finds out what fire support is available to him during the patrol. He then finds out what artillery and mortar targets have already been plotted along the routes to and from the objective area and within the objective area itself. Next, he plans for additional fires (if necessary) along the patrol's route to the objective area, at the objective area, and to cover his withdrawal from the objective area back to his unit's position.

d. **Logistic Support.** The patrol leader must arrange for the delivery or pick up of ammunition, special equipment, demolitions, water, binoculars, etc. He must also inquire as to the use of helicopters for casualty evacuation during the patrol's movement and at the objective area.

e. **Information Checklist.** The patrol leader should try to find out as much information about the enemy as possible. Specifically, he should determine the enemy's pattern of operation--has he been conducting patrols, what type weapons does he have, what is his strength and disposition, does he use mines and booby traps, etc. If the patrol leader has access to him, the battalion S2 may be able to provide some valuable information about the enemy, including some information gleaned from prior patrol reports, aerial photographs.

### 8211. Make Reconnaissance/Coordination

Whenever possible, the patrol leader makes a physical reconnaissance of the routes he wants to follow and of the objective area. Often, because of the enemy situation, he is not able to do so, and must rely instead on his map reconnaissance and information he is able to gather from other sources. He makes final coordination with higher, or adjacent units that impact his patrol.

### 8212. Complete Detailed Plans

The patrol leader is now ready to plan his patrol in detail. Through his discussions with the platoon commander and his coordination efforts, the patrol leader has already determined the situation and the mission (paragraphs 1 and 2 of the five paragraph order). The remainder of his planning deals with how the patrol is to be executed and the tasks assigned to each element/team (paragraph 3); administrative and logistic matters (paragraph 4); and command and signal (paragraph 5).
a. Specific Duties of Elements, Teams, and Individuals. The warning order assigned
tasks to elements, teams, and key individuals. The patrol leader now assigns specific
duties to each.

b. Route and Alternate Route. The patrol leader selects the patrol routes based on
his map study, aerial photographs, his own reconnaissance, and/or consultation with
others who have been over the terrain. He chooses a route that affords concealment
from enemy observation, where little or no enemy opposition is expected, and yet
presents a minimum of obstacles to the patrol. For a night patrol, the route should
normally be planned to avoid thick undergrowth, dense woods, and ravines. Whenever
practicable, the patrol leader should plan the return via a different route. This is called an
alternate route. It is used when the primary route becomes compromised. Patrol routes are
pointed out to the patrol members by--

· Indicating the routes on a map or overlay.
· Designating objectives and checkpoints.

c. Conduct of the Patrol. The patrol leader's plan must address all the following:

· Patrol formation and order of movement.
· Departure from and reentry to friendly lines or areas.
· Rally points and actions at rally points.
· Final preparation position and actions at that position.
· Objective rally point and actions to be taken at that point.
· Actions at danger areas.
· Actions on enemy contact.
· Actions at the objective.

d. Arms and Ammunition. The patrol leader checks to see if the arms and ammunition
specified in the warning order have been obtained.

e. Uniform and Equipment. The patrol leader checks to see if all required equipment
was available and was drawn.

f. Wounded and Prisoners. The procedures for handling wounded may vary, depending
on the seriousness of the wound and if it occurs en route to the objective, at the objective,
or on the return to friendly areas. A patrol may continue on to the objective carrying its
casualties, may send them back with a detail of men, the entire patrol may return with the
 casualties, or the patrol may have to call on its parent unit for assistance. Personnel who
 become casualties at the objective area or on the return to friendly areas will normally be
 transported by whatever means are available--carried by the patrol, in vehicles, or by
 helicopter. Prisoners normally travel with the patrol, guarded by personnel so designated
 in the patrol order.

g. Signals. The patrol leader's plan addresses the type of signals to be used during the
 patrol--arm and hand signals, radio, pyrotechnic, audio. Normally, he should designate a
 primary and alternate signal for each event requiring signals.

h. Communication With Higher Headquarters. The patrol leader includes all essential
details of communication--call signs, frequencies, reporting times (usually upon reaching
checkpoints), code words, and security requirements.

i. Challenge and Password. In addition to the parent unit's challenge and password, the
patrol leader designates a challenge and password to be used within the patrol, outside of
friendly lines/areas. Usually this is assigned by HHQ.

j. Location of Leaders. The patrol leader plans his location where he can best control the
patrol, usually in the forward one third of the formation. The assistant patrol leader is
placed where he can best assist in control during movement, usually near the rear of the
formation. At the objective, the assistant patrol leader positions himself so he can readily
take command if the patrol leader becomes a casualty.

8213. Issue Patrol Order
When the patrol leader has completed his plan, he assembles the members of the patrol and
issues the order. He issues the order in a clear, concise manner, following the standard five
paragraph order format. He should--

· Ensure all patrol members are present.

· Receive a status report from his unit/team leaders on the preparatory tasks assigned
to them when he issued the warning order.

· Precede the issuance of the order with an orientation.

· Build a terrain model using dirt, rocks, twigs, etc., to help explain the concept
of operations for movement to the objective area, actions at the objective area, and
The return to friendly lines/area.

· Issue the entire order before taking questions.

· Conclude the question/answer session with a time check and announce the time
of the next event. ("It is now 1700. Everyone get some chow and I'll inspect the patrol,
in movement formation, at 1745, in that clump of pines near the company CP").
SITUATION

a. Environment. Weather, terrain, visibility; local population situation and behavior as they impact on the patrol and enemy forces.
b. Enemy Forces. Identification, location, activity, strength.
c. Friendly Forces. Mission of next higher unit, location and planned actions of adjacent units, mission and routes of other patrols, availability of supporting fires and other support.
d. Attachments and Detachments. Time and units affected.

MISSION

A clear concise statement of the task and purpose that the patrol must accomplish.

EXECUTION

a. Concept of Operations. The concept tells the where, how, and who and lays out the patrol leader's general scheme for accomplishing the mission. It outlines the following:
   (1) Commanders intent.
   (2) Task organization of the patrol.
   (3) Movement to the objective area, to include navigation method.
   (4) Actions in the objective area.
   (5) The return movement, to include navigation method.
   (6) Use of supporting forces (including illumination, if required).
b. Tasks. Missions are assigned to elements, teams, and individuals, as required.
c. Coordinating Instructions. This paragraph contains instructions common to two or more elements, coordinating details, and control measures applicable to the patrol as a whole. At a minimum, it will include:
   (1) Time of assembly in the assembly area.
   (2) Time of inspections and rehearsals (if not already conducted).
   (3) Time of departure and estimated time of return.
   (4) Location of departure and reentry of friendly lines and the actions associated with departure and reentry.
   (5) Details on the primary and alternate routes to and from the objective area.
   (6) Details on formations and order of movement.
   (7) Rally points and actions at rally points.
   (8) Final preparation position and actions at this position.
   (9) Objective rally point and actions at this point.
   (10) Actions at danger areas.
   (11) Actions in the event of enemy contact.
   (12) Details on actions in the objective area not covered elsewhere.
   (13) Estimated time of patrol debriefing. Upon return.

ADMINISTRATION AND LOGISTICS

a. Changes/additions to uniform, equipment, and prescribed loads that are different from that given in the warning order.
c. Instructions for handling wounded and prisoners.

**COMMAND AND SIGNAL**

a. **Command Relationships.** Chain of command and succession to command.
b. **Signal.** Challenge and password, arm/hand and special signals, and radio frequencies and call signs.
c. **Command Posts.** Position of patrol leader and assistant patrol leader within the patrol organization during the approach and return and at the objective.

**Figure 8-2. Patrol Order.**

8214. **Supervise (Continuous), Inspect, Rehearse, and Reinspect**

Inspections and rehearsals are vital to proper preparation. They are conducted even when the patrol leader and patrol members are experienced in patrolling.

a. Inspections determine the state of readiness of the men, both mental and physical.

(1) The patrol leader inspects the patrol just before conducting rehearsals. He looks for--

- Prescribed uniform, weapons, ammunition, ordnance, and equipment.
- Camouflage.
- Identification tags and Geneva Convention cards.
- Unnecessary equipment and personal items.

(2) The patrol leader questions each member of the patrol to ensure he knows--

- The mission, routes, and fire support plan.
- His assignment and during what part of the patrol he performs it.
- What other members of the patrol are to do at certain times during the patrol.
- Challenges and passwords, call signs, frequencies, code words, reporting times, and other pertinent details.

(2) If there is any time between the final rehearsal and the time to depart, the patrol conducts another inspection.

b. Rehearsals ensure the operational proficiency of the patrol. Plans are checked and any necessary changes are made. The patrol leader verifies the suitability of the equipment. It is through rehearsals that patrol members become thoroughly familiar with the actions they are to take during the patrol.

(1) If the patrol is to operate at night, conduct both day and night rehearsals. They should be conducted on terrain similar to that on which the patrol will operate. All actions should be rehearsed. If time is limited, only the most critical phases should be rehearsed. Action at the objective area is the most critical phase and should always be rehearsed.
(2) The patrol leader should talk the patrol through each phase, describing
the actions and having each man perform his duties. He should then walk the
patrol through all phases of the patrol, using only signals and commands that will
be used during the actual patrol.

(3) When rehearsals are completed and the patrol leader is satisfied with
the members’ performance, he makes any final adjustments to his plan or
patrol organization. He then issues final instructions to his unit/team leaders,
noting any changes he has made. While his subordinate leaders are giving the final
instructions to their men, the patrol leader informs the platoon leader that
the patrol is ready to depart.

Section III. Conduct of Patrols

8301. Formation and Order of Movement

In organizing the patrol for movement, the patrol leader determines the formation(s) in which the
patrol will move to the objective area. He also determines the location of units, teams, and
individuals in the formation. As far as practicable, the patrol leader organizes the movement so
as to maintain unit and team integrity.

The standard squad and fire team formations are adaptable to any patrol. The patrol leader may
change from one formation to another depending on the situation. Other considerations impacting
on the patrol formations are:

- Probability of contact with the enemy.
- Terrain, weather, vegetation, and visibility.
- Time allotted for the patrol to accomplish its mission and return to friendly lines/areas.

8302. Departure and Reentry to Friendly Lines/Areas

The following is one of many techniques utilized to affect departure and re-entry of friendly
lines. Any technique that allows for safe passage of lines only used.

a. During his preparation phase, the patrol leader makes contact with the leaders of the
units occupying the areas through which the patrol must depart and reenter friendly
lines/areas. In some instances coordination is done at higher levels and the patrol leader is
simply told where he is to depart and return. In either case, the patrol leader should try to have a
face-to-face session with the unit leaders to reduce the possibility of mistakes occurring during
the passage of lines.

b. The patrol leader also picks out an assembly area for his patrol to move into while he
coordinates final preparations with the unit through which the patrol will be moving. If
possible, the patrol's route from its assembly area through friendly positions should offer concealment from enemy view.

c. Once the patrol leader has received permission from the platoon commander to move out, he leads his patrol directly from its rehearsal area to the assembly area. Leaving his assistant patrol leader in charge, the patrol leader, usually accompanied by a radio operator or messenger, moves to the unit occupying the positions through which the patrol will depart. There he meets with the personnel with whom he has previously coordinated (company commander, platoon commander, or squad leader), and makes final arrangements for departure. If guides are required to lead the patrol through the unit's position and/or its local security area, the patrol leader picks them up at this time.

d. Once the departure has been coordinated, the patrol leader advances the patrol to his position. He may call the patrol forward by radio, send his messenger back to the patrol's assembly area to lead it forward, or go back himself to lead the patrol forward.

e. With the patrol assembled in its formation for movement, the patrol leader or the guide leads the patrol through the friendly positions. At the last friendly position, the patrol leader dismisses the guide to return to his own unit. He also takes this time to give any last, very brief instructions to the patrol's point or navigator if he considers it necessary. As the patrol moves past him, the patrol leader takes his position in the formation for the patrol. Usually the patrol leader transmits to his platoon commander or company commander that the patrol has departed friendly lines/area.

f. Also, during his planning, the patrol leader effects coordination with the leaders of the unit through which the patrol will return. He provides them information about the size of the patrol, general route, and expected time of return. The manner of challenge and recognition of the returning patrol is coordinated in great detail.

g. Upon returning to friendly forward local security area or front lines, the patrol leader leaves the patrol in a covered position while he and a radio operator or messenger move forward to make contact with the friendly unit in the manner previously agreed upon. Once he has made contact, the patrol leader calls the patrol forward, sends his messenger back, or returns himself to lead the patrol forward to the passage point. It is imperative that the patrol leader check each man personally as he reenters.

8303. Exercise of Control

a. The patrol leader positions himself where he can best control the patrol as a whole. The assistant patrol leader moves at or near the rear. Other unit and team leaders move with their units. All patrol members must stay alert and pass on signals and instructions.
A signal to halt may be given by any patrol member, but only the patrol leader may give the signal to resume. It is an important note that the patrol leader and the members of his patrol must be focused outward on the enemy. It is easy to get overly concerned with control when he becomes focused internally. In so doing he may diffuse effort and lose focus on the enemy.

b. Arm-and-hand signals are the primary means of communication within a patrol and should be used exclusively when near the enemy. All members must know standard infantry signals as well as any special signals and be alert to receive and pass them to other members.

c. The patrol leader should speak just loudly enough to be heard. At night, or when close to the enemy, he halts the patrol and has subordinate leaders come forward. He gives the information to them and they then pass it on to their subordinates by moving quietly from man to man.

d. Radios provide a means of positive control within a large patrol, but should only be used when arm-and-hand signals or face-to-face communication is impractical.

e. The patrol leader may designate other sound signals if he can be sure they will serve their intended purpose. Sound signals must be natural sounds that are easily understood. If used, they must be planned for and rehearsed, keeping in mind that fewer signals are better.

f. Night vision devices, are excellent aids in exercising control of the patrol. Also, small strips of luminous tape on the back of the cap or collar of patrol members can aid in keeping visual contact with the man in front.

g. An important aspect of control is personnel accountability. Personnel must be accounted for after crossing danger areas, after halts, and after enemy contact.

1. When moving in a column, the patrol leader gives the signal of "Send up the count". This is passed back to the last man who starts the count. The last man sends up the count by tapping the man in front of him and saying "one" in a low voice. This man taps the man in front of him and says, "two". This continues until the count reaches the patrol leader. The men behind the patrol leader, plus the patrol leader, and the men he knows to be ahead of him, should equal the total of the patrol.

2. After enemy contact or after dispersal and reassembly at a rally point, the patrol leader or senior man obtains a count by the quickest method available. Time and the situation permitting, he should go from man to man himself. This also gives him the opportunity to check on the condition of the men.

3. The patrol leader may give guidance in his patrol order to send up the
count automatically at various times or after certain events/occurrences during the patrol.

8304. Navigation

One or more men in the patrol are assigned as navigators. Their function is to assist the patrol leader in maintaining direction by use of the compass. The patrol leader also assigns men as pacers to keep track of the distance from point to point. He should assign at least two pacers and use the average of their counts for an approximation of the distance traveled. The pacers are separated so they will not influence each other's count.

The route is divided into legs, with each leg starting at a recognizable point on the ground. The pacers begin their counts from zero at the beginning of each leg. It may be convenient to use the distance from checkpoint to checkpoint as a leg. Periodically, the patrol will call for a pace count. The count from both pacers is sent up in the same manner as the personnel count. All patrol members must understand that the count of both pacers must be sent forward, and the counts will be different.

8305. Security

The patrol leader organizes the formation to provide security while on the move, during halts, at danger areas, and upon reaching checkpoints and rally points. Scouts are always employed to the front and rear of the formation. Consistent with visibility, the terrain, and vegetation, scouts are employed to the flanks. When employment of flank scouts is impractical, they move with the patrol formation, but maintain observation to their assigned flanks. Depending on the size of the patrol, scouting units may consist of one or two men, or a fire team. Regardless of the size of the scouting units and where they are employed, they must maintain visual contact with the patrol leader at all times.

a. Day Patrols

(1) The patrol is dispersed consistent with control, visibility, cover, concealment, and the enemy situation.

(2) Scouts are employed to the front and rear, and to the flanks, if practical.

(2) The patrol moves so as not to silhouette itself when moving along high ground.

(4) Movement is along available covered and concealed routes, and exposed areas are avoided whenever possible.

(5) The patrol avoids known or suspected enemy locations and built-up areas.

(6) The patrol maintains an even pace. Sudden movements attract attention.

d. Night Patrols
(1) Patrol members stay closer together.

(2) Silent movement is emphasized.

(3) Speed of movement is slowed to reduce the possibility of men becoming separated from the patrol.

c. Halts. The patrol leader halts the patrol occasionally to observe and listen for enemy activity. During these security halts, on signal from the patrol leader, every man freezes in place, remains quiet, observes, and listens. Security halts are called upon reaching danger areas and periodically along the route. When the patrol gives the signal to resume movement, the signal is passed rearward. The last man, upon receiving the signal, gives a "thumbs up" which is passed from man to man forward to the patrol leader. Once the patrol leader gets the "thumbs up" from the men to his rear, he signals forward to resume movement.

8306. Movement Control Measures

a. Checkpoints. A checkpoint is a predetermined point on the ground used as a means of controlling movement. During his map study or physical reconnaissance, the patrol leader decides the number and locations of checkpoints to be plotted along the patrol route. These are coordinated with his parent unit before the patrol leaves. Checkpoints are assigned numbers, not in sequential order. Normally, the patrol leader will call in upon reaching checkpoints so that the parent unit will be able to follow the progress of the patrol toward its objective and on its return to friendly lines/area.

b. Rally Points. A rally point is an easily identifiable point on the ground, designated by the patrol leader, where the patrol can reassemble/reorganize if it becomes dispersed. It should provide cover and concealment and be defensible for a short time. All rally points are considered tentative until they are reached, found to be suitable, and designated by the patrol leader. He ensures that all patrol members are notified when a rally point is so designated, either by arm and hand signal or by passing the word orally. He also points out identifying features that mark the limits of the rally point.

(1) Types of Rally Points

(a) Initial Rally Point. This is a point within the friendly area where the patrol can reassemble if it becomes dispersed before departing the friendly area or before reaching the first rally point designated en route. It may be the patrol assembly area. The initial rally point location must be coordinated with the commander in whose area it lies.

(b) En Route Rally Points. These are points selected along the patrol’s route to the objective and from the objective back to friendly lines/area. The patrol leader selects them as the patrol passes through likely areas for which rally points are needed.
(c) **Objective Rally Point.** The ORP is that location in the vicinity of the objective where the patrol makes the final preparations prior to approaching the objective. This position must provide the patrol concealment from enemy observation and, if possible, cover from enemy fires. It is this position from which the patrol leader's reconnaissance is made; it serves as the release point from which units and teams move into position to accomplish the mission at the objective. It is also a position to where the patrol returns to reorganize, pass pertinent information for continuation of the patrol.

(2) **Selecting Rally Points.** The patrol leader selects likely locations for tentative rally points during his map study or reconnaissance. He always selects a tentative initial rally point and tentative objective rally point, and identifies them in his patrol order. He also selects additional rally points along the patrol route, if necessary. Rally points should always be designated on both the near and far sides of danger areas, such as roads, trails, open areas, and streams.

(3) **Actions at Rally Points.** The patrol leader plans the actions to be taken at rally points and instructs the patrol accordingly during the patrol order. Planned actions at the initial rally point and en route rally points must provide for the continuation of the patrol as long as there is a reasonable chance to accomplish the mission. Actions to be taken at rally points should address--

· Recognition signals for assembly at rally points.

· The minimum number of men required and the maximum waiting time before the senior man at the rally point moves the rallied patrol members on to the objective.

· Instructions for patrol members who find themselves alone at a rally point.

**8307. Actions at Danger Areas**

A danger area is any place where the patrol is exceptionally vulnerable to enemy observation or fire (e.g., open areas, roads, trails, and obstacles such as barbed wire, mine fields, streams, and lakes). Any known or suspected enemy position the patrol must pass is also a danger area. The patrol leader plans for crossing each danger area identified during his reconnaissance or map study, and includes the plans in his patrol order. It is recognized that any area in the enemy AO is dangerous. Danger areas are those areas that might permit the enemy to ambush a patrol or allow for unrestricted observation. Patrol leaders develop a sense for which areas are dangerous as distinguished from a danger area.

When a patrol approaches a danger area, the near side of the danger area is reconnoitered first; then the patrol leader sends scouts to reconnoiter the far side. The scouts should also reconnoiter the tentative rally point on the far side. Once the scouts report that the far side is clear of enemy, the remainder of the patrol crosses the danger area. As each individual/group crosses the danger
area, others provide cover. If possible, enemy obstacles are avoided as they are usually covered by fire.

In crossing a river, the near bank is reconnoitered first; then the patrol is positioned to cover the far bank as scouts are sent across. When the scouts report that the far bank is clear of enemy, the remainder of the patrol crosses as rapidly as possible. If the crossing requires swimming, the patrol uses improvised rafts to float weapons, ammunition, and equipment across the river. Roads and trails are crossed at or near a bend or a narrow part.

A patrol may be able to take advantage of battlefield noises to help cover its movement across danger areas near enemy positions. If supporting arms are available, the patrol leader can call for them to divert the enemy's attention while the patrol crosses the danger area or passes the enemy position.

**8308. Immediate Actions Upon Contact With the Enemy**

**a. General.** A patrol may make contact with the enemy at any time. Contact may be made through observation, a meeting engagement, or an ambush. Contact may be visual, in which the patrol sights the enemy but is not itself detected. In this case, the patrol leader can decide whether to make or avoid physical contact, based on the patrol's mission and capability to successfully engage the enemy.

1. A reconnaissance patrol's mission prohibits physical contact, except that necessary to accomplish the mission. Its actions are defensive in nature. Physical contact, if unavoidable, is broken as quickly as possible and the patrol, if still capable, continues its mission.

2. A combat patrol's mission is to seek or exploit opportunities for contact. Its actions are offensive in nature. When making enemy contact, the patrol's actions are swift and violent in an effort to inflict maximum damage on the enemy, followed by immediate relocation to another area, or return to friendly lines/area. Patrols can expect to make physical contact with the enemy either in a meeting engagement or an ambush.

(a) A meeting engagement is a combat action that occurs when a patrol, which is incompletely deployed for battle, engages the enemy at an unexpected time and place. It is an accidental meeting where neither the patrol nor the enemy expect contact and are not specifically prepared to deal with it.

(b) An ambush is a surprise attack by fire from concealed positions on a moving or temporarily halted force.

**b. Immediate Action (IA) Drills.** During a patrol, contacts are often unexpected, occur at very close ranges, and are short in duration. Enemy fire may allow leaders little or no time to evaluate situations or give orders. In these situations, IA drills provide a means for swiftly initiating positive offensive or defensive action, as appropriate. IA drills are designed to provide swift and positive small unit reaction to visual or physical contact.
with the enemy. They are simple courses of action that can be initiated by using minimal
signals or commands. All patrol members must be trained as a unit in conducting IA drills; even
then, all drills must be rehearsed prior to going on patrol. It is not feasible to design an IA drill
for every possible situation. It is better to know one drill for each of a limited number of
engagements or occurrences.

c. Immediate Halt Drill. When the situation requires the immediate, in place halt of the
patrol, the immediate halt drill is used. It is used when the patrol detects the enemy but is
not itself detected. The first man detecting the enemy gives the arm and hand signal to
FREEZE. Every man halts in place, weapon at the ready, and remains absolutely
motionless and quiet until further signals or orders are given.

d. Air Observation and/or Attack Drills. These drills are designed to reduce the danger
of detection from aircraft and casualties from air attack.

(1) Air Observation. When an unidentified or known enemy aircraft which
may detect the patrol is heard or seen; the appropriate IA drill is FREEZE.

(2) Air Attack. When an aircraft detects the patrol and makes a low level
attack, the IA drill for air attack is used. The first man sighting an attacking
aircraft shouts, "Aircraft, front (rear, left, right)". The patrol moves quickly
into line formation, well spread out, at right angles to the aircraft's direction
of travel. As each man comes on line, he hits the deck, using available cover.
He positions his body at right angles to the aircraft's direction of travel, to
present the shallowest target possible. Between attacks (if the aircraft returns
or there is more than one attacking aircraft), patrol members seek better
cover. Attacking aircraft are fired on only on command of the patrol leader.

e. Meeting Engagement Drills

(1) Hasty Ambush. This IA drill is both a defensive measure to avoid contact
and an offensive one to make contact. It may often be a subsequent action after
the command to freeze has been given. When the signal HASTY AMBUSH is
given, the entire patrol moves quickly to the right or left of line of movement,
as indicated by the signal, and takes up the best available concealed firing
positions. The patrol leader initiates the ambush by opening fire and shouting,
FIRE; thus ensuring the ambush is initiated even if his weapon misfires. If
the patrol is detected before this, the first man aware of the detection initiates
the ambush by firing and shouting.

(a) When used as a defensive measure to avoid contact, the hasty ambush is not
initiated unless the patrol is detected.

(b) When used as an offensive measure, the enemy is allowed to
advance until he is in the most vulnerable position before the ambush
is initiated.
(c) An alternate means for initiating the ambush is to designate an individual (e.g., point or last man) to open fire when a certain portion of the enemy unit reaches or passes him.

(2) Immediate Assault. This IA drill is used, defensively, to make and quickly break undesired but unavoidable contact (including ambush); and, offensively, to decisively engage the enemy (including ambush). When used in a meeting engagement, men nearest the enemy open fire and shout, "Contact, front (rear, left, right)". The patrol moves swiftly into line formation and assaults.

(a) When used defensively, the assault is stopped if the enemy withdraws and contact is broken quickly. If the enemy stands fast, the assault continues through the enemy positions and further, until enemy contact is broken.

(b) When used offensively, the enemy is decisively engaged. Any enemy attempting to escape are pursued and killed or captured.

(3) Breaking Contact. Two methods used in breaking contact are the use of fire and maneuver and by using the clock system.

(a) To break contact by using fire and maneuver, one portion of the patrol returns the enemy fire while another portion moves by bounds away from the enemy. Each portion of the patrol covers the other by fire until the entire patrol breaks contact.

(b) In using the clock system to break contact, the patrol leader shouts a direction and a distance. Twelve o'clock is always the direction of movement of the patrol. If the patrol leader shouts, "Ten o'clock—two hundreds", it means for the patrol to move in the direction of ten o'clock for two hundred meters. Patrol members try to keep their relative positions as they move so the original formation is disrupted as little as possible, since this will facilitate reorganization once the patrol has broken contact. Subordinate leaders must be alert to ensure that their unit and team members receive the correct order and move as directed.

f. Counterambush Drills. When a patrol is ambushed, the IA drill used is determined by whether the ambush is near (enemy within fifty meters of the patrol) or far (enemy beyond fifty meters of the patrol). Fifty meters is considered the limit from which the ambushed patrol can launch an assault against the enemy.

(1) In a near ambush, the killing zone is under very heavy, highly concentrated, close range fires. There is little time or space for men to maneuver or seek cover. The longer they remain in the killing zone, the more certain their deaths. If attacked from near ambush:

(a) Men in the killing zone immediately return fire without waiting for
any order or signal. The action should be swift, violent, and destructive. The men fire their weapons at the maximum rate, throw hand grenades, and yell as loudly as possible—anything to kill as many enemy as they can, and confuse the enemy survivors. The next action should be to get out of the kill zone. Once out of the kill zone, a decision can be made on whether to continue the attack or break contact with the enemy.

(b) Men not in the killing zone maneuver against the ambush force, firing in support of those assaulting.

(e) If the ambush force is small enough to be routed or destroyed, the patrol members should continue with their assault and supporting fire. If the force is well disciplined and holds its ground, then the patrol members should make every effort to break contact as quickly as possible, and move to the last en route rally point to reorganize.

(2) In a far ambush, the killing zone is also under very heavy, highly concentrated fires, but from a greater range. The greater range precludes those caught in the killing zone from conducting an assault. The greater range does, however, permit some opportunity for the men to maneuver and seek cover. If attacked from far ambush:

(a) Men in the killing zone immediately return fire, take the best available cover, continue firing until directed otherwise, and make an effort to get out of the kill zone.

(b) Men not in the killing zone maneuver against the ambush force, as directed.

(c) The patrol leader either directs his unit and team leaders to fire and maneuver against the ambush force, or to break contact, depending on his rapid assessment of the situation.

(3) In each situation, the success of the counterambush drill employed is dependent on the men being well trained in recognizing the nature of an ambush and well rehearsed in the proper actions to take. Each man has to be confident in himself, his abilities, and those of his fellow Marines. He can’t wait for someone to tell him what to do, as his leaders may become casualties. Training gives the Marine the confidence and ability to do whatever it takes to accomplish the mission.

Section IV. Reconnaissance Patrols

8401. General
The commander needs information about the enemy and the terrain he controls. He must have accurate and timely information to assist him in making tactical decisions. Reconnaissance patrols are one of the most reliable sources for this information. A reconnaissance patrol is capable of carrying the search for information into the area occupied by enemy forces, usually
beyond the range of vision or ground observation, and is capable of examining objects and events at close range. Routinely, a reconnaissance patrol will not maintain communication with its Parent unit.

8402. Missions
Missions for reconnaissance patrols include gaining information about the location and characteristics of friendly or hostile positions and installations, routes, stream/river crossings, obstacles, or terrain; identification of enemy units and equipment; enemy strength and disposition; movement of enemy troops or equipment; presence of mechanized units; presence of nuclear, biological, and chemical equipment or contaminated areas; and unusual enemy activity.

8403. Types of Reconnaissance

a. Area Reconnaissance. An area reconnaissance is a directed effort to obtain detailed information concerning specific terrain or enemy activity within a specific location. The objective of the reconnaissance may be to obtain timely information about a particular town, bridge, road junction, or other terrain feature or enemy activity critical to operations. Emphasis is placed on reaching the area without being detected.

b. Zone Reconnaissance. A zone reconnaissance is a directed effort to obtain detailed information concerning all routes, obstacles (to include chemical or biological contamination, terrain, and enemy forces within a particular zone defined by specific boundaries.

c. Route Reconnaissance. A route reconnaissance is a reconnaissance along specific lines of communications, such as a road, railway, or waterway, to provide information on route conditions and activities along the route.

(1) Reconnaissance of routes and axes of advance precede the movement of friendly forces. Lateral routes and terrain features that can control the use of the route must be reconnoitered.

(2) Considerations include traffic ability, danger areas, critical points, vehicle weight and size limitations and locations of obstacle emplacements.

(3) The route reconnaissance is narrower in scope than the zone reconnaissance. The limits of the mission are normally described by a line of departure, a specific route, and a limit of advance.

8404. Task Organization of Reconnaissance Patrols
Generally, a rifle squad is used for reconnaissance patrols; other teams or individuals having specialized capabilities may be attached to the squad for the conduct of the patrol’s mission. The patrol should be organized with one or two fire teams to actually conduct the reconnaissance mission and the remaining fire team to provide security. A small area reconnaissance patrol may need only one team for the assigned mission. A larger area reconnaissance patrol might use two teams to physically conduct the mission and one team for cover and security. The security team
should cover the likely avenues of approach into the objective, protect the units conducting the
reconnaissance, and cover the objective rally point.

8405. Equipment

Patrol members are armed and equipped as necessary to accomplish the mission. The automatic
rifle in each fire team provides a degree of sustained firepower in case of enemy contact.

8406. Actions at the Objective

A reconnaissance patrol tries to conduct its reconnaissance without being discovered. Stealth and
patience are emphasized. The patrol fights only to accomplish its mission or protect itself. In
some situations, the patrol leader can locate enemy positions by having some of his men fire to
draw the enemy's fire. It is not used if there is any other way to accomplish the mission, and is
used only when authorized.

a. Area Reconnaissance. The patrol leader halts and conceals the patrol near the
objective in the final preparation position. The patrol leader then conducts his leader's
reconnaissance to pinpoint the objective and confirm his plan for positioning the security
teams and employing units assigned the reconnaissance mission. He returns to the patrol
and positions the security. They are placed to provide early warning of enemy approach
and secure the objective rallying point. The reconnaissance unit(s) then reconnoiters the
objective. The reconnaissance unit may move to several positions, perhaps making a
circle around the objective, in order to conduct thorough reconnaissance. When the
reconnaissance is completed, the patrol leader assembles the patrol and tells everyone
what he has observed and heard. Other patrol members contribute anything they may
have observed. The patrol then returns to the friendly area and the patrol leader makes a
full report.

b. Zone Reconnaissance. The patrol leader halts the patrol at the final preparation
position, conducts his leader's reconnaissance, and confirms his plan. He positions the
security team and sends out the reconnaissance teams. When the entire patrol is used to
reconnoiter the area, it provides its own security. After completing the reconnaissance,
each reconnaissance team moves to the objective rallying point and reports to the patrol
leader. The patrol then returns to the friendly area and makes a full report.

c. Route Reconnaissance. The patrol leader halts and conceals the patrol near the
objective in the final preparation position. The patrol leader then conducts his leader's
reconnaissance to pinpoint the objective and confirm his plan for positioning the security
teams and employing units assigned the reconnaissance mission. He returns to the patrol
and positions the security. They are placed to provide early warning of enemy approach
and secure the objective rallying point. The reconnaissance unit(s) then reconnoiters the
objective (route). The reconnaissance unit may move to several positions, along or
adjacent to the specific route, in order to conduct a thorough reconnaissance. After
completing the reconnaissance, each reconnaissance team moves to the objective rallying
point and reports to the patrol leader. The patrol then returns to the friendly area and
makes a full report.
Section V. Combat Patrols

8501. General

Combat patrols are assigned missions that usually require them to actively engage the enemy. As a secondary mission, they collect and report information about the enemy and terrain. Combat patrols are employed in both offensive and defensive operations. Combat patrols can inflict damage on the enemy, establish or maintain contact with friendly or enemy forces, deny the enemy access to key terrain, probe enemy positions, and protect against surprise and ambush.

8502. Types of Combat Patrols and Their Missions

a. Raid Patrols. Raid patrols destroy or capture enemy personnel or equipment, destroy installations, or free friendly personnel who have been captured by the enemy.

b. Contact Patrols. Contact patrols establish and/or maintain contact with friendly or enemy forces.

c. Economy of Force Patrols. Economy of force patrols perform limited objective missions such as seizing and holding key terrain to allow maximum forces to be used elsewhere.

d. Ambush Patrols. Ambush patrols conduct ambushes of enemy patrols, carrying parties, foot columns, and convoys.

e. Security Patrols. Security patrols detect infiltration by the enemy, kill or capture infiltrators, and protect against surprise or ambush.

8503. Task Organization of Combat Patrols

As with a reconnaissance patrol, the combat patrol is task-organized to perform the specific mission assigned. MCWP 3-11.3, Scouting and Patrolling contains detailed discussion on combat patrols. As with other combat missions, the size and organization of a combat patrol depends on the mission, enemy situation, troops available to conduct the patrol, and terrain. The commander ordering the patrol must evaluate all these elements in arriving at his decision regarding the type of patrol and what unit will conduct it.

8504. Equipment

Combat patrols are armed and equipped as necessary for accomplishing the mission. In addition to binoculars, wire cutters, maps, compasses, night vision devices, and other equipment common to all patrols, the combat patrol is generally armed with much greater firepower than is the rifle squad. As success of the mission may depend on the patrol’s ability to call for supporting arms fire, radio communications plays a much more important role than in the reconnaissance patrol.
The patrol must be able to communicate with higher headquarters, and radio communications among units/teams should be provided.

8505. Contact Patrols

a. General. Contact patrols establish and/or maintain contact to the front, rear, or flanks by:
   (1) Contacting friendly forces at designated contact points. (A contact point is an easily identifiable point on the ground where two or more units are required to make contact. The order establishing the patrol should state what contact is required; e.g., physical, visual, radio.)
   (2) Establishing contact with a friendly or enemy force when the definite location of the force is unknown.
   (3) Maintaining contact with friendly or enemy forces, without becoming decisively engaged with the enemy.

b. Organization and Equipment. A contact patrol's organization and equipment is dependent on the known enemy situation and anticipated enemy contact.
   (1) A patrol operating between adjacent friendly units, making contact at designated points, is usually small and relatively lightly armed.
   (2) A patrol sent out to establish contact with an enemy force is organized, armed and equipped to overcome resistance offered by light screening forces, in order to gain contact with the main enemy force. It is not organized and equipped to engage the main enemy force in combat.
   (3) Reliable radio communications over the entire distance covered by the patrol must be provided.

b. Actions at the Objective. The patrol leader selects a series of objectives. If his mission is to gain or maintain contact with friendly forces, these objectives may double as contact points. If the mission is to gain or maintain contact with the enemy, the objectives may be terrain features, an enemy screening force, or the main enemy force. The patrol leader initially selects probable objectives during his preparation time. Once on patrol, he will select objectives while on the move, depending on what the enemy does. His mission will dictate his choice of objectives. If the mission is to keep the enemy under surveillance, his objectives will be terrain features from which he can do so. If his mission is to maintain pressure on the enemy, his objective may be the enemy screening force, and he will continually deploy his men to conduct a series of attacks against that force, reorganizing the patrol after each attack. If the enemy reacts strongly, the patrol leader should withdraw his force and seek another time or place from which to...
again put pressure on the enemy force. Above all, the patrol leader must take care not to become decisively engaged with the enemy.

8506. Ambush Patrols

An ambush is a surprise attack from a concealed position upon a moving or temporarily halted target. It is one of the oldest and most effective types of military action. The ambush may include an assault to close with and decisively engage the enemy, or the attack may be by fire only.

**a. Purpose of Ambushes.** The idea behind an ambush is to trap the enemy - create a dilemma from which the enemy unit cannot extract itself. Ambushes are executed for the general purpose of reducing the enemy's overall combat effectiveness and for the specific purpose of destruction of his units. The cumulative effect of many small ambushes on enemy units lowers the morale of enemy troops and, in general, is a harassment to the enemy force as a whole.

1. The primary purpose of ambushes is to kill enemy troops.

2. Harassment is a secondary purpose for conducting ambushes. Frequent ambushes force the enemy to divert men from other missions to guard convoys, troop movements, etc. When enemy patrols are ambushed, they fail to accomplish their mission, and the enemy is deprived of valuable information. Successful ambushes cause the enemy to be less aggressive and more defensive minded. The enemy troops become apprehensive and overly cautious, they become reluctant to conduct night operations and patrols, and are more subject to confusion and panic if they are ambushed. In general, they become less effective fighters.

**b. Classification of Ambushes.** Ambushes are classified as deliberate ambushes or ambushes of opportunity. A deliberate ambush is one that is planned against a specific target. Detailed information is required about the target--the nature of the target, its size and organization, armament and equipment, the route it will follow, rate of movement, and times it will reach or pass certain identifiable points along its route. A deliberate ambush is normally conducted by a reinforced platoon. A deliberate ambush may be planned for such targets as--

- Logistic columns, either rail or motorized.
- Troop movements, either rail, motorized, or on foot.
- Enemy patrols which establish patterns by frequently using the same routes or habitually depart and reenter their own areas at the same point.
- Any other force, when sufficient prior information is known.

When detailed information necessary to conduct a deliberate ambush is not available, but there are routes that the enemy will likely be using, day or night, for troop movements,
patrols, or convoys, the commander may order an ambush patrol, or a number of
ambushes, to cover those routes. These are the ambush patrols most often conducted, and
the reinforced rifle squad is well suited to perform them. Generally, the patrol will be
given a mission to organize an ambush along a road or trail near a specific point or area,
and execute the ambush against the first profitable target that appears.

c. Types of Ambushes. There are two types of ambushes--point and area.
(1) The point ambush is one where forces are deployed to attack along
a single killing zone.
(2) The area ambush is one where forces are deployed as multiple related
point ambushes. A squad may conduct a point ambush as part of a larger area
ambush; it cannot, however, conduct an area ambush on its own. This holds true
even when the squad is reinforced with crew served weapons.

d. Factors for a Successful Ambush
(1) Routes. A route is planned which will allow the patrol to enter the
ambush site from a direction that will not take it through the planned killing zone.
If the killing zone must be entered or crossed (e.g., to place mines), patrol
members must take care not to disturb the natural appearance of the area. Nothing
should be done that could alert the enemy and compromise the ambush. A covered
and concealed withdrawal route is also planned. As with all patrols, alternate
routes are planned, as necessary.
(2) Ambush Site. In conjunction with the map or aerial photo study conducted by
the patrol leader during his preparation phase, a physical reconnaissance of the
site must be made. The patrol leader must remember that a suitable ambush
site for his patrol is also a suitable site for one by the enemy. Additionally,
it must be looked at firsthand to ensure that what looked good on the map
is actually a good site for an ambush. An ambush site must provide for--

(a) Favorable fields of fire.

(b) Canalization of the target into the killing zone. An ideal killing
zone restricts the enemy on all sides, confining him to an area where he
can quickly and completely be destroyed. A killing zone flanked by
natural obstacles such as cliffs, streams, embankments, or steep
grades, supplemented by other obstacles such as mines or barbed wire,
limit an enemy's opportunity to escape or to employ his own
counter ambush drills against the ambush.

(2) Positions. The security teams move into position first, to prevent the
patrol from being surprised as it moves into the ambush site. Automatic weapons
and machine guns are positioned so that each can fire along the entire killing zone,
or their sectors of fire must overlap so that the killing zone is covered completely.
Riflemen and grenadiers are positioned to cover any dead space left by the
automatic weapons and machine guns. The patrol leader then selects a position
from which he can best initiate the ambush. He then gives instructions as to
  clearing fields of fire, preparing positions, and camouflage, and sets a time
by which all preparations are to be completed.

(3) **Local Security.** The security unit, normally employed in two teams,
does not usually participate in the initial attack, but protects the flanks and rear,
giving early warning of enemy approach, and covering the patrol's withdrawal at
the conclusion of the ambush. The flank security should be in a position to attack
the enemy entering the kill zone as well as protecting the patrol from the enemy
that could attack the patrols flank.

(4) **Surprise.** Surprise distinguishes the ambush from other forms of attack.
It is surprise that allows the ambush patrol to seize and retain control of the
situation. If complete surprise cannot be achieved, it must be so nearly complete
that the target is not aware of the ambush until too late for effective reaction.

(5) **Coordinated Fires.** All weapons, mines, and demolitions must be
positioned, and all fires, including those of available artillery and mortars, must
be coordinated to achieve:

  · Isolation of the killing zone to prevent escape or reinforcement.

  · Surprise delivery of a large volume of highly concentrated fires into the
    killing zone.

(6) **Control.** Close control must be maintained during movement to,
occupation of, and withdrawal from the ambush site. This is best achieved
through rehearsals and maintenance of good communications. The patrol
members must control themselves so that the ambush is not compromised. They
must exercise patience and self-discipline by remaining still and quiet while
waiting for the target to appear. They have to forego smoking, endure insect bites
and thirst in silence; resist the desire to sleep, ease cramped muscles, and perform
normal body functions. When the enemy appears, they must resist the temptation
to open fire before the signal is given. The patrol leader must effectively control
all units of the ambush force. Control is most critical at the time the enemy
approaches the killing zone. Control measures must provide for--

  · Early warning of enemy approach.

  · Fire control.

  · Initiation of appropriate action if the ambush is prematurely detected.

  · Timely and orderly withdrawal of the ambush force from the ambush
    site and movement to the objective rally point.
(7) Suitable Objective Rally Point. The objective rally point must be easily accessible to all personnel in the ambush force. It must be located far enough from the ambush site so that it will not be overrun if the enemy successfully assaults the ambush. Situation permitting, each man walks the route from his ambush position to the objective rally point. If a night ambush, he must be able to follow his route in the dark. After the ambush has been executed, and the search of the killing zone completed, the patrol withdraws quickly but quietly on the patrol leader's signal. If the ambush was not successful and the patrol is pursued, withdrawal may be by bounds. The last group may arm mines, previously placed along the withdrawal route, to further delay pursuit.

e. Execution of an Ambush. The manner in which the patrol executes an ambush depends on whether the purpose is to kill or harass the enemy.

(1) When the primary purpose of the patrol is to kill the enemy, the area is sealed off with the security teams. Maximum damage is inflicted with demolitions, command-detonated clay more mines, automatic rifle and machine gun fire, and anti-armor weapons. When these fires are ceased or shifted, the patrol launches a violent assault into the killing zone. The assault unit then provides security while designated teams kill or capture personnel, search bodies for items of intelligence value, and destroy vehicles and equipment. On the patrol leader's signal, all units withdraw to the objective rally point, reform the patrol, and move out quickly.

(2) When the primary purpose is harassment, the patrol seals off the area to prevent reinforcement and enemy escape. Maximum damage is inflicted with demolitions and automatic weapons fire. The patrol delivers a high volume of fire for a short time and then withdraws quickly and quietly. The patrol does not assault, except by fire, and avoids physical contact. The patrol avoids being seen by the enemy.

(3) When the patrol's primary purpose is to obtain supplies or capture equipment, security units seal off the area. Weapons and demolitions are used to disable vehicles, but not destroy them. The assault unit must use care to ensure its fire does not damage the desired supplies or equipment. Designated teams secure the desired supplies or equipment. Other teams then destroy vehicles and equipment not needed by the patrol.

f. Miscellaneous Ambush Techniques

(1) Normally, the ambush patrol will be deployed along a trail or route which is either known to be used by the enemy, or likely to be used. The enemy is permitted to pass by the center of the ambush force so the attack can be made from the rear. One or two men should be posted well forward and to the
rear along the route, to prevent the enemy from escaping. All fires should be delivered simultaneously on a prearranged signal.

(2) It is important to remember that an ambush should have four distinct signals—one to open fire (with an alternate signal utilized at the same time as the primary), a signal to cease or shift fires, a signal to assault or search the killing zone, and a signal to withdraw.

(3) The signal to open fire should meet two criteria. First, it should be the firing of a weapon that will kill the enemy. Second, it should be a weapon that will shock the enemy and throw him into a state of confusion. An excellent primary signal is a command-detonated clay more mine fired by the patrol leader. The alternate signal should be from a weapon that is distinct and clearly unmistakable. It is usually a poor technique to indicate an ambush using an open bolt weapon.

8507. Security Patrols

In a static situation, security patrols prevent the enemy from infiltrating the area, detect and kill or capture infiltrators, and prevent surprise attack. They protect a moving unit by screening the flanks, the areas through which the unit will pass, and the route over which the unit will travel.

a. Task Organization and Equipment. Patrol members are heavily armed and equipped to handle themselves in a meeting engagement with the enemy. They carry an ample supply of hand grenades and flares. The patrol must be equipped with reliable radio communications in order to report information over whatever distance from the parent unit it is employed. Popup flare signals are used as secondary means of communication.

b. Planning. A security patrol must not be viewed as a simple matter of following a designated route, calling in checkpoints upon arrival, and returning to friendly lines/area via a different route. The patrol must be well planned and rehearsed. Units, teams, and personnel must be designated and assigned specific missions. Its route must keep it within proximity of friendly positions, so that it can be supported with both organic and nonorganic weapons and reinforced, if necessary. Communications must always be maintained between the patrol and its parent unit. In relatively static positions, patrol routes and times must vary; routine patterns must be avoided.

c. Actions at the Objective. A series of objectives is selected covering the area over which the patrol is to move. These objectives may double as checkpoints. Actions at each objective are planned much in the same manner as are actions at danger areas.

Section VI. Information and Reports

8601. General

The patrol leader and every member of all patrols must be trained in observing and accurately reporting their observations. The patrol leader should have all members of his patrol signal or immediately report to him any information they obtain. These reports should not be restricted to information about the enemy, but should include any information about the terrain, such as newly
discovered roads, trails, swamps, and streams. The patrol leader includes all information in his report to the officer dispatching the patrol.

8602. Sending Information

The patrol leader is informed if messages are to be sent back and what means of communication are to be used. Messages may be oral or written. They must be accurate, clear, and complete, and answer the questions, what, where, and when.

a. **Oral Messages.** An oral message must be simple, brief, and not contain numbers or names.

b. **Written Messages.** Written messages must contain facts, not the patrol leader's opinions. Information about the enemy should include strength, armament, activity, direction of movement, the patrol's location when the observation was made, and the time the enemy was observed. An overlay or sketch should accompany the message if deemed necessary.

c. **Messengers.** If a patrol leader must communicate a message of great importance and cannot do so by radio, he should dispatch two messengers, each taking a different route, to increase the possibility of having the information reach the person for whom it is intended. A messenger is given exact instructions as to where the information is to be delivered and what route is to be taken. If the message is oral, the patrol leader has the messenger repeat the message back to him before departing. Any information the messenger obtains along the way must also be reported at the time the message is delivered. If delayed or lost, he should show the message to an officer, if possible, and ask his advice. Messengers must be given all practicable assistance. If in danger of capture, the messenger destroys the message.

d. **Use of Radio and Other Means.** If the patrol is provided with a radio, a definite schedule for checking in must be established by the parent unit prior to the patrol's departure. The patrol leader must take every precaution to ensure that codes and copies of messages are not lost or captured. Radio transmissions from the patrol should be infrequent and short, and the patrol should leave the area immediately after transmitting to reduce the possibility of being detected by enemy direction finding equipment.

Pyrotechnics (flares, colored smoke, etc.) and air panels may also be used by the patrol to communicate simple signals and information.

e. **SALUTE Report.** In order to keep messages brief, accurate, and complete, the SALUTE report should be used to report information, written or oral. Appendix F provides information on the SALUTE report. In hasty situations the SPOT report can be used.

8603. Captured Documents
Every patrol should search enemy dead and installations for papers, maps, messages, orders, diaries, and codes, after first ensuring that they are not booby-trapped. All captured documents are turned in to the patrol leader who turns them in when he makes his report. The documents should be marked as to time and place of capture.

8604. Patrol Report
Every patrol makes a report when the patrol returns. This report is made at a debriefing that is attended by the patrol leader and all patrol members. Unless otherwise directed, the report is made to the person ordering the patrol. If the situation permits, the report is written and supported by overlays and/or sketches. The patrol leader's report should be a complete account of everything of military importance observed or encountered by the patrol while on the mission. (See fig. 8-3.)

Figure 8-3. Patrol Report.

8605. Patrol Critique
After the patrol has rested and been fed, the patrol leader should hold a critique. Constructive criticism is offered by the patrol leader and, in turn, by members of the patrol. It is an excellent time to prepare for future patrols by going over lessons learned as a result of the patrol. At the
1 conclusion of the critique, the patrol leader should let his men know what their patrol
2 accomplished.
Chapter 9

Special Tactics and Techniques

Section I. Military Operations on Urbanized Terrain.

9101. General

Complexity of the Urban Battlespace. MOUT takes place on, above, and under the ground floor level of buildings. Here are the key facts about MOUT:

- Urban combat can involve fighting on multiple levels and multiple directions simultaneously.
  -- This almost always causes units to become fragmented.
  -- Situational awareness is very difficult to maintain.

- The enemy is not everywhere, but may give the appearance of being everywhere.
  -- Often the problem is finding him.
  -- Urban fighting has historically produced high casualty levels.
  -- Open areas are the primary danger areas.
  -- Historically, up to 70% of casualties in the urban battlespace occurred in open areas.

- MOUT is almost always characterized by the presence of significant numbers of noncombatants.
  -- There are certain basic urban fighting skills for which Marines must be trained in addition to basic infantryman skills.

Enhanced Mission Effectiveness through Focused Training and Use of Combined Arms. Focused, MOUT-specific training reduces casualties by increasing knowledge of how to fight and win effectively in the urban environment. After focused training, the highest payoff for improved MOUT performance is employment of combined arms. Task organized forces combining infantry and mechanized forces are often ideally suited for urban combat and can help in reducing casualties.

Urban Battlespace Geometry. Urban targets have hard, smooth, relatively flat surfaces. Rounds almost always hit these surfaces on a slant, increasing potential for low order detonations, duds and ricochets.

Other important battlespace geometry factors include:

- Engagements are at close range.
  -- Inducing danger from back blast and fragmentation.
  -- Causing duds from firing inside of minimum arming ranges.

- Canyons formed by tall buildings create dead space. This affects:
  -- Depression and elevation limits for indirect fire weapons.
  -- Availability of delivery path options for air delivered ordnance.

- Distance in urban combat relates as much to vertical separation as it does to horizontal distance.
  -- Separation between forward and rear areas may be greatly compressed in terms of meters and kilometers but can be greatly extended in time by the need to move up and down stairs and ladders.

- Urban boundaries can be noncontiguous because units maneuvering in urban environments often bypass isolated pockets of enemy rather than attempting secure all the terrain in a linear manner.
  -- Buildings provide excellent cover and concealment to the enemy.
  -- Precision targeting is obscured by smoke, dust and shadows from buildings.
  -- Targets are hard to identify and hit from the air.

  -- Tactics are greatly affected by the potential for fratricide in the complex battlespace.
-- Limiting collateral damage and rubbling can be a major concern.
-- Principles that apply to use of high ground and cross-compartment mobility in open or rolling terrain often apply equally well to the urban environment.
  -- For example, upper stories and tops of buildings offer the same advantages as hilltops.

**Human Factors.** In addition to those strategic and operational level considerations addressed in the “Human Dimension” section (Chapter 1) of MCDP 1 *Warfighting,* certain tactical human factors affect behavior in urban combat. Specifically, small units that are in very close proximity do most of the urban fighting. Therefore, the squad leader’s situation awareness can be the difference between victory and defeat for the entire force.

-- Engagement times are short, often ruling out well-aimed shots.
  -- Necessitating quick kill techniques that rely on effective use of the front sight post.
-- Ammunition usage is very high so you must plan for rapid and constant resupply.
  -- This is a critical planning factor.
-- Close coordination of fires is required to reduce potential fratricide.
-- Rules of Engagement (ROE) may limit fire support options.
-- Communications are very difficult to maintain.
-- Casualties can be high so casualty evacuation must be planned for.
-- Casualty collection points (CCPs) must be established to facilitate care of Marines, and mitigate those human dimension factors cited in MCDP 1.
-- In addition to normal gunshot/shrapnel wounds, casualties will probably include:
  - Extensive injuries from glass fragments embedded in skin.
  - Serious abrasions from contact with concrete.
  - Crushing injuries from falling walls and debris.
  - Eye injuries from flying glass.
  - Fractures from tumbling down stairs or falling from upper stories.
  - Breathing problems in confined spaces caused by persistent smoke and dust clouds.
  - Infectious diseases endemic to the area. These diseases can spread quickly in confined spaces.

**9102. Principles.**

**Spherical Threat.** Tactical formations, of whatever size or composition, must maintain a 360-degree security or a “tactical bubble” in the urban battlespace to protect against a threat that can attack from any direction. This is because there are no fronts, flanks or rear in the urban environment. The squad must be capable of reacting to enemy contact at any single point or multiple points simultaneously to deny the enemy the ability to maneuver effectively against the flanks and rear. And, each element within the patrol has to create 360-degree security in its own right. In this way, they can provide for their own security as unforeseen gaps appear in the formation.

**Combined Arms.** Correct employment of Marine Corps combined arms assets in support of the infantry is a cornerstone of effective MOUT. See Section IX, below.

**Adherence to Basic Principles.** Fighting in the urban environment is chaotic, deadly and very fatiguing. However, the environment can be effectively managed through adherence to certain basic principles.

- Keep plans simple; but provide clear, use concise control measures.
  -- Complex plans unravel very quickly when they are exposed to the friction imposed by the environment and the number of options available to the enemy.
- Clearly communicate the plan to all members of the team.
  -- Enables every Marine to make decisions when in contact with the enemy that supports the commander’s intent two levels up from themselves.
- Prepare and rehearse immediate action drills (IAD) and “actions on” that are specific to the combined arms team.
Key among these are actions on ambush from the flank and rear.

- Plan and rehearse your use of communications nets and procedures.
- Use formatted reports. Formatted reports reduce the number and length of radio transmissions and reduce the chances that tired or frightened operators missing crucial information.
- Develop and rehearse combined arms team formations and IADs that provide for mutual support among elements for varying threat and urban conditions.
- Train the squad to change formations quickly and efficiently.

**Mutual Support.** ALL movement should be mutually supported. This applies to combined arms teams (described later) all the way through bounding and overwatch movement in pairs.

**Command and Control (C3).** Maintaining situation awareness is very challenging in the chaotic, heavily compartmented urban battlespace. However, knowing where the squad is and what it is doing—even though the squad leader cannot maintain visual contact—is critical to mission success. For example, a squad clearing a building may have its fire teams isolated from one another by walls and/or floors. This can create a sense of isolation and loss of mission focus. Effective tactical positioning and use of the ISR can help the Squad.

**The Squad Leader in MOUT.** In the urban battlespace, the Squad Leader is the primary tactical leader. His rifle squad must be able to operate semi-independently, physically close to other squads, yet isolated by walls, buildings and rubble.

**Leader Location.** During movement in the urban environment, the squad leader must often move back in a position from which he can keep situational awareness and therefore provide better overall command and control. When the squad leader chooses to move forward immediately behind his assault elements, as he had been trained to do in more open terrain, he risks losing situational awareness behind him. He should use high vantage points whenever possible to watch his elements move into and around buildings. This will also give the squad leader a better picture of the terrain and sometimes the enemy.

Above all, the platoon commander, platoon sergeant and squad leader must share information and awareness. The best way to do this is to periodically meet in the battlespace.

**Speed, Tempo and Momentum.** Speed is rate of movement relative to time and distance. Tempo is a characteristic, rate, rhythm or pattern of work or activity measured relative to the enemy’s movement or activity. Momentum—either positive or negative—is the quantity of your advantage in speed and tempo relative to that of the enemy.

**Establishing Tempo and Momentum in the Urban Battlespace.** Set a pace that the enemy cannot maintain until he is eventually overcome by events. Although a fast tempo is necessary for the initial break-in stage, you may have to slow down to allow the attacking force to regain its balance. Urban attacks are characterized by fast violent action during clearance followed by lulls for reorganization. This does not mean to stop the momentum, but to control it, even if this means slowing down to do so. As squads move, it is important to prevent one unit from losing communications with the others to reduce the chances of fratricide. (See the “Go Firm” tactic, below.)

**Maintain an Aggressive Approach to Maneuver.** You must maintain an aggressive posture and keep the enemy under pressure. Beware of a “Bunker Mentality” that comes from a sense of security and relief upon clearing a building or winning an intense firefight. This can generate a desire to “stay put” and reluctance to reenter danger areas to pursue another battle.

- Avoid focusing attacks on buildings where retreating enemy are observed.
- Use maneuver, e.g., flanking attacks to avoid attacking directly into the enemy’s defenses.
  - Coordinate with adjacent squads for use of fire support or for a flanking attack.

9103. MOUT Specific Rifle Squad Techniques

**Go Firm Tactic.** The *go firm* technique enables leaders to rapidly assess their tactical situation and adjust as necessary. The *go firm* is essentially a short halt during which the force secures its immediate environment and then pauses to reorient itself. Concurrently, it allows the affected units to conduct resupply, or redistribution and to treat and evacuate casualties.

**Go Firm Employment.** There is no specific time to conduct a *go firm*. The decision to do so will be balanced by the need to maintain contact with the enemy. Some examples are:

-- On patrol, after moving without incident for a sustained period.
-- Following a confusing period of contact such as sniper engagement or unsuccessfully chasing a suspected enemy.
-- After the seizure of a building or other structure.
-- Any time the leader feels he is losing the ability to effectively command and control his unit.

The *go firm* can be particularly effective at night when the populace is avoiding you. When teams *go firm* and remain concealed, it gives the impression that the patrol has moved on and may entice the opposition come back out into the open. The broad steps for *go firm* are:

-- Pass the word and ensure all elements acknowledge receipt.
-- All elements halt and seek the nearest defensible position.
-- All elements clear their immediate area through 360 degrees.
-- Stand by for a leader’s situation report that should:
  -- Describe the current situation as he sees it.
  -- Give the status of enemy contact and locations of his elements.
  -- Add any administrative issues.

Each subordinate element either concurs with the report, or corrects any items or areas where the squad leader has lost situational awareness.

-- Concurrently, at the platoon level, the platoon sergeant should use the time to push replenishment forward and take casualties out.
-- After the leader makes any adjustments, he issues a FRAGO and the force resumes its movement.

**NATO Control Markings** are characterized by the following:

-- Flag or chemically activated light (chem light) at an entry point. This may be the only entry point cleared of enemy and booby traps.
  Make it easily recognizable for approaching Marines.
  Flag/chem light to mark FLOT as battle progresses.
  Mark each cleared room as soon as possible.
  -- So supporting fires can be shifted two rooms ahead while you clear the next room.
  -- This is essential to protect against fratricide
  -- Colors at entry points can give information, as shown in table 1.

<table>
<thead>
<tr>
<th>Color</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Entry Point: Building not yet Clear</td>
</tr>
<tr>
<td>Green</td>
<td>Room or Building Cleared</td>
</tr>
<tr>
<td>Yellow</td>
<td>Casualties Present</td>
</tr>
<tr>
<td>Blue</td>
<td>Engineer Support Required</td>
</tr>
<tr>
<td>White</td>
<td>Forward Line of Troops (FLOT)</td>
</tr>
</tbody>
</table>

**Organizational Structure.** The basic infantry structure does not change for urban combat. But forces may be task organized within the urban battlespace. For example, the rifleman in some fire teams may be employed as a Designated Marksman (see below). Squads may be reinforced or have heavy weapons and/or armored vehicles in direct support or attached to them.
Maneuver Control Measures.

- Objective(s) such as a single small- or mid-sized building may be an objective for a rifle squad.
  - When an objective extends into the street, include only the near side of the street.
- Phase Lines are normally used to report progress or to control the advance of attacking units.
  - Orient on readily identifiable features.
  - Use the near side of a street or open area.
  - Could be separate floors; i.e., vertical phase lines, in a multiple story building.
- Boundaries are used to define zones of action.
  - Set within blocks so that a street is included in the zone.
  - Include both sides of the street.
- Checkpoints aid in reporting locations and controlling movement.
  - Should be easily identifiable.
  - Move them at irregular intervals to avoid establishing a routine.
  - Make sure all units use the same names for these points.
- Attack Positions (APs) are secure positions near the objective that may be occupied by forward units for last-minute preparation and coordination.
  - APs are often behind or inside the last large building before crossing the Line of Departure (LD).
- Line of Departure (LD) should be located on the near side of an open area running perpendicular to the direction of attack.
  - Is often a street or rail line. Figure 1 illustrates how these are displayed on a map.

9104. Night Operations

Importance of Getting into Position. After your unit has conducted a daylight movement in the urban battlespace, you should establish a defensive posture before transitioning into night security operations. Establishing 360-degree security after nightfall is very difficult and the potential for fratricide is high. Whenever tactically feasible, establish security and sectors of responsibility before it gets dark.

Advantages. When fighting in the urban battlespace during night or periods of limited visibility, attacking or defending forces have several advantages.

- In many cases, Marines may have a technological advantage in thermal imagery and light intensification over their opponents. This enables Marines to identify, engage, and destroy enemy targets before being detected by the enemy.
  - Having the capability to conduct operations nearly as well at night or during periods of reduced visibility as during daylight gives Marines a tremendous advantage over an enemy with reduced night vision capability.
  - It also aids the generation of tempo and allows Marines to gain or retain the initiative.
- Generally, ranges of direct-fire engagements are greatly reduced in the MOUT environment. During periods of limited visibility, unaided target acquisition ranges are further reduced. This enables attacking forces to close to shorter ranges, thus increasing the lethality and accuracy of weapons.
- Attacking forces can also take advantage of the enemy’s reduced ability to see and can more effectively engage the enemy before being detected with thermal imagery or light intensification devices.
- Helicopter borne assaults are best conducted during periods of reduced visibility because the enemy’s air defense systems may be degraded.
- Attacking during periods of limited visibility gives the attacker a greater chance of achieving surprise.

Disadvantages. When fighting in built up areas during periods of limited visibility, attacking and defending forces also face some disadvantages.

- Command and control is difficult in any operation in the urban battlespace; periods of limited visibility increase this difficulty.
Marines have an instinctive tendency to move closer together during periods of limited visibility. Constant attention must be given to prevent Marines from “bunching up.” Marines may become disoriented easily because of the combined effects of low visibility and the characteristics of the urban battlespace. Target identification becomes more difficult in limited visibility conditions. Depending on the training of the individual, the Marine may fire at anything seen or may hesitate too long before firing at a real target.

**Fratricide.** The risk of fratricide is much greater during periods of limited visibility. The key to avoiding fratricide is increased situation awareness by leaders and individuals coupled with realistic training in target identification.

- Graphic and visual control measures should be clearly defined and obvious.
- Examples include distinctive buildings, large boulevards, rivers and so forth.
- Leaders must exercise firm control when directing the fires of their units at hostile targets.
- Movements should also be coordinated and controlled.
- Cleared rooms and buildings should be distinctly marked to identify cleared areas and the position of the lead elements of the friendly forces to base of fire elements supporting the maneuver.
- Visible markers (for example, glint tape or thermal strips) should be attached to individual Marines for rapid identification.
- Far and near recognition signals should be coordinated during planning and used properly.
- Units employing close air support must exercise firm control. Failure to do may easily result in fratricide.

**Urban Environmental Effects on Night Vision Devices.** Built up areas affect standard night vision devices and sights differently than do open areas. This may cause some confusion because the images Marines receive through their night vision devices are unusual compared to those they may be used to. Most built up areas have electric power, therefore, street lights and/or building lights may “white out” some light intensification devices unless the power is disrupted or lights are turned off.

- Fires may be burning in the urban area.
  - Open flames cause problems for light intensification devices, and also for thermal devices.
  - Subterranean areas and the interiors of buildings will not have ambient light if the power is off.
  - Passive night vision devices must then use an artificial light source such as infrared radiation, to provide enough ambient light for the devices to work effectively.
- The many reflective surfaces found in built up areas may cause false images, particularly for laser range finders and laser target designators.
- Thermal imaging devices may not be able to see through large amounts of dust particles suspended in the air.
- Smoke and dust degrade effectiveness of night vision goggles.
- Fog degrades long-range target acquisition from thermal sights.
- Weapons flashes within enclosed areas appear much brighter.
  - This causes Marines to lose night vision and can wash out light intensification devices.

**Considerations.** The environment of built up areas presents special challenges and considerations during periods of limited visibility.

- The use of glint tape, thermal tape, or chemical luminescent lights (chem lights) is an important consideration.
  - These can be used to mark the FLOT, casualties, cleared buildings and rooms, weapons positions, and individual Marines.
  - Their use must be clearly addressed in the unit’s SOP.
- When markers are used for extended periods, their meanings should change because the enemy may be able to capture or manufacture and use these marking devices to their advantage.
- The use of tracer and incendiary ammunition may be restricted to prevent fires. The light of fires whites out some night vision devices and may interfere with or confuse thermal devices.
- The control of power stations may be essential to operations during periods of limited visibility. Control of power stations enables friendly forces to control, to a degree, background illumination. Shutting off the power to the streetlights is much easier than shooting out the lights. Commanders must balance the tradeoff between force protection and maintaining law and order after the battle is over. During cold weather, the control of power stations may be critical to the welfare of the civilian population.
- Identifying friendly units, noncombatant civilians, and enemy troops becomes more difficult during limited visibility operations.
- Locating the source of sounds becomes more difficult because of the natural echoing in built up areas and the tendency of sounds to carry farther at night.
- Locating booby traps and obstacles also becomes more difficult at night. Movement rates are normally slower than during periods of normal visibility.

**Special Equipment.** Fighting during periods of limited visibility requires some specialized equipment to maximize advantages.
- As a rule, thermal imaging devices such as the AN/PAS-7 infrared viewer and the AN/TAS-5 Dragon infrared sight are better for limited visibility operations than are light intensification devices such as the AN/PVS-7B. Light intensification devices are more easily washed out by background light, weapons flashes in enclosed areas, and fire. Thermal devices are not as easily washed out.
- The AN/PAQ-4A infrared aiming device is similar to its off-the-shelf laser aiming sight counterparts except it is not visible to the naked eye.
- Other night sights for weapons include AN/PVS 5 crew served weapon night vision sight, the AN/PVS-4 individual weapons night vision sight, and the AN/UAS 12 night vision sight, which mounts to the modular universal laser equipment (MULE) and the TOW missile system.
- Trip flares, flares, illumination from mortars, and artillery and spotlights (visible light or infrared radiation) can be used to blind the enemy’s night vision devices or to artificially illuminate the battlefield. See MCWP 3-16.6, *Supporting Arms Observer, Spotter, and Controller,* for more information on illumination from mortars and artillery.
- Spare batteries for the night vision devices should be carried to keep the devices operational. Soft, clean rags should be used to clean the lenses.

**Combat Support.** Coordinating employment of forces and fire support in limited visibility conditions is a major concern to leaders during MOUT. The concentration of forces and fires at the point of decision is facilitated by the technological edge that night vision devices provide.
- Any degradation of accuracy in artillery fire will likely be a result of the limitations of target acquisition assets. While FOs and FACs may have thermal sights and laser range finders, most Marines in the battlespace do not yet have devices that will enable them to acquire targets accurately. The following are some devices and techniques to improve target acquisition for indirect fires:
  - If the target is within line-of-sight, tanks and LAVs can rapidly identify the target and provide an accurate range.
  - Preregistered targets are effective if the target reference point can be observed and the observer has clear communications with the firing unit.
  - Fixed-wing and rotary-wing aircraft can be used to identify targets and adjust supporting arms.

**Operational Considerations.** Marine units conduct attacks during periods of limited visibility to gain or sustain the momentum of the attack. Before conducting a limited visibility attack, the commander must balance the risks and ensure that every Marine understands the mission, intent and control measures. Rehearsals and strict command and control reduce casualties and greatly enhance the chances for mission accomplishment.
To reduce confusion, Marines should clear buildings and rooms using the same techniques they use during the day.

Movement rates are slower in the dark. Each Marine must remain alert for mines, booby traps, and enemy positions.

Rifle squads and fire teams should be equipped with a mixture of both thermal imaging and light intensification devices whenever possible. This enables the squads and fire teams to obtain a better picture of the night environment and enables Marines to balance the strengths and weaknesses of each type of night vision device for optimum results.

When moving through buildings, assault forces mark cleared rooms and buildings and communicate with the support forces. Marking cleared rooms is especially critical if more than one assault force or element is in the same building. Communication with supporting forces is imperative to avoid fratricide.

If flashlights or chem lights are used, they should be held away from the head or chest area. This will make it harder for enemy soldiers firing at the light to hit the Marine holding the light(s).

Assault forces should be aware of adjacent fires that may diminish the effectiveness of night vision devices. Weapon flashes within small rooms cause Marines to lose their night vision and can wash out light intensification devices. Also, enemy soldiers may use flares inside and outside of buildings to deliberately render night vision devices ineffective.

Leaders must ensure that all Marines follow the ROE and the Law of Armed Conflict (LOAC). This is critical if the enemy is intermixed with the local civilian population and other noncombatants. Also, leaders must follow all control measures.

Enemy forces can be expected to use periods of limited visibility to the same advantage as Marine forces do.

Enemy forces may have access to sophisticated night vision devices manufactured in Europe, Asia, the United States and the former Soviet Union.

**MOUT Specific Assault Equipment.** Marines should plan to use special assault kits to get inside of buildings, sewers, etc. These include ropes, sledgehammers, Hooligan tools (see figure 2) and mouse hole charges.

The hooligan tool is one of the most versatile tools designed for forcible entry. It has a pointed pike for such uses as breaking padlocks and hasps, and adz type “ax” head for slipping into tight crevices and a forked flat bar for prying. The hooligan tool is often used with a ram or sledgehammer for a “pick and pry” entry.

**General Urban Control Measures.** You can improve your control and direction by doing the following:

- Give teams easily recognizable boundaries and control measures.
- Divide areas into sectors, w/ phase lines to control the advance.
- Ensure everyone knows the SOP for using runners, linkmen, or visual signals to overcome electronic communication failure.
- Have simple SOPs that everyone can understand.
  - Make sure they deal with how to mark buildings, routes of entry, clearing status, requests for engineer support, CASEVAC, etc.

**Phases of Urban Attack.**

- Phase I - Reconnoiter the Objective. Use all available resources to gain information, including
personal reconnaissance when possible. Locate such things as:

-- Avenues of approach.
-- Observation posts (OPs).
-- Supply routes.
-- Direct- and indirect-fire weapon emplacements.
-- Composition and structure of buildings and roadbeds.
-- Cover and concealment opportunities.
-- Location of noncombatants.
-- Other information that is not apparent on a map.

· Phase II - Isolate the Objective. Emplace weapons systems to prevent reinforcement or withdrawal of the enemy forces.
  -- Seize natural and man-made features that dominate the area.
  -- Place observation around the objective to look for surfaces and gaps.
  -- Coordinate supporting arms to seal off lines of communication and support maneuver.
· Phase III – Gain a Foothold. Assault the initial portion of the objective to establish a foothold. Build up combat power to enable continuation of the assault.
  -- Can be simultaneously or soon after Isolation.
  -- Occupy a position from which to continue the assault through the objective.
  -- Use combined arms preparation fires to provide the greatest shock just before the main assault.
    - Consistent with the ROE.
  -- Use covered approaches, darkness, or smoke obscuration.
· Phase IV – Seize the Objective. Establish the foothold and fight to and through the objective.
  -- Coordinate advance to allow for mutual support and reduce possibility of fratricide among units.
  -- Occupy or keep under close observation rooms and buildings that have been cleared.
    - To prevent enemy re-infiltiration.
  -- Maintain awareness of adjacent units to prevent fratricide.
  -- Use a simple, pre designated marking system for identifying cleared buildings.
· Phase V – Reorganize/Replenish. Immediately deploy a security force to repel any counterattacks.
  -- Establish mutually supporting, in-depth, 360 degree defensive positions;
    in order to avoid being flanked or attacked from the rear, above, or below.
  -- Redistribute ammunition and water as soon as possible.
  -- Evacuate military, civilian, and enemy dead and wounded.
  -- Organize enemy prisoners of war (EPWs) for evacuation.
  -- Resupply to sustain follow-on operations.

Demolitions. The demolitions available to the rifle squad include TNT and C4. Used effectively, both can blow holes in walls that are big enough for a man to walk through.

· Detonation Cord (DC) can be an effective stand-alone demolition.
  -- Maximum effect with minimum standoff distance can be achieved by using detonation cord; e.g., in a doughnut shape, especially against doors.
  -- DC is light and easily transportable in the urban environment.
· Shaped Charges come in two sizes: a 15-pound M2A3 and a 40-pound M3A3 (most likely size to be used in MOUT). It creates a small hole with a large amount of spall thrown behind the target wall. It creates a large safety hazard for friendly forces.
· Satchel Charges come in two standard sizes; the M183 and the M37. Each weighs 20 pounds. They are very powerful, and throw debris great distances, so friendly forces must take cover before detonation.
· Cratering Charges. The standard cratering charge is a 43-pound cylinder of ammonium nitrate. It does not have the shattering effect of bulk TNT or C4, and is best used in deliberate demolitions.
· Mouse hole Charges.

A. ORGANIZATION AND PLANNING.
Squad Urban Assault Force. Based on METT-T, each of the three rifle squads normally form assault, support and security elements as follows:

- **Assault Element.** The assault element closes with and destroys the enemy by fire and maneuver. It is also responsible for creating entry points and breaching obstacles when engineers are not available.

- **Support Element.** The support element provides accurate supporting fire for the assault element. It normally consists of several crew served weapons, special equipment and additional infantry.

- **Security Element.** The security element provides security for the assault element’s movement. The security element may also have the on order mission of becoming a second assault force.

**NOTE:** ALL THREE FIRETEAMS MUST BE ORGANIZED TO CONDUCT THE ASSAULT, AS CASUALTIES MAY CREATE THIS NEED.

Combat Service Support (CSS). Here are the key considerations for urban CSS:

- Priority is support of combat power.
  - Bring ammunition, food and water forward before bringing casualties to the rear.
  - Reversal of this priority will result in more casualties, not less.
- Use prepackaged or instantly usable supplies.
  - Deliver ammunition in magazines and swap them out with empties.
  - Deliver water in full canteens, camel back bags or small bottles rather than 5-gallon cans.
- Anticipate limited CASEVAC by air due to greater risk environment.
  - Aircraft may not be able to approach as close to the wounded as they can in less complex terrain.
- Have a workable surface CASEVAC alternative plan that does not slow momentum and tempo.
- Ensure a vigorous force protection posture with CSS elements.
  - All CSS elements will be high value targets for any enemy concealed in the environment.

Squad Level Urban Logistics. Plan to carry much more ammunition than normal. Use cleared buildings for protected staging points to push logistics forward.

- Plan how to carry ladders, sledge hammers, ropes, and other MOUT specific equipment;
  - e.g., Demolitions for mouse hole charges to blow entry points in buildings.
- Have a simple but effective CASEVAC plan to deal with the number and type of casualties anticipated in urban combat.
- Have a functional, well-understood plan to provide a frequent resupply of water.

**B. MOVEMENT.**

Unit Movement in MOUT. Falling debris is a major casualty producer in the urban environment. Therefore, remain aware of the necessity for overhead protection. Wherever possible, plan to avoid routes that have significant potential for falling debris.

Movement Techniques. There are three techniques of movement depending on the likelihood of enemy contact. They are: traveling, traveling overwatch, or bounding overwatch.

- **Traveling** is used when enemy contact is remote.
- **Traveling Overwatch** is used when enemy contact is possible.
  - While caution is justified, speed is desirable.
- **Bounding Overwatch** is used when enemy contact is imminent.
  - Movement is deliberate and speed is not essential.
  - The moving force consists of two sections.
  - One section moves or bounds while the other section takes up an overwatch position.
  - Overwatch section covers the bounding section from covered, concealed positions that offer observation and fields of fire.
- The Bounding Overwatch technique is normally used in the city. For more information see MCWP 3-
Bounding Overwatch in MOUT. The bounding overwatch technique is a key component to reducing casualties in the urban environment. It is normally the preferred technique in MOUT. With training and practice, squads using this technique are very hard to track through the environment, even by observers on the highest buildings.

Tactical Patience. Do NOT mistake speed for momentum. Rushing headlong across a space between buildings may give the impression of momentum, but this urge must be balanced against the need to maintain situational awareness. The open area is likely a kill zone. A moment of tactical patience, during which the element leader conducts reconnaissance, integrates maneuver with available fire support, and briefs and positions his men, enables far greater momentum for the entire force than rushing into the space and having one or two men become casualties.

Fire Team Crossing Tactics. Squad or platoon sized crossing of danger areas can create a situation where the first ones across have to fight their way into the limited access points of the building, leaving the rest of the unit out in the open (stacked) to be easily destroyed. Although it is situation dependent, the optimum size unit to move across a danger area is the fire team, using fire team crossing tactics. The fundamentals of these are:

- Avoid silhouetting yourself.
- Avoid open areas.
- Select your next covered and concealed position before you move.

Do Not Get Canalized By the Enemy Into Kill Zones.
- When attacking, the squad can become canalized into killing zones by obstacles (especially wire) if it does not have a hasty breaching capability.
- This can be avoided with proper visual reconnaissance prior to moving across an open area to the squad’s next objective.

Do Proper Visual Reconnaissance.
- Squad leaders must conduct a proper visual reconnaissance prior to moving to the next objective building.
- Decide where their entry point(s) will be and what equipment will aid in breaching the building.
- As a general rule, when crossing danger areas, you should not move unless you are screened by smoke or low-light conditions and supported by covering fire. Then, move as quickly as possible in a bounding overwatch manner from covered position to covered position.

Individual Movement Outside of Buildings. When forced to move outside buildings, use smoke, covering fire, and cover and concealment. Hug the sides of buildings unless someone is shooting at you. If this is the case, try to stay about one foot off the wall to avoid bullets and bullet fragments that may roll along the walls. Stay in the shadows, move rapidly, and present a low silhouette.

Do not stack outside of buildings prior to entry.

The stacking technique is effective for police forces, or hostage rescue situations where the surrounding area is clear or under the control of friendly forces. In urban combat, this is not the case because Marines normally fighting for control of the entire area. Stacking to prepare for entering a building exposes those personnel in the most deadly killing zone in urban combat: the open street.

Movement Past Windows. If you cannot avoid the danger area (e.g. window opening) completely, stay below the window level. Do not silhouette yourself in the window. An enemy gunner inside the building
would have to expose himself to covering fire if he tries to engage you. This same technique is used for lower windows or small openings. An alternate technique is to pie off the window or opening.

**Crossing Open Areas.** Avoid open areas, such as streets, alleys, and parks. They are natural kill zones for enemy crew served weapons. If you have to cross, use bounding and overwatch and these TTPs:

- **Anticipate.** Identify and run the shortest distance to the next position.
- **Conceal.** Use smoke or low light conditions to conceal movement.
- **Apply Firepower.** Deliver supporting fires prior to, and during movement.
- **When moving from position to position, be careful not to mask your supporting fires.**

**Move in Appropriate Groups.** The assault element moves together, fast and tight, keeping muzzles pointed in direction of probable enemy locations at their next covered position. The support force provides the base of fire and security for the element moving.

- The general rule is to move as a fireteam sized element, but it is the squad leader’s decision based on METT-T, as to how to move the unit.
- Marines should *always* move in pairs—at the minimum (Buddy Team concept)

**C. ASSAULTING.**

**Assault Equipment Movement.** Plan for follow-on squads to bring proper assault equipment forward. As squads assault buildings they often have to leave the assault equipment (e.g., ladders) for follow on forces to bring up so they can maintain the tempo of the advance.

**Doorways.** Avoid using doorways as entrances or exits. They are normally covered by enemy fire or booby traps. If you have to use a doorway as an exit, move quickly through it to the next position, staying as low as possible to avoid silhouetting yourself. You should *not* move unless you have covering fire and smoke. Move past a doorway quickly if it is closed. Use the pieing technique if it is open.

**Planning for Building Assault.** Assume that there are no uncontested entry points or easy access routes.

- Determine the point of entry.
- Brief subordinates on verbal and visual signals to be used.
  - Include code words for employment of shotguns, demolitions, hand grenades, etc.
  - Clarify how you will use hand and arm signals for entry methods.
- Anticipate use of hand grenades and demolitions.
- Spread load ammunition and special equipment.
  - The assault team normally has priority of ammunition and equipment, but all teams must be prepared to assume the assault.
- Determine how to best use your designated marksmen.
- Determine the order that rooms will be cleared.
  - Clear rooms in one direction.
  - Two rooms can be cleared simultaneously.
  - Avoid establishing a pattern.
  - Change direction from floor to floor.
- Determine the technique for moving through hallways.
  - Wall construction material (concrete, wood, etc.) will dictate if you move in the center of the hallway or along the walls.
- Define the method of clearing rooms.
  - Choose between one, two, three, and four man clearing techniques.
  - Avoid establishing patterns.
- Arrange the means for reinforcing and relieving the assault element and clearing teams.
- Establish the means for marking cleared rooms and secured buildings. This may be dictated by HHQ.
- Decide the means for handling friendly casualties.
- Assign aid and litter teams within the support element.
- Determine the method of handling enemy casualties.

**Assault Element Responsibilities.**
- **Clearing Team.** This team consists of a rifleman and assistant automatic rifleman. They are the initial team in the building. Their mission is to clear the room of enemy threats.
- **Covering Team.** This team consists of the fire team leader and the automatic rifleman. They provide covering fire and local security for the clearing team who will make the initial entry.

**Assault Drill.** This gives the squad leader a technique for assaulting a building. The technique used must be based on METT-T and generally follows this sequence:
- Suppress enemy position with a base of fire. (Support/Security)
- Provide smoke for concealment. (Assault)
- Balance this with the possibility that you alert the enemy that you are about to rush.
- Assault Element approaches building and makes entry.
- Support Element enters building on order.
- Security Element moves on order.

**Methods of Entry.** Select entry point(s) before moving toward the building. Use smoke to conceal your advance toward the building, and covering fire to support the advance. Use demolitions or direct fire weapons to make new entrances. Multiple, simultaneous entries are the preferred entry method as it keeps the enemy off balance.

You must establish close coordination among assaulting forces to reduce the potential for fratricide.

**Upper Level Entry.** Clearing a building from the top-down is the preferred method. This makes gravity an ally when throwing grenades and eases the fatigue of moving from floor to floor. Use helicopter lift to get to the top of a building if the anti-air threat permits. Use ladders, drainpipes, vines, ropes, or roofs and windows of adjoining buildings to reach the top floor or roof. Use the stairs of an adjoining building then create a mousehole to cross to another building. However, be aware that the longer you spend ascending a building from the outside, the longer you may be exposed to enemy fire.

**Use of Ladders.** Ladders offer the quickest method to gain access to the upper levels of a building.
- The ladder entry (see figure 3) consists of number 1 and 2 man providing security. Number 3 man places and holds the ladder while Number 4 climbs the ladder and gains entry. The rest follow as 2, 1 and finally 3.
- Follow on forces must remember to bring the ladder and additional gear forward (not leave it behind) so it can be used for the next entry. You must weigh the use of the ladder against the time you will have to spend in the open and exposed to enemy fire.

**Use of Grappling Hooks.** This technique is the *least preferred method* of entry due to extended outside exposure. These are the essential elements of the use of grappling hooks.
- Must be rehearsed and practiced often.
- Requires significant upper body strength.
- Entails extended exposure time/vulnerability while climbing.
- Requires security at the bottom of the rope.

**Scaling Walls.** When forced to scale a wall, use smoke and diversionary measures to improve your chances of success. Plan for wind direction to optimize smoke for concealment. Avoid silhouetting
yourself in windows of uncleared rooms or exposing yourself to fires from lower windows. Climb with
your weapon slung over the firing shoulder to allow for quick presentation.

**Rappelling** can be used to descend from the roof top into a window if the environment is semi-permissive
or the situation dictates. However, you will be exposed and vulnerable during the descent

**Assisted Lifts.** Assisted lifts are designed to be done with or without extra gear, and should be done as
quickly as possible with minimum exposure time outside a building. Commanders should weigh the risks
of exposing personnel in a danger area against the need to use that specific entry point.

**Two Man Lift Supported.** Two men stand facing one another holding anything to support weight of the
Marine. Another Marine steps on the support with weapon ready. Once both feet are on the support, the
two men raise it, lifting the third man into the entrance. See Figure 4.

**Heel Lift.** One man, standing with palms flat against the building, feet out from the building with heels
raised, is lifted by two men through the window.

**One Man Lift.** One man, with his back or side against the building cups his hands and bends at the knee.
The second man steps onto the cup and is lifted up and into the entrance using his shoulder as a step if
necessary. See Figure 5.

**Two Man Pull.** When the first two Marines are inside the building, the other Marines are pulled up into
the building with or without the aid of 20-foot nylon web runners.

**Knee Lift -** The Marine will kneel down with the inboard leg closest to the wall resting on the knee. The
outboard leg will be resting on the foot with the knee raised. The other members of the team will use the
upper portion of the outboard leg to step off of and into the window.

**Two Man Unsupported -** The first two Marines will place their backs to the walls and get shoulder to
shoulder in a squatting position and place hands together forming a cup. The Marine entering the window
will use the cups for footholds and will be raised to the window by the other two Marines. See Figure 8-1,
8-2 and 8-3 for steps in this lift.

**Upper Level Entry.** An enemy who is forced to the top of a building may be concerned and fight
desperately, or escape over the roof. But an enemy who is forced down to the ground level may withdraw
from the building, thus exposing himself to friendly fires from outside. The various means, such as
ladders, drainpipes, vines, ropes, or the roofs and windows of adjoining buildings which may be used to
reach the top floor or roof of a building. In some cases, one Marine can climb onto the shoulders of
another and reach high enough to pull himself up.

**Use Speed During All Assisted Lifts.** These are six techniques that can be used if ladders are not
available. Buddy lifts can be done with or without extra gear, and should be done as quickly as possible
with minimum outside exposure. MCWP 3-35.3, MOUT describes these in detail.

**Field Expedient Buddy Pull.** In some instances, personnel may already be in the building and can assist
another Marine who is trying to enter. If possible, use something other than the entering Marines arms
and hands to assist him. If you pull him by his hands and/or arms, you limit his ability to assist you, as
well as limit his ability to use his weapon if needed. A simple field expedient to help this technique is to
loop a web belt through the back of the armholes of the flak jacket and use it as a pull handle.
Lower Level Entry. While clearing from the top-down is preferred, upper level entry in a mid to high intensity combat environment may present a greater risk than lower level entry because of exposure to enemy fires while climbing a ladder or rope. It may be better to take a chance at clearing from the bottom up than risk an upper level entry. When you have to enter at the lower level, use demolitions, artillery, tanks, or similar means to create a new entrance to avoid booby traps. Then use a quick entry to follow up the blast effects. When the only entry to a building is through a window or door, direct your supporting fire at that entry point. It is very difficult to throw a grenade from the ground to an upper window so use an M203 round fired from a supporting unit prior to your assault. Firing M203 rounds into the breach point to clear it of possible booby traps and any enemy threat can be very effective. Before entering, throw a hand grenade (if ROE allow) into the new entrance to assure the effects of the original blast.

Use of Mouse Hole Charges. These are used to breach holes in walls to create entrances to building as an alternative to existing openings. Also, the fragmentation effects of the charge could aid the team in clearing the room. The most important thing to remember when using a mouse hole charge is that it must be braced firmly against the wall. Breaching a wall is extremely difficult. Good target intelligence is key so you can know in advance about the building construction, pipes, electric wires, etc. If Combat Engineers are attached to the squad, seek their assistance.

D. CLEARING

Individual Techniques During Building Clearance.

· Always clear fatal frontal funnel of fire first.
· Avoid the tendency to bunch together in a room.
· Focus outward immediately after clearing a room or building.
· Reposition Marines to provide 360-degree security.
  --With observation outside the room and the building.
· Do not silhouette yourself in doors, windows or around corners.
· Avoid the tendency to extend a weapon out a window to fire from a cleared building.
  --Set up proper observation and/or firing positions.
· Stay low to the deck when moving around inside the building.
· Keep track of ammunition consumption.
  --Know how much ammunition is available to individuals / units.
  --Take advantage of brief breaks in the action to reload and redistribute as necessary.
· Use front sight post (Quick Kill techniques) during close range engagements.
  -- It may be better to be able to hit your target than to have better cover when entering a room.
· When forced to use a hallway, move 6- 8 inches off of the wall.
  -- Small arms tend to ricochet when they hit walls and travel one to five inches along a wall.
· Use wall-body-weapon technique to minimize exposure as you move around corners.
  -- Keep the wall to your back, and your body and weapon to the outside.
· Control noise where possible.
  -- Use hand and arm signals in the building to reduce noise level.
· Use buddy aid procedures for initial treatment of casualties.
  -- Do not stop fighting to do this.
· Clear overheads, corners, staircases and behind furniture
· Locate casualties and prepare to evacuate them if necessary.
  -- Signal or radio casualty reports.
  -- Identify the casualty collection point within the building.

Marking Movement Through Buildings. When moving through a building, mark the FLOT using a visible, easily understood system that extends out the flanks of the buildings. For example, chemical
lights or engineer tape. This lets the supporting forces know that they should shift fire two rooms ahead.

If this is not done or not done well, fratricide is likely.

· Mark entry point(s) and route of movement for follow-on forces.
· Mark rooms that have already been cleared.
  -- Use your unit SOP so everyone knows exactly what the marks mean; e.g., CASEVAC, etc.

Room Clearing. There are three factors to consider for clearing a room:
· Method of entry. How we actually cross the threshold.
· The number of men clearing the room;
  -- e.g., there are normally four men in the assault team.
· Positioning of men with respect to the opening and assumed room characteristics ("reading a room").

Detailed Room Clearing Techniques. See MCWP 3-35.3, MOUT for detailed room entry techniques.
Each of these techniques is effective when employed in the appropriate situation.

Group Room Clearing Techniques.
· Do not spray the room with rifle fire, unless absolutely necessary.
· Consider room size and expected number of enemy targets.
· Throw the grenade hard, so it bounces around the room, reducing the chances that it could be tossed back at you.
· Maintain communication among members of the assault team.
· Designate the order of entry of all personnel.
· Thoroughly search the entire room before declaring it “clear.”
· Mark the room with a pre designated signal, once it is cleared.

Individual Room Clearing Techniques. Maintain alertness and proper weapon carries “guns and eyeballs.” See MCRP 3-01A, Rifle Marksmanship for weapon carries.
· You do not have to look at someone to talk to him, nor to hear what is said.
· See MCWP 3-35.3 for detailed room clearing TTPs.

Clearing Through an Open Doorway. Do not expose yourself to an open door until actually crossing the threshold into the room:
· Check the doorway for booby traps without exposing anyone.
  -- Do it with the man nearest the door.
· If you are going to use a grenade, show it to all Marines in the immediate area to warn them of its use.
  -- Do this silently if possible; if not, use a code word.
  -- Do not use the word "grenade" to avoid warning the enemy.
· Throw it vigorously into the room as the clearing team takes appropriate cover.
· Rapidly enter the room immediately after the grenade explodes.
  -- Designate which Marines will do this.
· Systematically search every section of room
  -- Designate which Marines will do this.
· When clear, leave enough security personnel to adequately cover all possible means of entry into the room.
· Mark the room.
· Move the assault team on to clear the next room.
  -- Maintain tempo consistent with controlling fatigue.

Forcing Doors. Doors may well be the most common point of entry in a MOUT environment. Generally, the weakest part of any door is the latching mechanism.
· The latch is most commonly one inch long and placed through a metal loop called a strike and inset into a wooden jamb.
By striking the door solidly near the latch, the throw can either be bent or the jamb can be split.

When striking the door, hit it above or below the doorknob since striking the door to the side will usually only remove a rail or, in the case of a hollow core door, simply push a hole through it.

Pulling Doors. Another way of attacking a door is by pulling it. This is the most common method of removing steel bars from the door. When present, steel bars should be thought of as a separate door and considered separately from the one they protect. As with all doors, the weakest part of the steel barred door is still the latch and the hooks or prying mechanism should be focused here.

A steel door is difficult to pull because of the lack of ability to grasp the door. Pulling the door handle is seldom successful since it simply comes off, leaving the door intact and in place. Hooks can be successful if the hook can be pounded through the door near the latch. The pull should be in the direction the door would normally open.

Pick and Pry Method. The pick and pry entry method is exceptionally well suited for entries inside buildings and behind obstacles which prevent other types of techniques to be used. This method is of particular value in defeating “sally ports.” To use this method, place the tang of the tool in the crack between the jamb and the door and strike it with a sledgehammer, ram, ax or other tool. When the tool has penetrated past the door, pull it back toward the jamb. This may require the efforts of more than one person. Although a Hooligan tool is ideally suited for this, practically any prying tool can be used for this method.

Cutting Doors. Cutting doors should usually be considered as a last resort. With some exceptions, cutting a door is usually one of the most time consuming methods that you can use. However, if cutting a door is required, consider a large triangle or diamond shaped hole. This is particularly adaptable for garage doors. The triangle requires only three cuts instead of the four required for a rectangle. Structurally, a triangle hole is not as weak as another shaped hole. A chain saw is one of the fastest portable cutting tools for this type of entry. When using this tool, the noise and risk of exposure to enemy fire must be carefully considered.

Using Explosives on Doors. Explosives can be used to cut doors. This is by far the most complicated door entry. The method usually uses flexible linear shaped charge or detonating cord (“det” cord). The charge can be placed to cut the latching mechanism or the entire door into halves. If the door remains in the jamb it can usually be forced after the explosion.

Engineers, EOD technicians, and trained breachers should be consulted and utilized whenever this method is required.

Clearing Through a Locked Door. Never kick a locked door. It could be booby-trapped or the enemy could be waiting to hear the noise and shoot you through the door. Use demolitions if possible. Also:

- Use a shotgun (if available) to blast the lock off.
- Use the SAW as follows:
  -- Put the SAW 1 to 2 inches from the door knob/lock plate.
  -- Hit between the doorknob and lock plate.
  -- Fire long bursts.
  -- Move the SAW up and down the side of the door to defeat deadbolts.
  -- This has the potential to produce lethal ricochets.
  -- You may be more vulnerable to fire from other areas because the length of the SAW forces you to stand back from the door.
Clearing a Room Through Mouseholes. In addition to the above-described techniques and those described in detail in MCWP 3-35.3, MOUT the best way to enter a room may be through an opening (mouse hole) we have made ourselves.

- The size of the mouse hole dictates the clearing technique.
- If the mouse hole already exists, check it for booby traps.
- If possible, use a mirror to observe the room first while another maintains security on the mouse hole.
- Clear it using the same methods described above (and in MCWP 3-35.3).

Clearing a Passageway/Hallway. Before moving down a hallway, establish frontal security. Ensure that the teams do not mask this as they move down the hallway. Use only the minimum number of Marines to move down the hallway to clear the next room. Other Marines remain in the cleared rooms until called or needed. Maintain security on all openings. Adjust your movement according to the wall construction.

- Keep your head and eyes up while moving down a hallway to recognize and react to danger.
- Control your movement. Pick up your feet and be aware of your foot placement.
- This enables you to avoid any obstacles on the deck and helps you keep your balance.
- Regulate your speed. You cannot rush. Move only fast as you can effectively clear and eliminate all threats.
- SLOW IS SMOOTH. SMOOTH IS FAST.
- Maintain security. While moving down a hallway, designate one Marine to be point security to protect the rest of the team.

Floor-to-Floor Movement. There are two methods for floor-to-floor movement: clearing stairwells and creating mousetraps.

Clearing Stairwells. Knowing building construction plays an important role in determining which technique to use when clearing a stairwell.

- Continuing Stairwells (switchback) are normally on the ends or at the corners of buildings close to elevators. They normally have thicker walls and fire proof doors. Continuing stairwells should be cleared in segments by bounding rapidly between landings while maintaining security under landings, overhead, and to the front and rear. Teams move progressively up the stairway levels.
- Once a flight of stairs has been cleared, the clearing team stops to maintain security on the door and to the front.
- The next team then assumes the assault team role and clears the next flight of stairs.
- Repeat this until the top or bottom floor is reached.
- Non-continuing stairwells are more open and have two or less landings. They are usually found near the center of building close to large lobbies.
- Clear these with continuous movement by the original clearing team.
- If you pause anywhere on the stairs as in a continuing stairwell, you become easy targets.
- Because these stairwells are open, security is very difficult to establish and maintain.
- Once security is established, one team will move to the next landing and set security on the hallway.
- The next team then becomes the assault team to gain a foothold on that floor. Fatigue is a major factor in this action.

Stairwell Rush. This is the most effective way of attacking up a defended stairwell. However, these shooting techniques can only be used when the ROE allow and there are known hostiles in the stairwell and no noncombatants in target areas. The stairwell rush is a coordinated assault up the stairwell using two to four Marines depending on the width of the stairwell. The stairwell rush technique relies on placing an overwhelming amount of direct fire on targets or potential targets and getting up the stairwell as fast as possible. There are two types, the four-man rush and the three-man rush.

- Four-Man Rush.
MCRP 3-11.2, Marine Rifle Squad (DRAFT)

-- Left and right outside positions covered by a SAW.
-- Inside positions are two M16s
-- Entire team rushes up the stairwell while placing maximum volume of fire to the front overhead and to the rear (when going up a stairwell with landings that overhang the flights of stairs.)

· Three-Man Rush.
-- Left and right outside positions covered by a SAW.
-- Inside position is the single M16.

Immediate Action for Hand Grenade. These shooting techniques can only be used when the ROE allow and you can be reasonably sure that you won’t be shooting noncombatants. If the enemy rolls a hand grenade down the stairs:
· Run up the stairs toward where the grenade came from, firing as fast as you can through the wall in front of you at floor to hip level.
· Remember run toward where the hand grenade came from.
· If the enemy throws a hand grenade from a room into the hall way (or any other room) rush toward the room where the grenade came from rather than trying to scoop up the grenade.
-- This is a last resort option.
· Fire a few shots through the wall while you are moving and enter through the door shooting.

Immediate Action When Being Engaged Through Walls. There are times when an enemy will hear or suspect movement outside their room and will fire through the walls at you. Here is the IAD for this.
· Immediately after their initial burst, return fire through the wall while simultaneously hitting the deck.
· Enter the room where the fire came from as fast as possible.

Use of Hand and Arm Signals, Bumps or Squeezes.
· Never use your firing hand to send hand and arm, bump or squeeze signals.
· Use a weapons transport that allows free use of our hand/arm can be used for signaling.
· Do not use your trigger hand for signaling.

Security Within a Building. To the maximum extent possible, seal off every room from enemy reentry, either from the hallway or from outside the building.

Clearing an Elevator Shaft. Use these seven steps for clearing an elevator shaft. These assume the availability of electric power.
· Locate the elevator control room or control panel.
  -- It is usually somewhere near the elevator.
· Clear the elevator control room (as any other room) and advise the assault team leader of its location and status.
· Descend the elevator to the lowest level that has been cleared.
  -- Assume enemies are inside.
  -- Do not open the elevator door until the objective has been secured and security is posted on each elevator door.
· Use cross coverage when you open the door.
· Clear the elevator enclosure.
· Notify all team members covering all elevator doors that you are about to begin clearing the elevator.
  -- This ensures that all of the elevator shaft doors on each floor are covered when they open.
  -- When all teams are ready, open the doors and clear the inside of the elevator using two man clear.
· Raise the elevator to the next higher level.
  -- Clear the shaft under the elevator starting from the time you see the bottom of the elevator.
  -- Use a downward pieing technique to clear the shaft underneath.
  -- Continue to raise the elevator until it has reached the highest level where two Marines will be
positioned waiting to clear the top of the elevator and the space above the elevator.

- Clear the space above the elevator.
- The team on top floor begins by clearing the shaft from the center to the ceiling cutting the pie.
- As the elevator begins to reach the highest level both Marines should clear the top of the elevator.
- Clear the elevator shaft.
- Once bottom and top of elevator shaft are cleared, lower the elevator to the lowest level.
- Marines at lowest level must be prepared in case someone has slipped onto the top of the elevator.
- Once at lowest level a two-man team gets on top of the elevator with a spotlight and rides the
  elevator to the highest level clearing the inner shaft.

9106. Defense

S.A.F.E. Use this acronym to plan your defense.
- S – Security
- A – Avenues of Approach
- F – Fields of Fire
- E – Entrenchment

Urban Defense Fundamentals. The doctrinal fundamentals of defense do not change in MOUT. Use
maneuver principles, keep the enemy off balance and seek decisive action. Use METT-T to apply the two
fundamental types of defense: mobile defense and position defense. We tend to use both types
simultaneously and rarely will one type or the other be used exclusively.

Mobile Defense. If the squad is assigned this mission, you must focus on the enemy, not the terrain. Use
maneuver, together with fire and terrain (primarily buildings and rubble) to seize the initiative from the
enemy by letting him advance into a position that exposes him to counterattack. These are the
circumstances that favor a mobile defense:
- Mission does not require denying the enemy specific terrain.
- Defender possesses equal or greater mobility than the enemy.
- Frontage assigned exceeds defender’s capability to establish an effective position defense.
- Available battlespace allows the enemy to be drawn into an unfavorable position.
- Limited time is available for preparing defensive positions.
- Sufficient forces are available to allow rapid concentration of combat power.
- Enemy may employ weapons of mass destruction.

Position Defense. In the position defense, we put our force in selected tactical positions where the
decisive battle is to be fought. It denies the enemy critical terrain or facilities; e.g., avenues of approach,
transportation center, industrial parks, etc. This defense uses battle positions, strong points, obstacles, and
barriers to slow, canalize, and defeat the enemy attack. We use positions of mutual support organized
around key terrain features usually buildings to preserve the integrity of the defense and provide ease of
maneuver. We identify and locate our reserve in a position to respond quickly to exploit success or to
restore the battle position by counterattack. Based on METT-T, you can assign forces to defend sectors
using battle positions or strong points. Circumstances that normally dictate some kind of position defense
include the following:
- Enemy use of weapons of mass destruction is unlikely.
- Must defend specific terrain that is militarily/politically essential.
- Have less mobility than the enemy.
- Have limited maneuver space due to terrain restrictions.
- Can provide mutual support to the defending force.
- Lack battlespace depth.
- Have enough time to prepare positions.
Maneuver in the Defense. Two types of defenses that apply maneuver fundamentals to the defense are:

- Urban Ambush Defense.
- Urban Counterstroke Defense.

Urban Ambush Defense. This is an urban swarm approach that is similar to the tactic used by police responding to an emergency that requires backup. The tactical concept envisions numerous fire teams or squad-sized units operating in a dispersed, noncontiguous fashion in the urban environment. As these units (either fire team or squad) patrol their assigned defensive area, they are continuously prepared to respond rapidly to calls for assistance by nearby units/patrols. This means that all units must have shared situation awareness of each other. As a call for assistance is transmitted, the requestor gives an estimate of his requirements to all other units on the net and to HHQ Combat Operations Center (COC). The COC can direct an appropriate response to the request and adjust other units to fill or cover gaps that are created. Alternative methods could include the closest units responding without direction, while simply reporting their intention to respond. As situation awareness improves at all levels, so that all units have the current location of all adjacent units in near real time, coordinating this tactic of response without fratricide will become increasingly more feasible.

C² of the Urban Ambush Defense. The commander or leader of the unit requesting support, as the one with the best situation awareness, could retain tactical command of responding units. Other options could include the senior officer, SNCO, or NCO within the immediate area of operations assuming command, or in some instances, a command element being sent to the scene by the COC.

Avoid establishing patterns for ambush defense. If units respond to crises in repetitive or similar patterns, the enemy can use this to create crises to lure responding units into their own ambushes.

Urban Counterattack. Applying maneuver warfare to our concept of defense, this is an immediate counterattack on a local penetration as soon as it occurs. It combines the best attributes of defense and offense to maximize the advantages of each. Under this concept, the defender arrays his forces to cover a desired area and its approaches, deploying minimum force in much the same manner as a screen. We enable these units with fires of supporting and adjacent units and a reaction force that will assist in the immediate counterattack.

The urban counterattack is well suited to MOUT because forces are extended not by distance, but by terrain. This defense benefits from the surprise of the attack, while optimizing the knowledge of the defended terrain. In fact, defenders can specifically prepare positions to support this concept.

Urban Counterattack Philosophy. Fundamental to this concept is a shift from thinking about a tactical withdrawal to immediately moving to the attack. This makes the defense more of a meeting engagement than a defense. Specifically, once an attacking force penetrates a structure or building, we ATTACK, rather than focusing on options for withdrawing to the next position. Other/adjacent units must be prepared to assist in the urban counterattack by moving to assist the attacked location.

Implementing the Urban Counterattack. As an enemy force penetrates a structure, the defending unit notifies higher, adjacent and supporting units. At the same time, the unit goes into the attack to repel the enemy force. Thus, the defender moves to the attack while the enemy is attempting to consolidate at his initial entry point—vice waiting for the attacking force in defensive positions. The defender has the advantage of knowing the terrain in which he is operating, and by attacking, he will catch the opponent off balance.
Effects of Maneuver in Urban Defense. This approach to defense can confuse the enemy as to a unit’s precise location, critical vulnerabilities, and conceal our true intentions. Practiced properly, both the Ambush Defense and the Urban Counterattack can contribute to the enemy dissipating his forces, and energy at non-critical areas of the battlespace.

Employing MOUT Obstacles. These can be made of materials normally available to Marines in urban areas either from the engineers or because they can be readily found. For example, logs, such as utility poles, timbers and rubble are part of every city. And, vehicles of all sizes are usually part of the urban environment.

Ways to Strengthen MOUT Defensive Positions. Remove any climbing aids that may assist the enemy in gaining access to buildings. Ensure that any such things near defended buildings are either destroyed or moved far enough away so that the enemy cannot retrieve them. This includes, but is not limited to:

- Trees close to buildings.
- Drain pipes.
- Sheds and garages.
- Fire escapes, unless needed for withdrawal and can be covered by fire.
- Thick vines.

Creating Mousetraps. A mousetrap is a hole that has been blown or cut into a floor or ceiling. Security and initial entry through a mousetrap is most difficult, but once an entry is made movement becomes easier. When using grenades during upward movement, remember that they can be kicked back down through a mousetrap.

- Mousetrap size dictates the clearing technique to be used.
- Check existing mousetraps for booby traps before using it.
- Use a mirror to check inside the room before climbing into it;
  -- while another maintains security on the mousetrap.
- After throwing a grenade, if feasible, buddy-lift a Marine up through the hole. This Marine has to conduct a one man clear of the room, because there is not enough time to get more than one man up through the hole.

Protect Windows and Openings. Use chicken wire to protect these openings from grenades being thrown into the defended building. Drape black cloth (Hessian cloth) in doorways and to the rear of defensive positions as an aid to conceal movement within a building. See Figure 9.

Protect Entrance and Exit Points. Ensure that any building you select to occupy has a covered access for resupply, reinforcement and withdrawal. Block or constrict the other exit or entry points. For example, use sandbags to narrow them so they will slow down an enemy break-in/assault as shown in Figure 9.

Anti-Armor and Machine Gun Positions. Make sure that these are dug in with overhead protection. For anti-armor weapons, ensure you have sufficient clearance for the back blast to the rear. This means a room that is at least 20' by 20' and that has an opening in the back. Set up positions so the defenders can quickly move from position to position under cover and escape easily if necessary. Set the positions to make best use of the maximum range of the weapons and to be mutually supporting. For example, machine guns can fire through loopholes cut into the walls and reinforced by sandbags.

Machine Gun Fire. Machine guns are optimally employed low to maximize grazing fire. However, when you are covering an intersection in MOUT, placing them higher in buildings will often give them much more tactical effectiveness because your principal targets are vehicles. Decide which is best for your situation based on METT-T.
Defense Against Thermo Baric Weapons. Thermo baric weapons kill by blast and overpressure and thus are most effective against enclosed positions such as rooms in buildings. If you have a reasonable expectation that the enemy has such weapons, your primary defensive positions should be outside of buildings in slit trenches.

Internal Fortifications. Establish efficient weapons firing platforms that provide optimum protection from enemy fire. For example:

- Barricade all entrances, except those required by defenders or those intentionally left open as traps.
- Move via holes cut in ceilings, through which ropes or ladders can be raised or lowered.
- Use oil drums, ammunition boxes, wire and the like to restrict stairways and passageways.
- Put corrugated tin covered with grease on staircases to make them extremely slippery.
- Cut holes in the ceiling and have chicken wire cages hanging down, from which defenders can drop grenades at the head level of the attacking enemy.
- Use communications wire for fast, effective links inside a building.
- Make mouseholes so you can move unseen between positions.
- By smashing tunnels between partition walls of rooms or adjacent houses using picks, axes, sledgehammers, or similar tools.
- Avoid using explosives as it weakens the structure.
- Make sure occupied rooms have two exits, in case one gets blocked.
- Plan a route that reinforcements can use.
- Ensure it is feasible and protected from being blocked.
- Strengthen cellars and upper floor rooms support sandbags.
- Establish several locations within the building to stockpile reserve ammunition, water and food.
- Protect them with sandbag walls.
- Use propping to strengthen load-bearing members (figure 10).

Booby Traps and Mines. Booby traps and mines may only be employed by Marines when authorized by the ROE authority. Even when authorized, we must remain aware that their indiscriminate use can cause casualties to friendly troops. On the other hand, we should be prepared for an adversary to employ them against our forces.

Detection of Booby Traps and Mines. Although detection and clearance of traps is a task for a specially trained unit, such as Combat Engineers or EOD, depending on the situation, every Marine must look for signs of unusual activity that can warn of booby traps. These may include:

- Absence of people.
- Attractive items in unusual places.
- Disturbed ground, floorboards, fittings etc.
- Sawdust, nails, signs of recent work.
- Footprints.
- Battery wrappings, wire clippings.
- Minor channeling.
- Loose floorboards.
- Broken locks and catches.

When moving through a building, be acutely aware that food, valuables, enemy weapons, etc. could be rigged with pressure devices that explode when they are moved.

Nuclear, Biological, and Chemical (NBC) Considerations. Marines must be prepared to assume an adequate NBC defensive posture when engaged in urban fighting. Generally, the lowest floor or basement of a reinforced concrete or steel-formed building offers good protection from nuclear hazards and initial liquid chemical contamination, although some chemical agents tend to collect in lower areas. Armored
vehicles also provide some protection. When operating in mission oriented protective posture (MOPP) gear, you have to make allowances for the greatly increased fatigue factors due to the effort expended to execute urban combat TTPs.

9107. Urban Patrolling

Urban Patrol Organization. For urban patrolling, organize the patrol into assault, support, security, and command and control elements. You should further divide the security element into front, flank, and rear security responsibilities. Use formations that allow you to move with speed through areas of low threat yet keep the ability to quickly transition to secure movement if contact with the enemy is made unexpectedly.

The Tactical Bubble. All tactical formations moving through the urban environment must maintain a tactical bubble or “spherical security” as described earlier. Your patrol has to be able to react to enemy contact at any point of the formation or multiple points simultaneously. In effect, you must deny the enemy the ability to maneuver freely against the flanks and rear. And, even though the patrol may be structured for all around security, each element within the patrol has to create a tactical bubble in its own right. This requirement extends all the way down to individual fire teams.

Urban Patrol Principles. You may have to transition from a presence patrol to a life and death firefight within seconds. This causes us to focus on these six principles for urban patrolling:

· Maintain Depth. The restrictive, canalizing nature of urban terrain usually limits a patrol's ability to disperse laterally. So, to prevent bunching up, maintain depth along the length of the patrol formation.
· Plan for Mutual Support. Put your support weapons (SAW, anti-armor, machinegun) in key spots within the patrol so they can provide immediate, effective fire support.
· Consider Deception and Pattern Avoidance. Vary patrol routes, duration, and departure times to prevent enemy ambushes, blockades, and other hostile actions.
· Establish Solid Communication. Each element within an urban patrol must be able to communicate with every other element within the patrol. Also, the patrol must have reliable communication with higher HQ for reporting and to share SA with other friendly forces.
· Establish a Reaction Force. Due to such a wide range of threats, the need for immediate, coordinated reinforcement of an isolated urban patrol is best satisfied by an established reaction force.
· Plan on the Three Dimensional Threat. Hostile actions can originate from rooftops, streets, and subsurface levels.

HQ Patrol Planning Responsibilities. Higher headquarters will:

· Assign missions to a specific unit (company or platoon).
· Designate the area for patrol.
· Provide intelligence briefs and updates.
· Coordinate with higher, adjacent and supporting units.
· Ensure liaison with allied forces and civilian populace.
· Provide special equipment and specialists.
· Consider deception and pattern avoidance.

Patrolling Unit Planning Responsibilities.

· Assign the patrolling mission to a specific unit (platoon, or squad).
· Conduct detailed patrol planning and rehearsals.
· Coordinate with higher, adjacent and subordinate units (patrol overlay, intelligence briefs, etc.).
· Coordinate with the reaction force commander.
· Conduct intelligence brief by S-2 officer or representative.
· Issue the Urban Patrol Order/Warning Order.
Conduct initial and final inspections.
- Ensure attachments are fully integrated into the patrol and know plan and all unit SOPs.

**Single Column Urban Patrol Formation.** Unless dictated by street/alley width, use this formation only when enemy contact is considered to be unlikely. You can use this formation to move rapidly along a street, or when streets are restricted in width, but the single column is the least preferred advance/patrol method of moving. The same principles apply as in the double column (see below), except the single column does not provide 360-degree security.

**Squad Double Column Urban Patrol Formation.** There must be at least two squads or fire teams to conduct a double column. This method gives you 360 degrees of security with mutual support and interlocking sectors of fire. Squads move down the sides of the street using the building walls for cover and concealment. The point men stay abreast of each other while the rest of the Marines stagger themselves tactically. See Figure 11. Patrol leaders take a position that allows them to best control their units.

**Sectors of Responsibility.**
- **Point men** are responsible for security to the direct front and for pieing off windows and doorways. They are also responsible for staying abreast of one another.
- Marines immediately behind point men are the cover men. They cover the 45-degree oblique angle across from one another. The second cover man covers the direct front when the point man is pieing and checking for the enemy. The third and fourth cover men in the column are responsible for the far-side flank security. One covers the upper level and one covers the lower level building windows, doors, and stairwells. The fourth Marine also provides rear security if he is the last man in the column. Or, he interlocks his sector of fire with that of the lead Marine in the next fire team in the column.
- The last two Marines in the squad of each column are responsible for the rear security of each of their formations. They move in bounds so that they always provide active security to the squad’s rear.

**Multiple Urban Patrol Formation.** This is a technique used by a reinforced squad or platoon to enable an effective patrol through an urban area. It avoids being channeled down one route while retaining mutual support. This technique has been effectively used by Royal Marines in Northern Ireland. The baseline principle is called *satelliting.* This entails squad movement in groups dispersed fire teams with each fire team using the ISR to keep close communications with each other to enable rapid, if not immediate, mutual support when necessary.

**The Satelliting Principle.** The Squad Leader and his fire team (the primary team) move along a planned route, known as the primary route. The other fire teams move along parallel streets, on the primary route axis ahead and behind the primary team. They constantly change their locations in relation to the primary team and each other, moving into the best positions to cover each other, particularly when crossing open ground etc. This technique is called satelliting. Figure 12 illustrates this approach.

The success of the multiple patrol requires a clear patrol plan, good communications (primarily via the ISR) and effective control by both squad and fire team leaders. When operating in the correct way, the multiple patrol formation will provide mutual support through the satelliting fire teams that will keep the enemy off balance. The enemy will be unsure of the locations and movement of all of the fire teams, thus deterring many from making contact.

**Other Movement Formations.** In a high threat environment, the need for immediate firepower often outweighs the dangers of becoming canalized. However, in a low threat level, possibly only marked by snipers, our need to be able to move quickly modifies our approach; e.g., so we can cut off a terrorist’s
escape route. The V formation is an example of such an approach. Here, fire teams move in a V formation along parallel routes, while staying in depth with mutual support. The HQ team is in the center, with Assault and Security Teams slightly forward, on each flank. The distance between teams is within 150 meters. If the environment poses a higher threat level or the streets are too far apart, then the squad moves in a staggered column formation.

For Platoon-sized patrols, squads generally travel in the same manner as the fire teams along parallel routes. The intent is to create less of a target to an aggressor yet still allow the patrol to quickly react to an incident. Individuals within units/teams will move in a tactical stagger. Whenever possible, use snipers in an overwatch position to provide patrols with observation and intelligence updates prior, during, and after the patrol is conducted.

Navigation/Control Measures. The patrol leader is responsible for the navigation of the patrol. The headquarters unit normally functions as the base unit during movement and the designated navigator is normally assigned from within the headquarters unit. Buildings are the major terrain features, and units become tied to streets. If fighting has destroyed buildings, rubble may block these streets making navigation and control even more difficult. Operations in subways and sewers present other unique navigation challenges described below.

Crossing a Street Intersection. Cross four-way intersections quickly with focused security for the protection of crossing units. Crossing the intersection will force the three elements of a unit moving along a city street to rotate positions and assume appropriate responsibilities.

- **First Fire Team To Cross.** The lead (1st) fire teams in the two columns simultaneously set security around the corners of the building. They provide mutually supporting security to the direct front, security to the building on the far side of the intersection, and intersection security. The middle (2nd) fire teams provide mutually supporting flank and rear security. On order, the rear (3rd) fire teams move forward, cross the intersection, and assume the lead (1st) fire team’s forward security mission.

- **Second Fire Team to Cross.** The front-most fire teams (now the middle fire teams) continue to provide intersection security and assume rear area security. The 2nd fire teams (now rear fire teams) cross the intersection on order. The second fire teams position themselves to provide rear and intersection security to support the covering of the last fire teams.

- **Third Fire Team To Cross.** The 1st fire teams (now the rear fire teams) provide rear security and cross the intersection on order. In a leapfrog fashion, the 1st fire teams bypass the 2nd fire teams to become the middle fire teams and provide mutually supporting forward and flank security. The 2nd fire teams become the rear security.

After the squads and three fire teams have crossed the intersection, the fire teams have rotated. This rotation is convenient because it alternates the lead units, who may be fatigued by the demands of MOUT. The same procedures are used to cross an intersection with a single column.

Sewer Navigation. Navigate sewers in much the same way as city streets. Try to get maps providing the basic layout of the sewer system. These are normally maintained by city sewer departments and include the directions the sewer lines run and distances between manhole covers. Along with basic compass and pace-count techniques, such information may enable you to move through the city sewers with accuracy.

Using City Maps. The scale of the city map can vary from 1:25,000 to 1:100,000 depending on the importance and size of the city. Special maps prepared by topographical engineers may be available, but don’t count on them, especially in third world cities. When available, they may include maps of road and bridge networks, railroads, built-up areas, and electric power fields. Use street maps, unless street and road signs have been destroyed, switched or removed by the enemy.
As a map numbering technique, divide the urban terrain into *areas* (indicated by Roman Numerals) and then into *sectors* (indicated by letters). Number each of the buildings within each sector. This technique will help you more accurately identify your position. In use, you would state your position by saying Area II, Sector M, Building 6, for example. This technique is illustrated on the map in figure 13. Notice how many buildings may be included within just one square kilometer. Use street intersections or building numbers within sectors as reference points just as you would use hills and streams in rural terrain. Be alert to the possibility that the steel and iron in the MOUT environment may cause inaccurate compass readings.

**Use of Electronic Navigation Aids.** The urban canyon adversely affects the performance of some types of communications-electronic devices such as the GPS, the Position Location Reporting System (PLRS), and other line of sight (LOS) data-distribution systems. When available, use these systems on the tops of buildings, in open areas, and down streets where obstacles will not affect LOS readings.

**Urban Patrol Security Issues.**

*Camouflage.*

- the normally overt nature of urban patrols limits the need for camouflage.
- However, you should *always* use camouflage at night.

*Movement Rate.*

- During daylight, vary your rate of movement. Take irregular halts and employ brief periods of double timing. Make your patrol very hard to predict so you frustrate the enemy’s ability to coordinate an attack or easily set an ambush against a specific patrol.

*Security Halts.* (See the *Go Firm* tactic described earlier.)

- Patrols should take short security halts, with Marines taking up mutually supporting firing positions that change frequently.
  - 5-meter check. A short-term halt to conduct an immediate visual search within a 5-meter radius.
  - 20-meter check. A longer-term halt to conduct an immediate visual search within a 20-meter area.

*Buddy System.*

- Marines must always work in pairs, ensuring mutual support. The last man in the unit/team will provide rear security, but will always remain in sight of his assigned buddy.

**Danger Areas.** Patrols can expect to encounter many danger areas during a single patrol in the urban environment. These are points that pose a major threat to the patrol. They can be local political and religious headquarters, weapons containment areas, roads and routes that canalize movement and firepower. Add to this any area with a history of repeated confrontation or engagement with the local population. The danger is three-dimensional and always “in range” because of the proximity of buildings to the patrol route. Thus, every patrol member must maintain acute situation awareness at all times. Even a brief period of inattention could lead to a serious casualty.

**Dealing with Danger Areas.** Although danger areas should be avoided, our mission may require us to enter them. We can deal with this reality by using good patrol formation, movement rate, etc. Here are some other precautions that relate to patrolling in danger areas:

- Designate near and far side rally points.
  - Brief how you will use them during issue of the patrol order.
- Use the assault and security (A&S) teams to provide flank security for the headquarters unit and each other.
  - HQ unit identifies danger area and takes up static position on near side of intersection. Individuals provide all-around security.
  - A designated two-Marine element, consisting of one Marine from each A&S team move through
the HQ unit and establish respective firing positions on the near side of the danger area covering the patrol’s near side flanks.

-- Follow this element with a second pair (again, one Marine from each A&S team) who move across to the far side of the danger area and establish respective firing positions covering the patrol’s far side flanks.

-- Use bounding overwatch techniques to cross the unit.

**Patrol Reaction to Enemy Contact.** If a unit engages or is engaged by the enemy, there are two basic options that Marines may follow. The first and most preferred option is to immediately return fire and conduct a hasty attack to gain a covered position inside of the building. The second and least preferred method is to remain outside of the building(s) and fight from the street.

- Gain a covered position. Immediately return fire if the enemy’s position is spotted and enter buildings as quickly as possible. Use the basic principles of entry; however, speed of action is essential. Once inside, quickly scan the area and engage any threat. If no threat is present, acquire the enemy’s positions and deliver carefully aimed shots to achieve fire superiority.

- Remain outside and fight. Do not use this option unless strict ROE prohibit the occupation of buildings without being fired on from that specific building, or because of building obstructions, obstacles, or booby traps. In such cases, seek whatever cover exists, quickly acquire the target(s) and return fire to gain fire superiority.

**Reaction to a Sniper.** Patrol members should constantly try to identify likely firing points and anticipate their reactions to a shooting. When a sniping occurs, keep in mind that it may be part of a plan to entice you into a reaction that drives you toward a larger, more lethal attack. On the other hand, urban snipers will normally have a clear withdrawal route, so they may be planning a one shot and leave episode. You have to plan for both of these possibilities.

**Sniper Immediate Action (IA) Drills.** The technique is the same for both squad and platoon-sized patrols. If the sniper is to be neutralized (killed or captured), the patrol maneuvers by using planned and rehearsed IA drills. The goal is to cut off the shooter’s escape and then deal with him as follows:

- React immediately and positively to get behind the firing position in order to kill or capture the sniper.

- Unit in contact attempts to identify the firing position and maneuvers a designated marksman/counter-sniper team into position to return well-aimed and controlled fires.

- The unit leader determines appropriate cutoff positions and relays them to flanking teams.

- The unit leader in contact sends initial contact report to the patrol leader, who relays information to higher headquarters.

- The unit leader in contact retains eyes on the firing point, but does not enter it due to the possibility of booby traps.

- Flank units/teams set up along likely escape routes.

- The end of the contact period is signified by either a cease in sniper fire or neutralization of the gunman.

**Reaction to a Decisive Engagement.** If a patrol becomes decisively engaged from numerous firing positions, take the following immediate action:

- Move to available cover and return accurate fire on identified firing points.

- Patrol leader assesses the situation and decides to either assault the position, request a reaction force, or to break contact.

- Use appropriate MAGTF combined arms capabilities.

- If the reaction force is requested, the engaged patrol maintains its position until the reaction force arrives.

-- Then it either clears occupied buildings or covers the patrol during its extract.
9108. Employment of Designated Marksmen

Designated Marksman (DM). The DM is an individual with additional training in the fundamentals of marksmanship and observation. He is equipped with an optic mounted on his M16A2 Service Rifle, or M4 Carbine, when available. He is not a sniper.

Mission of the DM. The two elements of the DM mission are:

- Deliver precision fire in support of maneuver of the rifle squad.
- Cover the approach and entry of the assault element.
- Eliminate threats in and around the objective.
- Cover avenues of approach.
- Seal off the objective area by fire.
- Provide diversionary fire for assault elements.
- Gather Intelligence through the use of optical equipment.
- Collect and relay vital tactical intelligence data.
- Report on the Priority Intelligence Requirements.
- Identify enemy leaders or hostile individuals hiding in a crowd.

DM Precision Fire Missions. With the DM in place, the option of resolving any situation by fire is always available. The tactical employment of the DM is entirely METT-T dependent. These are the principal types of fire missions executed by the DM:

- Destroy
  -- Inflict personnel casualties such that they are unable to pose a threat to friendly forces
  -- Damage a target so that it cannot function as intended nor be restored to a usable condition.
- Suppress
  -- Use fires to temporarily neutralize or degrade the enemy’s weapons effectiveness.
  -- This may not entail inflicting casualties as long as the enemy’s weapons are suppressed and he seeks cover and stops effective maneuvering.
- Harass
  -- Reduce enemy effectiveness by curtailing his movement, disturbing his rest and lowering his morale by threatening losses.
  -- This can be especially effective in the tight confines of the urban battlespace.

DM in the Assault Element. The rifleman in an assault element is used in building assault and room clearing so he will not normally be assigned in the DM role. Simply put, the close combat mission of the assault element does not support the use of a DM. However, leaders should consider using one or several of his trained riflemen from either the security or support element to be DMs to provide covering fire for the assault element.

DM in the Security Element. During urban assault, the threat is often well hidden and well protected from small arms fire. This makes the security element an ideal place to employ the rifleman as a DM. Using the magnification power of his optic, the DM is able to spot the small apertures and loop holes that the enemy can use to fire on the assault force. He can acquire and shoot the enemy through the opening or hit whatever small part of him is exposed. Using his optics, he can acquire targets, either by sight or muzzle flash, and engage them with precision fire. Target acquisition is enhanced if the enemy is firing machine guns or Rocket Propelled Grenades (RPGs) at the assault force because of the larger signature of these weapons.
Advantage of the DM in the Security Element. A squad leader using one fire team to assault the building, one fire team as the security element and one fire team as the support element will have two DMs to accomplish this mission. The advantages of employing DMs in this manner include:

- Focused firepower.
  -- Rifle fire is concentrated on specific target(s) rather than areas.
- Optimizing automatic weapons.
  -- Employing DM to provide suppression frees the automatic weapons to support the assault force in ways that are more in keeping with their design and plays to the strengths of these particular weapons.
  -- In addition, it allows leaders to situate automatic weapons at ground level thus maximizing grazing fire.
  -- The precision DM capability gives us a viable option when the suppressive firing of automatic weapons is limited by concerns for fratricide, ROE and unnecessary danger to noncombatants.

DM in the Support Element. As Marines from the security element are called up, the DM from the support element can also provide covering fires. A rifleman acting as a DM located with this element can provide covering fires until all units from the squad are inside the objective building. He then moves with the support element into his next position to provide eyes on the next objective. DMs located with this element or any other have the mission of sealing off enemy escape routes during consolidation and are oriented on likely avenues of approach for a counter attack. This ensures that a retreating enemy is continually engaged with accurate fire and gives the DM the advantage to break up any counter attacks that the enemy may launch.

Breaking Contact. The Patrol Leader may be forced to break contact as a result of decisive engagement with the enemy. On the basis of his estimate of the situation, he will break contact in one of the following ways:

- As a patrol, with units/teams providing cover for movement defined by clock direction and distance.
- As individual units/team, taking separate routes out of the area then linking-up at a designated rally point that is a safe distance away from the engagement area.

As in any contact with enemy forces, use smoke to screen movement. Get supporting fires from the MAGTF as necessary to ensure a tactical retrograde. If allowed by the ROE, use riot control agents to disrupt any enemy pursuit.

9109. Combined Arms

Combined Arms Philosophy. This is more than simply using multiple weapons systems against an enemy. It's employing organic weapons, supporting arms, and maneuver to present a dilemma to the enemy; i.e., to avoid one threat, he will expose himself to another. Applying combined arms demands tactical proficiency and knowing the effects and employment methods for many types of weapons and how they relate to maneuver warfare.

The MAGTF is a balanced combined arms team. Combined arms is standard practice for all Marines. The strengths of the various arms complement and reinforce each other. At the same time, the weaknesses and vulnerabilities of each arm are protected or offset by the capabilities of the other.

For example, when you combine tanks and infantry to work together in an urban battle, you make a formidable team. Tanks operating alone can be vulnerable to close-in antitank fires such as the rocket-propelled grenade (RPG) fired by enemy infantry. Infantry operating alone has no powerful direct fire system. By operating together, the two elements create a combined arms team that helps eliminate the vulnerabilities of the other. The tanks provide long range direct fire support while the infantry provides protection for the tanks against close threats.
**Squad Weapon MOUT Considerations.** See Appendix A of MCWP 3-35.3, *MOUT* for a summary of MOUT weapons employment considerations.

**Mounted Urban Patrols.** Mounted patrols capitalize on speed, vehicle mobility and firepower.
- May be motorized, mechanized, or armored vehicles.
- Can be used in any combination.
- When LAVs and AAVs are used, ballistic protection is increased.
- Tracked vehicles provide better mobility than wheeled vehicles due to their greater ability to negotiate obstacles and rubble.

**Vulnerabilities of Mounted Patrols.** The problems associated with mounted patrols include:
- Easier to be canalized into killing zones.
- Cannot use the 3-Dimensional aspect of the urban areas.
  - Generally confined to roads or wide, passable surfaces.
- Vehicles need additional protection (e.g., reactive armor, sandbags, wire mesh, etc.) to negate attacks from sides, rear and top.
  - Vehicles always need infantry protection.

**Mounted Patrol Organization.** Mounted patrols are generally organized in the same manner as a dismounted patrol into assault, security, support and command and control elements. They maintain unit integrity when positioning personnel to specific vehicles. A notional squad size patrol that is task organized with three vehicles could be effectively organized as follows:
- Assault and security team A.
  - Driver, Fire Team Leader, Gunner, A-Gunner.
- Assault and support team B.
  - Driver, Fire Team Leader, Gunner, A-Gunner.
- Command/HQ unit.
  - Driver, Fire Team Leader, Squad Leader, Gunner, A-Gunner.

**Mounted Urban Patrolling Principles.**
- Ensure mutual support and depth by maintaining constant observation among vehicles.
- Coordinate supporting fire plan with any dismounted units in the area.
- Maintain all-around security.
- Be wary of temptation to de-emphasize rear security because of speed of movement.
- Plan for and maintain positive communication between vehicles.
  - Plan to use easily recognizable visual signals.
  - Plan how smoke will be used including its color.
- Adjust patrol routes and speeds to promote deception and pattern avoidance.
- Maintain 360° security when moving and at the halt.
- Never enter the area via the route you will use to exit.

**Employment of Mounted Patrolling.** The keys to success for mounted patrols are:
- Mutual support.
- All-around security.
- Positive communications.
- Patrol routes and speeds that are adjusted to promote deception, and pattern avoidance.

*Speed and shock are weapons for mounted patrols. It may be best to immediately assault through the firing position. Hit them head-on. If tanks are present, it may be best to immediately smash through a barricade from which the patrol is receiving fire.*
**The Dismounted Patrol.** As the threat of enemy contact increases the formation commander must determine how to maintain the security of the patrol. He has two options. One is to remain mounted and use his speed and momentum to push through light contact. This is a viable but risky option that risks having a whole squad killed or wounded if they are trapped in a vehicle hit by antiaircraft fire. The other option is to dismount short of high-risk areas and patrol on foot to find and fix the enemy. This is the option that will be used in the majority of cases.

The dismounted combined arms patrol can be an effective technique to fix and destroy the enemy in a fluid, high threat situation during MOUT. When dismounted the patrol is able to achieve all round security. The infantry are able to move out and away from the noise of the armored vehicles. They are also able to make contact with the population and get a sense of the dangers of the environment. An example formation is shown graphically in Figure 14.

The key characteristics of this patrol are as follows:
- The lead elements are a dismounted infantry squad and a tank.
- The tank travels behind the lead fire-team, coordinating its movement with the team leader.
  - The squad leader moves parallel to the tank, able to direct the tank’s fire or position the tank should his lead team get into contact with the enemy.
  - The remainder of the squad hastily clears to the sides and rear of the tank.
  - A close protection team is only necessary with the tank if the patrol commander intends to regroup the tank during the patrol.
  - In all other situations the lead squad provides the security for the lead tank as it hastily clears the route.
  - The threat level and the length of the patrol will determine whether the remainder of the patrol is also dismounted and hasty clearing along the route.
- Where possible, the depth elements should remain mounted to reduce fatigue and allow the rotation of fresh troops into the lead.
- The patrol commander and the engineer attachments should travel forward in the order of march. Both should remain mounted as long as possible.
- The last elements in the patrol formation are the trail infantry squad moving dismounted with another tank in support of their movement.
  - They are employed in the same way as the lead element: fire-team and tank, followed by the last two fire-teams.

Dismounted squads do not conduct deliberate clearances of every building. This process is time consuming and physically demanding. The aim of the patrol remains to find and fix the enemy. It is when the enemy has been found that deliberate building clearances commence.

Conceptually once contact with the enemy has been established, the lead infantry squad and tank fix the enemy while the rest of the patrol maneuvers to envelop the enemy’s position. The formation described above has the advantage of tanks being in both the fixing and enveloping forces. Additionally, a tank is positioned forward to provide shock action and responsive direct fire support for the lead infantry squad. The tank will normally be able to drive through any light enemy resistance.

**The Combined Arms Attack in MOUT.** The guiding principles for the combined arms attack do not change in the urban environment. Adherence to these guiding principals is therefore still critical in achieving success.

**Tanks.** Tanks maneuvering with infantry are lethal, mobile and survivable assets in the urban environment. Tanks help to reduce infantry casualties even as the infantry is protecting the tanks. Further,
the thermal sights on the tanks are a powerful aid in locating and identifying enemy positions. Also, keeping the tanks well forward in the column of march provides the infantry with near instant direct fire support. Whether engaging a sniper, destroying a prepared defensive position, or countering an ambush, having the tank readily available helps to quickly suppress and defeat the enemy. This helps reduce friendly casualties in the most deadly area of the urban environment, the streets and open areas.

**Light Armored Vehicle (LAV)**. The LAV 25 (with the 25mm Chain Gun) can be a valuable combined arms asset in MOUT. However, leaders must take its vulnerabilities into account. Specifically, the gun and sight are powerful assets when used to establish overwatch positions on areas of high ground or down long straight roads that allow it to maintain a good stand off range. However, LAVs are vulnerable to tank, antitank, and some machine gun fires. Maneuverability and speed is degraded when LAVs are used in streets or alleys that are short and narrow. As a wheeled asset, it can also be boxed-in by structures or rubble. If employed as a tank, high casualty rates for the LAV can be expected.

**Combined Arms Antiarmor Team (CAAT)**. Each infantry battalion normally organizes a CAAT to be ready to deal with an armor threat. Depending on the threat, these are task-organized elements normally consist of mounted heavy machine gun and antiarmor assets. When it is organized from assets drawn solely from the battalion—i.e., no tanks, AAVs or LAVs—it is almost wholly drawn from the Weapons Company. Depending on the threat, all or part of a rifle company's command group—artillery forward observer (FO), 81mm FO and FAC—is part of the CAAT. Often, an 81mm mortar vehicle with one tube is included in the CAAT so that the 81mm mortar can be an on-call marking tool for CAS. The vehicle-mounted weapons included in a nominal CAAT platoon are:

- TOW, Dragon and/or Javelin ATGMs
- Mk-19 40mm grenade machine guns
- .50 caliber heavy machine guns

Properly trained CAAT members are proficient in call-for-fire and close air support procedures. Their capabilities can be enhanced through the use of hand-held designators for precision-guided weapons. The CAAT uses doctrinal movement techniques consistent with assigned mission and the threat situation. Tactical missions include employment as a reconnaissance, screening, guard, ambush or delaying force.

In the offense, the CAAT can be employed as a combat reconnaissance patrol ahead of, or flanking, the main body in a movement to contact. In the defense, the CAAT can be used far out in front to expand the defense in depth with tanks in a series of defensive delay lines to shoot and maneuver in a combined arms battle well in front of the main battle position. They can also be part of the counterattack force, usually in overwatch of tanks. In either the offense or defense, the unit must have a plan to react to a decisively engaged CAAT.

**Infantry/Armor/AAV/LAV/Engineers in MOUT.**

**Combat Vehicle Fire Support Roles**. In MOUT, combat vehicles are often employed as fires support vehicles for infantry. Typical missions include:

- Suppression/destruction of enemy forces in buildings and strong points.
- Reserve or counterattack suppression fires.
- Creating entry/exit points in buildings.
- Isolation of the built-up area or objectives within the built-up area.
- Antiarmor fires.
- Breaching obstacles in a direct fire mode.

**Tank/Infantry Operations in MOUT**. The powerful, high-velocity 120mm cannon and the machine guns mounted on the M1A1 tank provide excellent direct-fire support. Although the infantry assumes the lead role during combat in urban areas, tanks and infantry work as a close team mutually supporting each
other. Tanks move down streets with the infantry protecting them from antitank weapons (RPGs, AT-3s, etc.). In turn, the tanks support the infantry with fire support. The primary role of the tank cannon during combat in urban areas is to provide direct fire support against buildings and strong points that are identified as targets by the infantry.

Tank Weapon Systems. The M1A1 tank has significant firepower with highly accurate fire control systems that includes a 20 power optical sight. Its four weapon systems are:

- 120mm main gun with multiple warheads available.
- 7.62mm coaxial machine gun w/10,000 round magazine with tracer and armor piercing incendiary rounds.
- 7.62mm loader’s machine gun w/ 200 round magazine.
- .50 caliber machine gun w/100 round magazine with 1000 more rounds on board.
- The tank can also mount an in-bore .50 caliber device used to shoot precision engagements to 2000 meters. The in-bore device is normally a training device, but it can be configured the tank’s main gun for operational employment. It provides the supported unit with an effective anti-sniper weapon.

In addition to its 20-power optics, the tank’s fire control systems include:
- Laser range finder.
- Thermal-imaging systems can provide the infantry an enhanced surveillance capability during low light or reduced visibility conditions.

Tank-Infantry Employment. The infantry may be dismounted, truck-mounted, or AAV-mounted, depending on METT-T factors. When Marine tanks are employed in MOUT, tank units may have to be task organized down to sections with two tanks per section. Tanks support the infantry in urban areas by:

- Providing shock effect and firepower.
- Isolating objectives with direct fire to prevent enemy withdrawal, reinforcement, or counterattack.
- Neutralizing or suppressing enemy positions.
- Smashing through street barricades or reducing barricades by fires.
- Using fires to reduce enemy strong point in buildings.
- Obscuring enemy observation using onboard smoke generators.
- Suppressing identified sniper positions.

Infantry supports tank in urban terrain by:

- Locating targets for engagement by the M1A1 tank.
- Suppressing and destroying antitank weapons with mortars, automatic weapons, and grenades.
- Assaulting positions, clearing buildings, and securing chokepoints such as bridges and causeways.
- Providing local security for M1A1s throughout the urban operation;
- At a minimum, one infantry fire team must provide security for each tank.
- Ground guide tanks in close terrain using standard tracked vehicle hand and arm signals.

**Speed and shock are weapons for tank/infantry employment. It may be best to immediately assault through an enemy barricade or position from which the force is receiving fire.**

M1A1 Employment Considerations. The following are some techniques and concerns that Marine infantry and/or tank leaders should consider when employing M1A1s in urban terrain:

- The tank's main gun has danger zones that can cause death and serious injury to Marines due to:
  - Back blast overpressure that can kill or incapacitate.
  - An armor piercing discarding sabot (APDS) round that discards 3 or 4 petals after firing that can kill unprotected personnel. The *Danger Zone* extends 1000m along gun line and 70m on either side of the barrel.
- M1A1s should mount the fording kit exhaust plenum pipe attachment or heat shield deflector to allow...
infantry to safely approach the rear of the tank.

· Streets and alleys can greatly restrict and canalize tank routes making it vulnerable.
· At least one infantry fire team should remain with each tank to furnish local security.
--HOWEVER, DISMOUNTED TROOPS CANNOT BE WITHIN THE DANGER ZONE (DESCRIBED ABOVE).
· A hastily rigged external TA-1 phone using wiring harness can be an excellent means for communication between the infantry and the vehicle commander.
· The ISR can also be used for tank-infantry communication, if the tank commander has an ISR.
· Otherwise, use hand and arm signals or SINCGARS radio.
· Tanks do not enter buildings with basements.
-- This eliminates the potential to fall into them.
· M1A1s should stay near buildings held by friendly troops.
· Crewmembers must watch for signals from infantry inside buildings on their flanks.

**Target Indication Techniques for Tank Guns.** Direct the tank into position by using some sort of mark or flag. Otherwise, the tank may accidentally move past the supporting infantry and expose itself to enemy fire. This type of coordination is very difficult and requires extensive training, because a simple signal may make the difference in the survival of that tank. When possible, use smoke, tracer fire, laser pointer, etc. to mark a target for a tank. When this is not possible, use any of the following methods.

Orient the tank commander on target using a reference point. Use an easily recognizable point like a church tower so the tank gunner can identify the correct building reference point. Then talk the gunner onto the correct building and window. For example, “From the church tower, five o’clock, 200 meters, white two story building, second window from the left.”

Orient the tank commander using Tank Main Gun method. Talk the tank on target by using the turret to guide the gunner. Always use the 12 o’clock position as the direction of travel with the main gun over the main slope. For example: “RPG team at 2 o’clock.”

Describe target. This should be short, simple, and easy to understand. Once the commander has identified a target, he responds: “identified.”

**Using Tanks in MOUT.**
· Do not walk directly behind the tanks extremely hot turbine exhaust unless a deep water fording kit or maintenance exhaust kit is installed on the tank. These deflectors vent the exhaust upward and away from the dismounted troops.
· Use simple field expediency to rig field phones to the rear of the tank so dismounted infantry can communicate with the tank crew.
· You can also use the ISR, providing the tank commander has one.
· Do not ride on the tank cupola if main gun firing is a possibility.
--Its overpressure will incapacitate you.
· Use the tanks two 7.62mm machine guns or the .50 caliber heavy machine gun to suppress the enemy.
· Use the tanks machine gun to lay a base of fire, rather than expending the infantry’s rounds.
-- The tank carries over 10,000 rounds of 7.62mm ammunition.
-- The tanks machine guns are accurate even on the move.

**Track-width Mine Plows.** Although not optimized for use in the urban environment, these capabilities can be used in the city when attached to the front of the tank. Plows make lanes through minefields and rollers detect minefields and proof lanes created by other means. Therefore, the plow can be used
effectively in the urban streets to clear local barricades made of wire, rubble, etc. that have been laced with surface-laid mines.

Assault Amphibious Vehicles (AAVs) in MOUT. The AAV, with its enhanced appliqué armor kit (EAAK) and its upgunned weapon station (UGWS), provides an excellent vehicle for maneuver and patrolling in the urban environment.

AAV Amphibious Roles in MOUT. The existence of waterways, canals, rivers, and marshlands in and around urban areas can provide avenues of ingress into designated objective areas. If used in conjunction with supporting fires, smoke, and/or deception operations, AAVs can capitalize on their amphibious capability and make use of waterways for ship-to-shore, shore-to-shore, and limited riverine operations.

AAV MOUT Capabilities. Specific tasks for AAV’s include:

- Transport assault elements, equipment and supply.
- Provide support in the clearing of lanes through minefields and other obstacles.
- CASEVAC
  - Best USMC armored platform for this mission.
- Fire Support
  - Direct fire with heavy machine gun and grenade launcher from Upgunned Weapon Station (UGWS).
  - Overwatch
  - Significant organic radio communications assets for MAGTF
- Urban Patrolling
- Mobility for Counterattack or Reaction force
  - Speed, firepower, and limited armored protection
  - Delivery of reaction force to the scene
- Defensive strong point when protected by infantry.

- Both the AAV and the M1A1 tank have the capability to rapidly generate a large amount of smoke to assist urban tactical maneuver. Both also have on-board smoke grenade launchers.

AAV Operational Considerations. When operating with the AAV you are to ensure you adhere to the following rules:

- If you are required to move forward of the vehicle, always ensure the crew knows you have done so.
  - This can be done with a visible sign or a radio call that receives acknowledgement.
- When using supporting fire from the machine guns, have the vehicle even with your FLOT.
  - If you cannot do this, due to threat or obstacles, make sure that the vehicle commander knows the location of all troops forward of the vehicle.
  - You must also ensure that no troops are within the 45 Degree frontal arc.
  - Do not assume the AAV crew has seen you. You are responsible for your own safety.
- Never take a prone firing position directly behind an armored vehicle.
- The AAV can move almost as quickly in reverse as it can move forward.
- When operating with armored vehicles at night, and you are not sure the vehicle crew has seen you, move next to a large building or object well out of the pathway of the vehicle.
- Make sure that you never place yourself or your Marines between two AAVs.

Mount and Dismount. The AAV is most vulnerable during mount and dismount of the vehicle. To reduce this vulnerability use these drills to enter and exit the vehicle.
· Keep fire team integrity.
  – Do not mix team members between seats or stations.
· Maintain 360-degree security.
  – Do not remove rear security elements until elements of another fire teams are in place and covering that arc.
· Do Not Rush.
· Enter and exit the vehicle under control.
  – This means about ¾ pace.
  – This will prevent Marines falling on wet or slippery ramps, or tripping over ramp door handles and cables.
· Maintain Contact with your buddy. In MOUT there is a real chance you will move to load and the next member of the team will not see you go. This may cause delays where the ramp is down and you are vulnerable, or worse it may cause you to leave members of your team behind.

Load Positions. Figure 15 illustrates the recommended loading positions for a Marine Rifle Squad. Squad leaders must observe from the troop commander’s hatch so they can direct the vehicle commander as to the best location in which to stop based on cover opportunities for his Marines. He must inform the fire teams of these cover positions before they dismount. It is critical that Marines maintain contact with each other in this case, either by using the ISR or by leaving a linkman at the entrance to each building or covered location.

AAV Dismount/Remount Drill. See figure 16.

Dismounting

· Fire Team 1 (FT1) remains covering flanks, rear and high.
· Fire Team 2 (FT2) and Fire Team 3 (FT3) exit left and right.
· First man out in each squad moves up on a line with the turret, approximately 10 yards out from the vehicle and goes to ground.
· Second man moves level, adds another 10 yards and goes to ground.
· This goes on until the last man is out.
· He covers the flanks and any overlooking buildings.
· FT1 exits when the last men of FT2 and FT3 are clear.
· They move out and cover the flanks and rear in an arc. See figure 16.

Remounting

· FT2 and FT3 peel in toward the center, making sure they tag the next Marine as they pass.
  – They file straight into the troop / cargo compartment.
· Once the last man from FT2 and FT3 has mounted the vehicle, the rear security (FT1) peel into the troop / cargo compartment, reoccupying the hatch positions to cover the flanks and rear.

The Combined Arms Attack in MOUT. The guiding principles for the combined arms attack do not change in the urban environment.

Movement to the Objective. The formation adopted to move from the assembly area to the objective must make provision for reconnaissance en route. LAVs are well suited to this role. With their scout infantry they are able to provide information about the route and provide guides for the follow on force. Dismount and use the upper decks of buildings that overlook the objective area for last minute reconnaissance.
Isolation of the Objective. Isolation of the objective is critical to long-term success in the urban environment. If the force is not able to isolate the objective, the enemy will use the cover and concealment provided by the buildings and rubble to reinforce their position, or when defeated, to exfiltrate and prepare to fight again.

The LAV / scout team is an effective combination with which to achieve isolation in the modern urban environment. These are the reasons:

· These escape routes provide the enemy freedom of maneuver so the enemy so will be prepared to fight hard to keep them open.

· The LAV is relatively stealthy.
  -- It has a quiet engine and does not have the loud track noise of other armored vehicles.
  -- The weapon and sight on the vehicle have the range and accuracy to dominate urban killing areas in both day and night.

· The scout infantry have the ability to protect the vehicle at the halt and to infiltrate forward to cover areas not visible from the vehicle.

The LAV is not the only solution to the requirement to achieve isolation. Sniper teams can often achieve the same effect and a well-placed fire team with a light or heavy machine gun may be another option.

Combat Engineers in MOUT. The urban battlespace requires extensive use of engineers in both offense and defense. For offensive maneuver, they can help prepare the battlespace during shaping operations, and they can provide immediate assault support by clearing obstacles with heavy equipment or demolitions. Combat Engineers are critical for mine clearance and elimination of improvised explosive devices and booby traps. For defensive maneuver, they essentially reverse the process.

Engineer Organization. When possible, attach two-man demolition teams or fire teams to support a rifle squad when they are assigned to breach obstacles or blow booby traps. Note, however, that by breaking up the Combat Engineer Platoon attached to the battalion reduces the overall impact they can make.

Link Man. Squad leaders often use a linkman to maintain coordination between the infantry squad and supporting assets, especially when an assault force enters buildings and disappears from view.

· Designate one member of the infantry squad to maintain visual contact with adjacent units or tanks/AAVs.
· He must move with his squad but always remain in a position where he can be seen to mark the forward line of his own troops.
· Equip this Marine with an ISR.
· If a tank telephone is fitted, make sure he knows how to use it.
· Assault squads should try and mark their progress or clearance limits with flags or paint, even when using a linkman.
  -- This allows any direct fire support assets to fire with confidence when they detect movement in or around buildings.
· Establish clear lines of lateral communication with attached elements so they do not have to wait for information to be passed through the commander.
  -- They must act on the commander’s intent and coordinate movement among themselves.
  -- They should work on the assumption that the commander will step in if he is not happy about the action being coordinated.
  -- Essential communication at this level should be lateral or among subordinate elements to establish and maintain mutual support among these elements.

Squad Combined Arms Teams. In most instances, the most effective means of operating in the urban battlespace is task organization into a combined arms team. One formation will not fit all situations.
Leaders must assess each situation and determine the best task organization from the assets available. For example, the smallest, most combat effective way to employ Tank, AAV, or LAV units is by platoon. However, the close nature of urban terrain does not allow this optimum employment. So task organized into smaller elements such as the section.

· A section of tanks is two (2) vehicles.
· A section of LAVs is two (2) vehicles.
· A section of AAVs is four (4) vehicles.

Although the tanks prefer to work in platoons, using sections in MOUT allows us to combine the strengths of the various components and negate some of the limitations. Further, nothing precludes the infantry squad or platoon from being attached to the AAV, LAV or tank platoon commander, based on METT-T factors.

Frontages, Formations, and Zones of Action. Rifle squad urban Ops are normally constrained within relatively narrow zones of action. This tends to drive leaders into linear thinking about the battle. Leaders must resist a narrow focus and look for or create opportunities to exploit gaps. Squad leaders must employ bases of fire to facilitate the maneuver their teams. Teams should seek to penetrate enemy positions from the flanks or rear. Exploitation of indirect avenues of approach is often difficult to do in a city. Failure to do so however, will usually result in high friendly casualty rates if units attack directly into the enemy’s strength.

MAGTF Aviation in MOUT.

Urban Close Air Support (CAS). The definitive work on urban CAS is the ACE MOUT Manual produced by MAWTS 1.

Supporting Arms Fires. Each infantry squad should have a member trained in urban call for fire procedures. He should have an understanding of how to mark and/or sufficiently describe the target to enable ordnance delivery from rotary- and fixed-wing CAS platforms. This includes knowing how to prepare a 9-line brief for CAS requests and general knowledge of the wide array of ordnance available.

Marks of all types are very hard to see in urban terrain. FAC skill must include ability to “talk pilot’s eyes on to target.” You must frequently practice in order to develop this important skill.

Urban CAS Issues.

· Laser designation from airborne and ground platforms should be visible for enough time to enable target engagement by rotary- and fixed-wing aircraft.
· A laser designator “twitch” creates unique problems in the vertically developed urban environment.
  -- It could cause the spot to move from one vertical target; e.g., a floor of a multistory building to another building in front of, or behind the desired target.
  -- It could cause the spot to move beyond the vertical surface to another surface that is a significant distance from the target.
  -- It could also move the laser spot outside of a seeker field of view, rather than just a small distance on a horizontal plane.
· If ROE require a positive visual target ID and/or the supported unit FAC cannot be certain that the laser spot is on the target, then aircrew cannot deliver ordnance.
· We can effectively employ air delivered TOW against structural targets in urban CAS.
· Urban strafe is only effective when the canyon created by the buildings allows sufficient target acquisition for a positive ID and acceptable delivery angles.
  -- Strafing is not a precision ordnance delivery.
**Assault Support Helicopters.** To take advantage of our helicopter mobility we have to reduce or eliminate the effectiveness of enemy small arms fire, anti-aircraft fire and man portable guided missiles. Some of the roles that assault support helicopters may play in urban warfare are:

- Insertion and extraction of forces.
- Command, control and aerial retransmission.
- Casualty evacuation (CASEVAC).
- CSS operations.
- Limited aerial reconnaissance.

**Helicopterborne Assault Techniques.** If the building can support the weight of a helicopter, Marines can be landed on the tops of buildings. If not, Marines can also rappel, fastrope or jump out of helicopters hovering just above the roof. Pre assault activities include clearing obstacles such as mines, electrical wires, telephone poles, or antennas.

### Section II. Attack of Fortified Areas

#### 9201. General

A fortified area contains permanent defensive works. These works consist of emplacements, field fortifications, obstacles, and personnel shelters. They are disposed laterally, in depth, and are mutually supporting. A trench or tunnel system may be included to afford covered movement. A fortified area is deliberately planned to deny access to an attacker. A fortified area can best be reduced with a combined arms approach. In the attack consideration must be given to avoid becoming trapped in the mutually supporting fires of multiple emplacements.

(1) **Characteristics.** Fortified areas differ in construction and physical layout; however, they all possess similar characteristics. In many cases they are called strong points.

a. **Strength**

(2) Emplacements and personnel shelters are constructed of reinforced concrete, steel, or heavy timbers and earth. The bulkheads and overhead may be up to 10 feet thick. This construction provides the defender with cover from indirect fire weapons, small arms, and limited protection from direct fire weapons.

(3) The area is usually prepared in advance of hostilities which permits the use of natural camouflage; however, artificial camouflage may be used.

(c) Each emplacement usually contains one or more automatic weapons.

(4) Emplacements are mutually supporting; one protects the other. To attack one emplacement; the attacker must pass through the sector of fire of one or more other emplacements.

(5) Each emplacement is protected by infantry occupying field
fortifications positioned around the emplacement. These field fortifications may have overhead cover.

(6) Tunnels and communication trenches are normally used to link emplacements within the fortified position.

(7) Barbed wire and other obstacles are used extensively in order to restrict the attacker's movement and to channel him into the sectors of fire of automatic weapons.

(h) Mines and booby traps are normally employed in fortified positions.

(i) Communication wire is laid deep underground, thus, providing a relatively secure means of communication.

a. Weaknesses

(a) Placing automatic weapons in fixed emplacements restricts the gunner's observation and, generally, prevents the weapon from being moved to an alternate or supplementary position.

(b) Emplacements depend upon mutually supporting positions for all-around observation and fields of fire. When one emplacement is destroyed, observation and mutually supporting fires are reduced proportionately.

(c) Generally, the emplacements can withstand the effects of artillery and mortar fire. Artillery and mortar fire are effective against the field fortifications around the emplacements. If the field fortifications have overhead cover, point detonating and delay fused rounds can destroy or collapse the fortifications. If the field fortifications do not have overhead cover, proximity fused rounds can be employed. In either case, the enemy infantry in the field fortifications will be forced to seek more protected locations, thus, weakening the enemy defensive position.

(d) The weakest points of emplacements are embrasures, air vents, and doorways. They provide the attacker with an opening to employ grenades, rocket launchers, demolition charges, and small arms fire.

b. Tasks. Infantry units attacking a fortified position are organized into support, assault and exploitation unit. The support unit provides covering fire for the assault unit which goes forward, penetrates, and seizes an assigned objective within the enemy fortified position. Both the support and assault units are reinforced or supported by appropriate combat power. The cumulative effect of several small units simultaneously conducting coordinated attacks against a fortified position will result in the penetration and reduction of that position. The following tasks must be accomplished in order to successfully attack and destroy assigned objectives within a fortified position.
(1) Neutralize the enemy infantry occupying the field fortifications and protecting the emplacement to be attacked. Neutralization means not only suppressing the enemy fire but also restricts the enemy’s ability to observe avenues of approach. Artillery, mortars, and the support unit provide neutralization fires. Once entry or gained by the assault unit the exploitation unit is employed to press the attack and roll up the defensive position.

(2) Suppress/Neutralize the enemy automatic weapons fire coming from the emplacement being attacked and from any other emplacement whose sector of fire the assaulting unit must pass through. To do this, mutually supporting emplacements must be attacked simultaneously. The actual neutralization of automatic weapons in the emplacements is best accomplished by a tripod-mounted machine gun using a traversing and elevating mechanism to deliver a high volume of accurate fire directly into the embrasure of the emplacement. One machine gun team is employed for each emplacement. The team is best employed from a covered and concealed standoff location where it cannot be suppressed by enemy fire. The machine gun team may not necessarily be attached to the attacking unit, but may be assigned the mission to provide direct support for the attacking unit.

(3) Reduction of the enemy emplacement on the objective is a critical task. The emplacement's field of fire may cover the approach of the assault unit or that of an adjacent attacking unit. In any event, it must be destroyed. Emplacements can be destroyed from ranges up to 250 meters using the SMAW. If a SMAW is not available, a DRAGON antitank guided missile may be used to destroy an emplacement. If no assault weapons are available, the emplacement must be assaulted and destroyed with demolition's or grenades.

(4) The assault unit advances under covering fire from the support unit and supporting arms fire. The assault unit must possess sufficient combat power to accomplish the following tasks:

- Destroy, neutralize, or overcome barbed wire and other obstacles encountered while moving forward.
- Kill or capture enemy sentinels or security posts covering avenues of approach.
- Penetrate the enemy position, and kill or capture the enemy personnel in or around the destroyed emplacement and in at the surrounding point of penetration.

(5) Once the assault unit has penetrated the objective, the exploitation element moves onto the position and continues the momentum of the attack, rolling up the trenches. When finished, it establishes a hasty defense to repel counter attacks from the position.
c. Role of the Rifle Squad. Normally, a rifle squad will participate in the attack on one emplacement as part of the platoon. The squad can be assigned as either the support the assault or exploitation element.

d. Employment of the Support Unit

(1) Organic Weapons

(a) Rifle. Rifle fires are directed against enemy troops occupying field fortifications protecting the emplacement.

(b) Automatic Rifle. Automatic rifle fire is directed at troops in field fortifications at the sustained rate. If a machine gun is not provided to suppress the enemy automatic fire coming from the emplacement, or if the machine gun becomes inoperable, the automatic rifle should be assigned to suppress the fire from the emplacement. In this case, fire is directed at the embrasure at the rapid rate. When fires from the emplacement are suppressed, automatic rifle fires are shifted to troops in field fortifications, and are fired at the sustained rate.

(c) M 203 Grenade Launcher. M203 fire is directed against enemy troops in defilade positions in trench lines and against automatic weapons.

(2) Supporting Weapons

(2) If available, the MK19 and .50 caliber machine guns can be employed in conjunction with the base of fire. If employed, these weapons will be used to neutralize the enemy infantry in field fortifications. Normally, these weapons will be employed from a standoff distance and will directly support the attack, rather than being attached to the attacking unit.

(3) White phosphorus (WP) rounds, delivered from the company's 60mm mortars, can be used to obscure the assault unit from enemy observation.

(4) As was previously discussed, artillery and mortar support is provided to neutralize the enemy occupying the field fortifications around the emplacement.

e. Employment of Weapons by the Assault Unit

(5) Organic Weapons. Squad organic weapons are employed by the assault unit in the same manner as they are employed in a daylight attack. (See par. 4303c.)
(6) Munitions Available. The following munitions are employed by the assault unit in reducing fortified positions.

(a) Demolition's. Demolition's are used extensively in fortified areas to breach obstacles and destroy emplacements. If combat engineers are not attached to the squad for the attack, squad members will be required to employ the demolition's such as satchel charges and other breaching charges.

(b) Fragmentation Grenades. These are used against enemy infantry dug in around the emplacement. Additionally, fragmentation grenades can be thrown through the embrasure or down ventilation apertures of the emplacement. Fragmentation grenades are absolutely essential in reducing a strong point.

(7) Smoke Grenades and Pyrotechnics. These are used primarily for signaling between the units of the squad and from the squad to the platoon commander. They are used to signal that the assault is about to begin and that the base of fire should shift or cease. Smoke grenades may also be used to screen movements of the assault unit from enemy observation.

(8) White Phosphorus Grenade. A WP grenade is normally used to screen the movement of the assault unit and to neutralize enemy personnel in field fortifications.

(9) SMAW. If the SMAW is employed with the assault unit, the assault unit leader selects the SMAW firing position. This position must not be closer than 10 meters from the emplacement being attacked as the round has an arming distance of 6 to 10 meters. He instructs the SMAW gunner to engage and destroy the emplacement as soon as possible or, if surprise is desired, to open fire upon signal. Surprise in this case refers not only to the enemy in the emplacement being attacked, but also to other enemy positions around or which support the emplacement.

(f) DRAGON / JAVELIN. Can be utilized to breach a position or neutralize / immobilize enemy vehicles in the strong points.

9202. Squad Assigned Mission of Penetrating the Fortified Area

(10) General. The squad may be assigned the mission of penetrating the fortified area. If assigned this mission, the following considerations should be addressed.

(1) A machine gun team should be assigned to neutralize the automatic weapon in the emplacement.

(11) A SMAW or DRAGON/JAVELIN team should be attached to
destroy the emplacement.

(12) The squad must be provided bangalore torpedoes and other demolition's to clear mines and obstacles, and satchel charges to destroy the emplacement or other field fortifications. Combat engineers may be attached to perform these tasks; however, squad members must be proficient in the employment of bangalore torpedoes, satchel charges, and other demolition's, in the event combat engineers are not available. The assault section of the rifle company also have this capability. The squad should also be provided the capability to adjust artillery and mortars.

b. Planning and Coordination. The squad leader receives the attack order from his platoon commander. His squad, with the additional combat power provided, is assigned the mission of seizing or destroying a certain emplacement. The other squads are assigned to attack other emplacements simultaneously. Attacks are usually conducted on a narrow frontage in an attempt to effect a penetration.

(13) Planning the Attack/Penetration

(1) During his reconnaissance, the squad leader observes and plans the following:

- Location of the emplacement on the squad's objective.
- Position of the embrasures and enemy fields of fire.
- Surrounding field fortifications and obstacles.
- Location of other enemy emplacements supporting his assigned objective.
- A tentative assault position and final coordination line.
- A route to the assault position.
- A position for the base of fire.
- A firing position for SMAWs / DRAGONS / JAVELIN.

(14) Based upon his reconnaissance, his mission, and the mission of the platoon, the squad leader plans his attack.

(15) The squad leader determines whether he will remain with the base of fire or move forward with the assault unit. If he is going to lead the assault unit, which is the preferred method, he designates the base of fire leader, who is normally the fire team leader of the fire team assigned to the base of fire. If for some reason he must remain with the base of fire, he will designate the senior fire team leader as the assault unit leader.

(4) Upon completing his plan, the squad leader conducts a rehearsal, if
feasible. During the rehearsal, he checks his plan and ensures that all squad members and attachments know their duties.

d. Preparation Fires. Preparation fires should be planned. However use of preparation fires may negate the possibility of surprise.

(16) Bombardment of the area by air, mortars, artillery, and naval gunfire may precede the attack.

(17) The squad leader will position the support by fire and any weapons attached to the support by fire under cover of the preparatory fires. The support by fire position is as far forward as possible.

(18) The fire teams and attached weapons, comprising the assault unit, remain in the assembly area or are moved forward to the attack position.

(19) The squad leader attempts to destroy the emplacement using the SMAW from the base of fire position and other supporting fires. If this fails, he sends the assault unit forward with the SMAW team attached to attack and destroy the emplacement.

e. Movement to the Assault Position. The base of fire neutralizes the enemy in the emplacement by firing into the embrasure. Additionally, the enemy in the surrounding field fortifications are taken under fire. When fires from the emplacement and the surrounding field fortifications are neutralized, the assault unit moves forward to the assault position. Smoke should be used to screen movement to the assault position and during obstacle breaching.

(20) The assault unit breaches any obstacle it encounters and destroys enemy personnel who cannot be bypassed.

(21) The assault position should be to the flank of the emplacement to take advantage of the defender's restricted observation and limited field of fire.

f. Penetration of the Emplacement. The assault is conducted in the following sequence.

(22) The assault unit leader signals the assault. The base of fire is shifted or lifted on this signal. Smoke should be used to cover the assault.

(23) If the emplacement has not already been destroyed, the SMAW, with the assault unit, is employed to destroy it.

(24) The assault unit assaults the objective as soon as supporting fires are shifted or ceased.

(25) Remaining enemy are destroyed with small arms fire, M203 fire, and hand grenades.
(26) The emplacement is searched for intelligence material, tunnels, or other entrances.

(27) After the penetration is achieved, the squad leader moves his support forward. The squad then consolidates the penetration point and prepares for any counterattack. He holds the penetration point open, widens it by attacking laterally so that the exploitation element can breach and finish the attack. The squad may be directed to support the exploitation element, or it may be directed to exploit the success he achieves.

g. Following successful penetration the exploitation element moves through the assault unit and pursues the enemy unit, continues to press the attack and takes advantage of success achieved by the assault unit. In some cases the assault unit may conduct exploitation type duties. Planning, coordination and other considerations for the exploitation element remain the same as for planning any attack in fortified areas.

Section III. Tank-Infantry Coordination

9301. General

The tank is primarily an offensive weapon employed to carry the fight to the rear of an enemy unit. Maximum use is made of its firepower, mobility, speed, and shock action. Restricting the speed of tanks to the speed of infantry moving on foot is not desirable as it negates most of the tank's capabilities. The information in this section applies to those situations where close terrain and/or enemy antitank defenses restrict the firepower, mobility speed and shock action of the tank.

a. Infantry Responsibilities. A rifle platoon commander directs the initial type of protection to be afforded the tanks by his rifle squads. As the attack progresses, the rifle squad leader decides whether to protect the tank physically or by short or long-range fire. His decision as to which type of protection to employ is based primarily on the terrain and situation.

b. Tank Responsibilities. Tanks can provide accurate high velocity direct fire support to the infantry. As a secondary role, tanks can assist in the antitank defense. Tank unit commanders make recommendations as to method of tank employment based upon the situation, terrain, mission of supported unit, and tentative concept of operation.

9302. Tank Capabilities and Limitations

a. Capabilities. Tanks have four general capabilities. They are:

(1) Firepower. The M1 tanks are equipped with a 120 mm high velocity main cupola-mounted .50 caliber machine gun, loader's 7.62 mm machine gun and a coaxially-mounted 7.62 mm machine gun.

(27) Armor Protection. Tanks have sufficient armor to withstand small arms fire and shell fragments. This protection makes them an effective weapon in
the assault.

(28) Mobility. Tanks possess cross country mobility and speed, which permits rapid concentration and maneuver. Tanks can span an 8 foot ditch, ford water four feet deep without special fording equipment, and are capable of climbing 3 foot obstacles.

(29) Shock Action. Firepower, armor protection, and mobility of the tank, when properly employed, provide shock action.

b. Limitations

(1) Inherent. Size, weight, noise, and limited observation are inherent limitations.

(2) Natural Obstacles. Terrain limits the employment of tanks. Deep mud, rocky or stumpy ground, dense woods, swamps, and extremely roughs ground limit their use. Rolling terrain, where cross-country mobility can be exploited, is the best type terrain for tank operations.

(3) Manmade Obstacles. Manmade obstacles canalize tank movement and restrict their employment. Obstacles frequently encountered are tank ditches, tank traps, and roadblocks reinforced with antitank mines and over watched by antitank weapons. Urban areas are also considered obstacles to the employment of tanks.

9303. Tank and Infantry Teamwork

There are two important areas in which tanks interact with an infantry squad: movement to contact and actions on contact (including attacks). In both instances, squad leaders working with tanks should avoid a mind set involving rigid formations or notions of the tank’s invulnerability.

a. Movement to Contact. During movement to contact, the tank’s long range firepower provides protection against enemy armor and enemy infantry. The infantry provides protection for the tanks against short-range ambush by enemy infantry. Clearly, tanks and infantry complement one another.

Figure 9-3. Open Terrain

(1) Open Terrain. Tanks lead in open areas or when faced with a significant armor threat. The infantry, in turn, may provide over watch for the tanks. See MCWP 3-12, Marine Corps Tank Employment and MCWP 3-13, Employment of Assault Amphibious Vehicles. For a thorough discussion of the over watch movement technique. (See fig. 9-3.)

(2) Close Terrain. In heavily wooded or jungle terrain, the infantry will normally lead the tanks. The tanks should provide over watch, if possible. The infantry,
in turn, is not only pursuing its mission but is providing a degree of
close-in protection to the tanks. Close in protection is not necessarily provided
by standing next to the tank; close in protection is provided by the infantry
being able to engage the enemy before the enemy can fire on the tanks.
The choice of formation, movement technique, and distance between units are
METT-T dependent. The principle of the infantry engaging the enemy before
the enemy can engage the tanks is illustrated in figure 9-4

Figure 9-4. Close Terrain

b. Actions on Contact/Attack. The basic plan for a surprise encounter with the enemy
and hasty attack or a well-planned deliberate attack is the same--fire and maneuver.
Rigid formations and set piece battle drills are to be avoided. Tanks may initially be used as
a base-of-fire and may be directed to fire and move in concert with or separate from
the infantry. Tanks should assault an enemy or move on to an objective only when
enemy antiarmor weapons are suppressed. Infantry units and supporting arms must be
used to suppress anti-armor weapons so that the tank’s speed, shock and firepower can be
used.

c. Communications. Communications between infantry and tanks may be accomplished
by using agreed upon arm and hand signals, pyrotechnics, and radio. Backup
communications and signals should always be planned.

c. Safety Considerations

(1) Do not move in front nor abreast of a tank when it is firing (muzzle blast
area extends 20 meters on each flank).

(2) Tanks have a short turning radius. Stand clear of a moving or turning
vehicle at all times.

(3) Stay clear of the immediate rear of the M1 tank. The intense heat coming
from its engine is dangerous.

(30) Infantry should keep clear of tanks being refueled or resupplied
with ammunition.

Section IV. Mine Warfare and Demolitions

9401. Mine Warfare
Mine warfare is the employment of mines against an enemy and the countermeasures employed against the hostile use of mines. In both offensive and defensive combat, employment of mine fields, covered by fire, helps a commander accomplish the mission.

The United States military does not employ non-self-destructing/deactivating antipersonnel/antitank landmines (NSDAPLs/NSDATLs) in accordance with the President’s policy on landmines as outlined in Protocol II to the Convention on Prohibitions or Restrictions on the use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (otherwise known as the CCW Convention). Self-destructing/deactivating antipersonnel/antitank landmines (SDAPLs/SDATLs) are found only in the family of scatterable mines (FASCAM). It is imperative that each Marine rifle squad be adequately trained to protect itself from enemy mines. Because of the relatively cheap price and simplicity of use, the land mine has become one of the most common threats to all military operations. Due to the broadened scale of enemy employment, mine warfare is no longer an exclusive engineer responsibility. Each Marine must be trained to gain confidence in dealing with both friendly and enemy mines.

a. **Purpose of Mine fields.** A minefield is designed to counter or delay armor, personnel, or a combination of the two. To prevent the enemy from bypassing the minefield, it is tied in with other obstacles, natural and artificial, and/or supported by fire. Minefields are laid to:

- Delay the enemy.

- Canalize or guide the enemy to areas where fires may destroy him.

- Harass and/or demoralize the enemy.

- Complement other weapons and obstacles in order to achieve a combined arms dilemma for the enemy.

b. **Classification of Mine fields.** Mine fields are classified according to their tactical purpose.

1. **Point Minefield.** Point mine fields are used to disorganize enemy forces and hinder their use of key areas. They include Self Destructing/Deactivating Antitank Land Mines and Self Destructing/Deactivating Antipersonnel Land Mines that may include anti-handling devices. They are used to reinforce existing obstacles or rapidly block an enemy avenue of approach.

2. **Interdiction Minefield.** Interdiction mine fields are used in enemy-held areas to kill, disorganize, and disrupt lines of communications and command and control facilities. The squad will not normally have contact with interdiction minefields.

3. **Phony Minefield.** A phony minefield is an area of ground used to simulate a live minefield and deceive the enemy. Phony mine fields can supplement or extend live mine fields and are used when time, effort, or material for live mine fields is limited. Squad members may be called upon to assist in emplacing a phony minefield.
c. **Land mines.** Land mines consist of a high explosive charge contained in a metallic or nonmetallic casing fitted with either a fuse and/or a firing device for actuation by enemy vehicles or personnel.

(1) Antipersonnel mines consist of a small amount of high explosive charge in a container fitted with a detonating fuze arranged for actuation by *pressure* or *release of pressure*, by *pull on a trip wire*, or by *release of tension*. The two general types of antipersonnel mines are the bounding fragmentation type and the blast type.

(2) Antitank mines consist of a high explosive charge in a metallic or nonmetallic case. Antitank mines require a pressure of 290 to 500 pounds to detonate them. Actuation of antitank mines may be by pressure, tilt rod assembly, or magnetic influence detonation.

(3) FASCAM are air or artillery delivered mines. They can be either antipersonnel or antitank mines. FASCAM mines are sown on top of the ground. In addition to the actuation methods mentioned above, FASCAM mines may have an anti disturbance actuator, which will explode the mine if it is touched or moved.

d. **Minefield Installation.** Mine fields may be emplaced by hand, mechanical means, or may be air/artillery delivered. In a hand emplaced minefield, the Marine rifle squad may install all or a portion of the mines, depending on the size of the minefield and time available.

e. **Reporting and Recording Mine fields.** Reports are made on every minefield placed or at the assumption of control of a friendly minefield. A scatterable minefield report must be made when emplacing a FASCAM minefield. This report must include at a minimum the approving authority, the type of emplacing system, the target/obstacle number, type of mines, life cycle of the mines, the aim and corner points of the field, and the safety zone from the aim point.

A *transfer of minefield report* must be made upon relinquishing or assuming control of a minefield. This report must include map sheets; grid coordinates of the minefield, obstacle identification number, and transfer from/to. It is the relinquishing unit’s responsibility to provide all relevant information on a minefield in a clear and precise format.

f. **Detection of Mines**

(1) **Visual.** Visual inspection is used to locate mines. Experience with the mine habits of a particular enemy is often a great aid. A careless or hurried enemy may leave indications such as disturbed soil, piles of stones, or debris from mine packaging. Pot holes, road patches, soft spots in road and shoulders, bypass routes, and bivouac areas are places that Marines can expect to find mines. Abandoned vehicles, felled tree trunks, and souvenir materials should be avoided because of the booby trap danger.

(2) **Probing.** Probing is the method of detecting mines by penetrating the ground
with a sharp instrument such as a bayonet, stiff wire, or mine probe. Probing is slow, but it is the surest and safest way to locate mines, particularly the small antipersonnel type such as the M-14. When probing, move on hands and knees with sleeves rolled up to increase sensitivity to contact with trip wires. Look and feel for trip wires and pressure prongs, then probe at an angle of 45 degrees every 2 to 6 inches on a 1 meter left-to-right front. When an object is touched, stop probing, remove the earth carefully, and determine what has been hit. The Marine should then mark the mine's location and probe a new row about 2 to 6 inches forward of the last row.

(3) Electrical Detection. Electrical detection, using mine detectors, is a method used to locate most types of mines. The detector is effective only if operated by a trained and experienced operator.

g. Removal of Mines

(1) Hand Lifting. Hand lifting is dangerous, but is used when secrecy must be maintained or exploding the mine would cause undesired damage. After uncovering the mine and neutralizing any devices on top of and around the sides of the mine, probe under the mine and feel to locate and neutralize any secondary fuzes. Carefully lift the mine from the hole and move it aside for disposal.

(2) Rope Removal. Rope removal is accomplished by attaching a 50 meter rope or wire to the exposed mine and pulling the mine from the hole, utilizing a covered position. Wait at least 30 seconds before moving up to remove fuzes, pull wires, and activate devices.

(3) Removal by Explosives. Blow in place; this is the safest way to destroy mines. A 1 pound block of explosives set on or beside the mine is the most efficient method. The bangalore torpedo is suitable for breaching minefields to provide foot lanes.

9402. Demolitions

Explosives are not dangerous if handled according to safety instructions. Military explosives are not sensitive to heat, shock, and friction as a result of normal usage and transportation. Blasting caps, electric and nonelectric, are extremely sensitive and dangerous and must be carried in the specially designed cap box.

a. Training. Training in explosives is simple and easily retained by the average Marine. This training includes preparing and using explosives to destroy bunkers, caves, bridges, and roadblocks; priming and firing of shaped charges, ban galore torpedoes, and claymore (M-18) mines; and blasting entrances into buildings.

b. Characteristics of Military Explosives
c. Explosives

(1) TNT, because of its insensitivity, stability, and power, is universally accepted as the basis for rating other explosives. Its shattering effect is suitable for breaching concrete, steel, or timbers. It can be used for all combat demolition missions.

(2) C-4 (C-3), a plastic explosive developed for steel cutting, is stronger than TNT and is suitable for all front line demolitions.

d. Prepared Charges

(1) Shaped charges are used to blast boreholes in concrete and steel and can penetrate bunkers and heavy tank armor.

(3) Bangalore torpedoes are used to clear foot paths through barbed wire systems or antipersonnel mine fields. They can also be used as an ambush weapon.

(4) Specialized mobility breaching charger can be constructed and employed for urban breaching of doors, fences, windows.

e. Demolition Accessories

(1) Detonating Cord (Prima cord). An explosive cord used to detonate a charge or a number of charges simultaneously. It is designed as a primer, and does not possess the power to be used as a working explosive such as TNT or C-4.

(2) Blasting Caps

(a) Nonelectric. A small metal tube closed at one end containing PETN (pentaerythritol tetranitrate). It is highly sensitive and must be carried in a cap box.
(b) Electric. Same as above, except for two leg wires for electrical connection. Its use requires a source of current such as a 10 cap-blasting machine (hell box) or battery and a sufficient length of wire to stretch well clear of the charge. By preparing this system, except for completing the circuit, explosions may be remotely controlled.

(3) Time Fuze (Safety Fuze). A fuse used to detonate nonelectric blasting caps.

Section V. Nuclear and Chemical Defense

9501. Introduction to Nuclear Defense
The introduction of nuclear weapons in modern warfare has placed greater responsibility on the unit leader. While nuclear fires produce casualties through blast, heat, and radiation, their effect depends upon many variables. Such variables include the size or yield of the weapon, height of burst (subsurface, surface, or air burst), distance from ground zero, and the protection afforded troops by fighting holes or armor. Marines with a basic knowledge of nuclear weapons and their effects can survive and still function as an effective part of a combat unit. Tests have proven that troops with adequate protection can operate within a matter of minutes in an area where a nuclear explosion has occurred.

a. Conventional and Nuclear Explosions. There are several basic differences between a nuclear and a high explosive detonation. First, a nuclear explosion may be many thousands of times more powerful than that of the largest conventional weapon. Second, a fairly large portion of the energy of a nuclear explosion is in the form of heat and light or thermal radiation, which is capable of producing injury or starting fires at considerable distances from the point of detonation. Third, and probably the greatest difference, is the highly penetrating and harmful rays, called initial nuclear radiation. Finally, the substances left after the explosion are radioactive, giving off harmful radiation over an extended period of time. This is known as the residual nuclear radiation or residual radioactivity. It is these differences between the conventional and nuclear explosions that require special considerations.

b. Effects on Individuals. Casualties from nuclear fire result from blast, thermal radiation, and nuclear radiation effects.

(1) Blast. Injuries are caused by both direct and indirect blast effects. Direct effect injuries, such as ruptured eardrums and internal injuries, are the result of the very high-pressure waves generated by the blast. Indirect effect injuries are caused by falling buildings; flying objects; scattered glass; and fires started from short circuits, overturned stoves, and ignited fuels. The highest percentage of blast injuries will normally be a result of indirect effects.

(2) Thermal Radiation and Other Burns. It has been estimated that approximately 30 percent of the deaths that occurred as a result of nuclear weapons were due to burns of one kind or another. Persons in the open within
2 miles of a medium sized nuclear weapon will receive painful flash burns on exposed skin. Fires resulting from blast cause other burn injuries. Personnel looking directly at the nuclear explosion may receive eye damage which is usually temporary in nature. Flash and flame burns resulting from nuclear explosions are treated like other type burns.

(4) Nuclear Radiation. The damage done by nuclear radiation depends on the dosage received and the time of exposure. Exposure to nuclear radiation does not necessarily cause radiation sickness. It takes a large amount of nuclear radiation, either initial or residual, to seriously harm an individual. Normally, the effects of nuclear radiation are not noticed during or immediately after exposure. If a man receives an excessive amount of nuclear radiation, such symptoms as nausea, vomiting, and a feeling of weakness occur within a few hours. Bear in mind, however, that a person can have nausea, vomiting, and weakness and still continue his duties. Generally, these immediate effects do not require that the individual be evacuated. Except in cases of extreme overexposure, these effects soon disappear and may not occur again, depending upon the dose received.

c. Types of Bursts. Nuclear bursts are generally described as air, surface, and subsurface, depending upon where the explosion occurs in relation to the surface of the earth. The height of burst is important since it influences the amount and kind of damage that occurs.

(1) Air burst. An air burst is a nuclear explosion in which the fireball does not touch the surface of the earth. The greatest danger from this type of burst is from blast and heat. The primary nuclear radiation hazard is from initial nuclear radiation, but a residual hazard may exist out to several hundred meters from ground zero (further with larger yield weapons), and should be avoided or passed through rapidly if attack through or reconnaissance of this area is necessary.

(2) Surface Burst. A surface burst is one in which the fireball touches, but is not beneath, the surface of the earth. Damage from blast is less widespread, and damage from heat is approximately the same as for an airburst of the same size. About the same initial nuclear radiation is present. Residual nuclear radiation is created in the target area and may occur as fallout in downwind areas.

(3) Subsurface Burst. A subsurface burst is one in which the center of the fireball is beneath the surface of the earth. Most of the blast effect appears as ground or water shock waves. The majority of the heat and initial nuclear radiation is absorbed by the surrounding earth or water. However, considerable residual radiation is produced in the target area and later as fallout.

d. Individual Protection. The effects of a nuclear explosion may be divided into two broad categories, immediate and delayed. The immediate effects are those that occur within a few minutes of detonation and include blast and shock, thermal radiation, and initial nuclear radiation. The delayed effects are normally associated with the radioactivity present in fallout and neutron induced activity. The early fallout from a
(1) Protection from Blast. Since the effects of blast are immediate, consider the individual in each of two circumstances; when adequate warning is given prior to the attack, and when no warning is forthcoming.

(a) When adequate warning is given, the individual has time to prepare his defenses. The fighting hole is good protection. It should be deep and strong with the cover well secured. Bunkers, fortified positions, and shelters are excellent protection from all effects of blast.

(b) When there is no prior warning, individual reaction is mandatory. Remember, the flash can be seen a few seconds before the blast wave arrives. In any case, a person should stay down for at least 90 seconds. Ditches, culverts, and hills offer good protection and as the distance from the ground zero increases, good protection can be obtained from walls, slight depressions in the ground, or anything that breaks the pattern of the wave.

(2) Protection from Thermal Radiation. Another of the immediate effects that requires reaction on the part of the individual is the thermal radiation that is emitted from the fireball. Thermal radiation has a line of sight effect, so protection from it is the same as for blast. If prior warning of a nuclear attack is received, preparation both for blast and thermal radiation should be complete. If a weapon goes off with no warning, drop flat on the ground or to the bottom of a fighting hole, keep your eyes closed, and protect exposed skin from heat rays as much as possible (keep hands and arms near or under your body and helmet on). This immediate reaction will minimize serious burns.

(3) Protection from Nuclear Radiation. The different effects of nuclear radiation requires both intermediate and delayed action. Initial nuclear radiation is spent in the first minute or two after the burst, so protection from it is the same as for thermal radiation and blast. Any material will afford some protection from initial radiation, but denser items are better. For example, earth is a better shield than water, and steel is better than concrete.

(4) Protection From Residual Radiation. Under conditions where the explosion takes place either on or beneath the surface, the resulting residual radiation hazard is high. Particles of water spray, dust, and other debris, which become radioactive through contact with the nuclear reaction of the weapon, contaminate large areas. Individual protection consists of avoiding the fallout particles. This may be accomplished in the field by covering fighting holes with earth, a shelter half, or poncho. Open food and water supplies should be destroyed if contaminated. Personnel and equipment should be checked and decontaminated if necessary.

e. Decontamination. At the small-unit level, decontamination is usually confined to personnel, equipment, and food.
(1) **Personnel.** Personnel decontamination should be accomplished as soon as the tactical situation permits.

(a) **Normal Procedure.** In rear areas, and when permitted in the tactical area, personnel bathe, using plenty of soap and water. Particular attention should be given to skin creases, hairy parts of the body, and the fingernails.

(c) **Field Expedient Procedures.** When the tactical situation prohibits normal procedures, field expedient procedures are used. Clothing should be removed and shaken vigorously downwind. Shrubbery can be used to brush radioactive particles from the clothing. Personnel should put on a protective mask or cover their nose and mouth with a damp cloth to prevent inhalation of the radioactive dust. Care must be taken to avoid secondary contamination of food or water supplies during the shaking of clothing. Personnel then wipe all exposed skin with a damp cloth and remove as much dust as possible from the hair and from under the fingernails. Personnel should bathe and change clothing when the tactical situation permits.

(2) **Equipment.** The squad may be required to decontaminate individual items of equipment. The decontamination of equipment may be accomplished by removal (brushing and washing, sealing, and aging). In some cases, brushing will reduce dry contamination to a permissible level. In most cases, washing will be adequate even though brushing has not been effective. When speed in the decontamination of equipment is important, brushing is performed first, followed by washing as time and circumstances permit.

(3) **Food.** Food and water that have become contaminated should be destroyed by burying.

9502. **Chemical Defense**

Chemical agents are efficient, simple to produce, and capable of killing or incapacitating in a matter of seconds. Prior training and indoctrination is necessary for survival and combat efficiency.

a. **Types of Chemical Agents.** Chemical agents are divided into the following general classifications:

(1) **Toxic Chemical Agents.** Chemical agents designed to kill or incapacitate are known as toxic agents. They may enter the body through the lungs or by contact with the skin. The current groups of toxic agents are:

(a) **Nerve Agents.** These agents are quick acting. Entering the body through breathing or by skin contact, they are very rapid in action and produce immediate casualties.

(b) **Blister Agents.** These are chemical agents which injure the eyes, lungs,
and burns the skin. Symptoms may appear immediately or as long as 36 hours
after exposure.

(c) Blood Agents. These are rapid acting agents that deprive the body of
oxygen. They must be inhaled to be effective, so the field protective mask affords
complete protection.

(d) Choking Agents. These are delayed action casualty producers that are
very damaging to the lungs. Low concentrations may be difficult to detect.
The protective mask provides adequate defense.

(e) Incapacitating Agents. These chemicals will cause temporary casualties
that may be extremely difficult to control. Symptoms of mental confusion may
take several hours to appear and may last for several days. Restraint and
immediate medical assistance is necessary.

(2) Irritant Chemical Agents. The irritant agents produce temporary irritating
or disabling effects if they are inhaled or contact the eyes and skin. The standard
agents of this group range from CS (tear agents) through chlorine.

(3) Smokes. Smokes are chemical agents used to deny observation or transmit
a signal.

(a) Screening Smokes. Screening smokes are used to screen
friendly movement or deny enemy observation.

(c) Signaling Smokes. Signaling smokes are special fuels containing dye
which produce colored smokes.

(5) Flame Fuels and Incendiaries. The flame fuels are normally employed
against personnel and incendiaries are used to destroy material.

(a) Flame Fuels. These agents consist of special blends of petroleum
products, usually in thickened form. They are easily ignited and may be
projected toward a target by a flame weapon or flame tank.

(b) Incendiaries. These agents consist of a combination of flammable
substances that burn with an intense heat and cause combustion and/or ignition
in most materials. The incendiaries are thermite and thermate. White
phosphorus may be used as an incendiary or as a screening smoke.

b. Detection of Chemical Agents. The success of chemical defense depends to
a great degree on the thoroughness of the training program conducted by the small unit
leader. This training must consider the various characteristics of the agents as stated
above and the three phases of defensive operations; detection, protection, and
decontamination.
(1) **Intelligence Sources.** Intelligence sources may warn of expected attacks. These reports are usually based on enemy preparations and capabilities.

(2) **Individual Marines.** Marines may be able to identify a chemical attack by the use of their physical senses. Agents may have characteristic odors, create a visible cloud, appear as droplets on vegetation, or be detectable only by early recognition of symptoms. Because of this variety and the risk of rapid casualty effects, an automatic masking procedure will be put into effect once chemical operations are initiated. Any suspicious occurrence (low flying aircraft, smoke screen, unaccountable liquid, unusual physical or mental symptoms) will be considered a potential threat and all Marines will mask. The situation can then be checked in comparative safety and the decision made to unmask or continue a protected Posture as required.

(4) **Special Equipment.** There are several items of special equipment designed for the identification and detection of chemical agents. The squad should be basically familiar with this equipment and its uses.

(a) **Paper, Chemical Agent, Detector, ABCM8.** ABCM8 chemical agent detector paper is a component of the chemical agent detector kits. The sheets consist of paper impregnated with chemical compounds that vary color when in contact with V- or G-type nerve agents or blister (mustard) agents, in liquid form. This paper does not detect vapor and must touch the liquid agent to ensure a positive test. Because some solvents cause a change in the color of the paper, it is unreliable for determining the completeness of decontamination by the use of solvents. A color chart is included in the booklet to aid in interpreting the tests.

(d) **Chemical Agent Detector Kit, M256.** This item is designed for company and larger sized units and provides the means of detecting and identifying vapor concentrations of most chemical agents. These devices are designed for rapid identification of agents but cannot be used as warning devices as test reactions may take several minutes to complete.

(e) **Individual Chemical Agent Detector (I CAD).** ICAD is a small battery-powered chemical agent sensor that attaches to outer clothing. This device provides the means for a squad size unit to detect low vapor concentrations of nerve, blood, blister, and choking agents.

(f) **Chemical Agent Monitor(CAM).** CAM is a hand held chemical agent monitor designed to identify the presence of agent vapor and residue.
for decontamination operations. CAM operates by two push buttons for on/off and mode change for selection of either nerve or blister agent detection.

(g) **Water Testing Kit, M272.** The M-272 is designed to test for several types of chemical agents in salt, brackish, fresh, or treated water regardless of water borne or possible interfering substances in any combination.

c. **Protection**

(1) **Protective Mask.** When properly fitted, the protective mask protects against inhalation and facial contamination by toxic agents. This is the primary means of protection in chemical defense.

(2) **Protective Clothing.** Protective clothing is available for those persons required to enter or remain in a contaminated area for a length of time.

(3) **Antidotes.** Antidotes for blister and nerve agents are found in the protective mask carrier. Atropine is used as treatment for any exposure to a nerve agent. It may be given by medical personnel or self-administered by the individual. Effects should be obvious in 15 to 20 minutes.

d. **Decontamination.** Decontamination consists of washing away, neutralizing, or destroying the chemical agent. The squad should be familiar with two groups of decontaminates, the natural and standard items, plus the procedure for personnel decontamination.

(1) **Natural.** Natural decontaminates are those provided by nature.

(a) Weather may be used when time is not a factor in the use of equipment or terrain.

(b) Water may be used to flush or neutralize certain agents from the surface of equipment. Hot water produces the best results.

(d) Earth is used to seal in contamination or act as an absorbent. If earth moving equipment is available, an area that is contaminated may be covered with about 4 inches of earth and then crossed without danger to personnel.

(e) Fire may be used to destroy or vaporize liquid agents, especially in grassy or wooded areas.

(2) **Standard.** There are certain chemical compounds that may be used to reduce the effectiveness of contamination.
(a) Bleach (STB) is a chlorinated lime that will neutralize most liquid agents.

(b) Slurry is a mixture of bleach and water designed for easier surface coverage.

(c) DS2 is a special solution designed for use against blister and nerve agents.

(d) The M-258 decontamination kit contains two separate packets, marked DECON 1 and DECON 2, to decontaminate skin and selected personal equipment.

(3) Personnel Decontamination

(a) Use the M-258 personal decontaminating kit immediately upon attack. A thorough wash down with hot, soapy water and a change of clothes should follow use of the kit, when the situation permits.

(b) The M-291 skin decon kit consists of a wallet like flexible carrying pouch containing six identical, hermetically sealed, foil packets. Each packet contains a folded, non woven fiber applicator pad filled with decontaminate powder and an attached strap handle on one side. Use this kit in the same manner as the M-258.
Section VI. Counter-Insurgency Operations

9601. General

Operations against insurgent forces are characterized by aggressive and carefully planned offensive actions. The rifle squad leader must be aware of the role his squad plays when engaged in such operations. In prolonged counter-insurgency operations the insurgents are often referred to as guerrilla.

9602. Characteristics

a. The squad leader must know how insurgents operate to defeat them. Insurgents require the following:

   (1) Base. An area with dispersed and alternate facilities to provide security, discourage pursuit, provide routes to alternate bases which are close to the area of operations, and has adequate routes for entry and exit.

   (2) Supply. A source of food, weapons, ammunition, and equipment.

   (3) Intelligence. Information which enables him to plan operations or evacuate his bases when endangered.

   (4) Communications. Means of gaining timely information and passing instructions promptly.

b. Insurgent may be ruthless, cunning, and able fighters even though they may have limited and outdated equipment. They attack weak or unprotected units at night, during periods of reduced visibility, and when security is likely to be lax. Attacks are characterized by speed, surprise, and rapid withdrawal.

9603. Training and Education for the Squad

The squad leader must educate the squad prior to taking part in operations against insurgents. Stress is placed on the following:

a. Self-Discipline. An important part of combating insurgent is self discipline. Men are proud of the spiritual values, culture, and customs of their country. If members of the squad ignore or neglect these items, hatred of Marines and sympathy for insurgent may result.

b. Security. Marines must be security conscious at all times. Two routine methods of providing security are safeguarding information and guarding installations. Loose talk, as well as careless performance of duty, endangers friendly forces.

c. Need for Intelligence. Successful operations against insurgent forces depend upon accurate and timely information. Insurgent are elusive and must be located and eliminated. All means of communication are used to ensure rapid transmission of messages in keeping with security.
9604. Establishing a Patrol Base

To cover the entire area of insurgent operations, it is usually necessary to establish temporary patrol bases some distance from the parent bases. Temporary patrol bases are established by company or smaller units to include the squad and should not be occupied more than 24 hours except in an extreme emergency. In all situations, a patrol base is occupied the minimum time necessary to accomplish the purpose for which it is established.

a. Deception. A patrol base is stealthfully occupied. The ability to hide the unit is maintained by practicing deception techniques that are carefully planned. Deception plans should include the following considerations:

- If possible, the march to the base is conducted at night.
- The route selected avoids centers of population.
- If necessary, local inhabitants met by the patrol in remote areas are detained.
- Inhabitants of areas that cannot be avoided are deceived by marching in a direction that indicates that the patrol is moving to some other area.
- Scouts operate forward of the main body of the patrol.
- Bases are usually located beyond areas that are patrolled daily.
- If fires are necessary, smokeless fuel is burned.
- Normally, not more than one trail should lead into the base and it should be camouflaged and guarded.
- The base is occupied as quickly and quietly as possible.
- The route to the base is selected by use of photos, maps, and ground and aerial reconnaissance.
- If practical, the patrol leader makes an aerial reconnaissance.
- Terrain features that are easily identified are selected as checkpoints and rest breaks.
- Daily aerial and ground reconnaissance is continued.

b. Locating the Base

(1) It must be secret and secure. A patrol operating from a base unknown to the enemy increases the possibility of guerrilla contact. A secure base permits
the troops to rest.

(2) The base must have facilities of terrain suited for the erection of adequate radio antennas.

(3) If it is anticipated that an air drop or a helicopter resupply will be required, the base should have a convenient drop zone or landing point.

(4) The base must allow men to sleep in comfort. Wet areas and steep slopes are avoided. Flat and dry ground that drains quickly affords the best location.

c. Sequence of Establishment. A suggested sequence for establishing a base in jungle or heavy woods is as follows:

(1) Leaving the Road or Trail. The jungle and heavy woods provide the best security from surprise and the best conditions for defense. Generally the best methods to use in leaving the trail or road are:

- Select the point to leave the trail or road.
- Maintain security while the column moves off the trail.
- Have troops at the end of the column camouflage the area where the exit was made from the trail.
- Continue movement until a suitable patrol base is reached.

(2) Occupation of a Patrol Base

(a) This occupation is based on a platoon of three squads, but the force may be larger or smaller.

(b) The patrol is halted at the last suitable position approximately 200 meters from the tentative patrol base location.

(c) Close in security for the patrol is established and the patrol leader has his subordinate leaders join him to conduct a reconnaissance.

(d) Patrol leader moves to the tentative patrol base location and designates point of entry into patrol base location as 6 o'clock, then moves to and designates center of base as patrol headquarters.

(e) Subordinate leaders reconnoiter areas assigned by clock system for suitability and return to patrol leader upon completion.

(f) Patrol leader sends some men to bring the patrol forward.
(g) Patrol leaves line of march at right angles and enters base single file moving to center of base. Designated men remove signs of patrol's movement.

(h) Each leader peels off his unit and leads it to the left flank of his assigned sector.

(i) Each unit occupies its portion of the perimeter by moving clockwise to the left flank of next sector.

(j) Each unit then reconnoiters forward of its sector, with designated individuals, by moving a specified distance out from the left flank of the sector; moving clockwise to the right limit of the sector; and reentering at the right flank of his sector. They report indications of enemy or civilians, suitable observation and listening post positions, rallying points, and withdrawal routes.

(k) Patrol leader then designates rallying points, positions for observation posts and listening posts, and withdrawal routes.

(l) Each squad then puts out an observation post (day) and a listening post (night) in front of each sector, establishes communications, and commences base routine.

d. Base Alert. The critical periods for defending the base are at dawn and dusk. During these periods, the entire patrol remains in an alert status. The base alert serves the following purposes:

1. Enables each man to see the disposition of troops and the nature of the ground to his front and flanks.

2. Provides a definite cut off period for the change of routine. Beginning with evening alert, all movement and noise cease and lights are extinguished. After the morning alert, the daily routine begins.

3. Enables the squad leaders to check details while all men are positioned. This will include a check on maintenance of weapons, equipment, ammunition, etc.

e. Alarm. The patrol must have a suitable alarm signal for the approach of either friendly or enemy troops. This signal should not sound foreign to the environmental area and must be detected only by patrol members.

f. Leaving a Base. Before leaving the base, all signs of occupation are removed. Any shelters are destroyed. The area is left to appear as though it had not been occupied.

9605. Establishment of Control Over Civil Populace

Rifle squads will assist in carrying out steps to reduce sympathy and civilian support for insurgent by making visits to villages, enforcing troop discipline, and working closely with civil
authorities. Every effort is made to deny insurgent their source of supply, reinforcement, and recruiting.

Surprise attacks against insurgent will encourage the populace to resist their operations. When friendly forces react effectively to insurgent attacks, insecurity is developed among the enemy, while the population gains confidence in friendly forces. Raids and ambushes are conducted to keep insurgent in a state of alarm for their security, to lower morale, to prevent rest, and to hinder their operations.

Rifle squads may assist civil populace in executing the following control measures:

- Establishing restricted areas.
- Enforcing curfews.
- Relocating villages and settlements.
- Controlling weapons.
- Denying food.
- Searching individuals, vehicles, and houses.
- Training self-defense units.
- Riot control.
- Registering civilians.
- Establishing roadblocks and checkpoints.
- Assistance in medical and dental capabilities (Med/Den Cap)

**9606. Patrol Operations Against Insurgent**

Short and long-range patrols perform reconnaissance and combat missions in operations against insurgent. Successful execution of these missions requires consideration of the significant differences between conventional and insurgent forces.

Insurgents are difficult to identify because they frequently dress in civilian clothing. Although a distinctive insignia is sometimes worn, the carrying of a weapon is often the only means of identification.

Insurgents are elusive and when threatened scatter by fading into the civilian population, thus making decisive combat difficult. Certain persons may be of value to patrols engaged in operations; e.g., persons speaking the language of the area, or native to the areas, who are
sympathetic to our cause. They may be able to identify insurgents, help locate insurgent bases, and provide other timely information.

Rapid communications are important. Immediate transmission of information permits prompt, decisive action against insurgents.

9607. Offensive Action Against Insurgents
When an insurgency has gained support for its cause and has achieved political recognition its military force may began conventional style operations. It is against this conventional force that aggressive action is required to destroy the insurgents. Offensive action is conducted by applying the tactics and techniques of regular offensive combat.

a. Purpose. The primary purpose of offensive action is the destruction of insurgent forces. Other objectives include capture or destruction of insurgent concentrations, headquarters, communication centers, and sources of supply.

b. Types of Offensive Operations. The most effective forms of offensive action may be classified as encirclement and attack.

(1) Encirclement. Encirclement is the most effective method of destroying insurgents. A rifle squad participates in the encirclement as part of a larger force. The operation consists of a movement from assembly areas to a line of encirclement, occupation of the line of encirclement, offensive drives, and destruction of insurgents within the area.

(2) Attacks. Although the encirclement is the most effective offensive maneuver used in combating insurgent forces, it is often difficult to execute because of inadequate forces, the type of terrain involved, or limitations imposed by the situation. Pressure on the enemy must be maintained by attacks, patrols, and raids.

(a) Squads attack using normal offensive tactics. Surprise gives the attacker a marked advantage; therefore, every effort is made to move all units into position quickly and undetected. Squads normally use the hours of darkness to move into positions for the attack and maneuver to blocking positions which seal off escape routes. All types of offensive tactics are employed. Success of the attack is often determined by aggressiveness and speed.

(b) If possible, a double envelopment is used by the main body. This maneuver limits insurgent withdrawal, disorganizes them, and creates shock effect. Units of the attacking forces close rapidly with the enemy. Squad leaders must realize that the objective is total destruction of the insurgents, not merely seizing and holding ground.
A. Cordon and Search. A cordon and search is an operation normally conducted during counterinsurgency/counterguerrilla operations and is designed to entrap a segment of the population in a built-up area. The object of the operation is to conduct a detailed search for guerrillas or other identifiable enemy personnel and their equipment and to execute other designated programs in support of the civil affairs aspect of the counterinsurgency. The techniques used to conduct the cordon and search are applicable in other combat or peace keeping environment when a search of an area is to be conducted.

1. Purposes. The purpose for conducting a cordon and search can vary. It is extremely important, however, that the cordon and search commander understand why he is conducting the operation in order that he be able to focus on the ultimate objective. Generally, a specific situation or need should exist the warrants a cordon and search be conducted on a specific village (e.g., intelligence reports, recent guerrilla activity, etc.).

Frequent village searches for the sake of providing situation and status reports to higher headquarters should be avoided. If not, this will lead to negative interaction between the counterinsurgency forces and the civilian community. The commander should look for quality and not quantity in conducting cordon and search operations. Some common purposes for conducting the cordon and search are as follows:

(a) Eliminate/reduce the insurgent’s use of an area.

(b) Assist in implementing counterinsurgency programs.

(1) Conducting population control activities.

(2) Civic actions may be conducted to boost support for the government. MEDCAP and/or DENTCAP operations with public health teams, and immediate outpatient care of routine medical problems with evacuation to a hospital for more serious cases.

(c) Gain intelligence on insurgent activity.

2. Insurgent influence. The influence or control over the population enjoyed by the insurgent exists in varying degrees, and is based on a number of factors.

(a) Pro-government villages.
(b) Villages dominated by insurgents.

(c) Confirmed insurgent/guerilla village.

3. Insurgent advantage. The guerrilla has many advantages over the counterinsurgent forces, the most notable of which is perhaps time. The insurgent can easily wait out the government forces particularly if those forces contain elements of the U.S. Armed Forces.

(a) Counterinsurgencies/insurgents do not lend themselves to quick solutions.

(b) Traditional culture may be at odds the government’s political decisions. In many cases, the insurgent will try to convince the local populace that the insurgency is the only way to stand against an “oppressive” government.

(c) From the population’s perspective, it may be more practical to stand with the guerrilla against the government.

(d) The insurgent will always seek to perpetuate the perception among the populace that the government and any external support is unreliable.

B. Organization of the Cordon and Search Force. The unit that is tasked with conducting a cordon and search will normally be no smaller in size than a rifle company and will frequently be a battalion. Organization of the force is similar to the method used in task organizing a patrol or raid force, in that we establish a “general organization” to conduct major tasks. This breaks the unit into subelements. Subelements are further divided into teams to conduct special tasks based on mission requirements and objectives. The following task organization is common:

(1) Command element. This is the HQ of the unit conducting the mission. It provides the command and control for the operation, coordinating the various assets.

(2) Cordon element. The mission of the cordon element is to control all access in and out of the village. Total isolation of the village is the objective. The level of isolation established around the village is a major factor in the success or failure of the operation. All avenues of egress out of the village (e.g., trails, roads, streams, draws, etc.) must be blocked. The following points generally pertain to the cordon:

(a) It usually comprises the majority of the force involved.

(b) It must be set in a manner that does not allow the population
caught in the cordon time to react (villagers an potential insurgents).

Some possible techniques to achieve this cordon are:

(1) Infiltration night or during the hours of reduced visibility or reduced population activity.

(2) Rapid maneuver particularly by helicopter insert.

(c) The cordon allows no one in or out until the search is complete.

(d) The cordon element provides its own security by employing OP/LPs and patrols outside the cordon.

(e) The proximity of the cordon to the village is METT-T dependent. A rough guide for the maximum distance of the cordon from the village is beyond small arms range (500-600 meters).

(f) A reaction element or force should be organized within the cordon element that would be capable of responding to pressure on the cordon during the operation.

(2) Search element. The search element actually searches the village and its inhabitants. The search element should be as small as possible and if the option exists, should not contain U.S. personnel with the exception of advisors.

(a) Reconnaissance team

(1) Conducts surveillance of village from a point inside the cordon.

(2) Selects/recommends the route the search element should take into the village.

(3) Normally will enter the village first, guiding the Interrogator and Translator Teams (ITT).

(4) Contacts and issues initial instructions to civic and police officials.

(b) Search teams

(1) Task organized to search village, with specific sections and/or structures to search.

(2) Search team members should not enter and search structures without the presence of the owner/head of household.
(3) The presence of this individual prior to search demonstrates respect for the family and home.

(4) Minimizes the risk of injury from booby traps.

(5) Provides the opportunity to question individuals out of ear shot of other villagers.

(c) **Populace control team.** This element centrally locates and monitors the inhabitants, detailing to them what is taking place, and why. Other possible functions include:

(1) National identity cards are verified by this team and at this time.

(2) Manages the going and coming of property owners or heads of households during the search process.

   (a) **Prisoner control team.** Handles and arranges for the evacuation of suspects uncovered by the search.

   (b) **Documentation team.** Documents, processes and arranges evacuation of weapons, equipment, and logistical supplies uncovered by the search.

   (c) **Medical team.** Conducts MEDCAP and DENTCAP operations.

(3) Reserve element. Use reserve and position reaction forces near highest threat area.

*Note:* Organization of the search element should be strictly tailored to the mission. The commander organizes his search element based on the tasks that need to be conducted within the scope of the mission and purpose of the operation. Organization of the search element will vary with each particular situation.

C. **Execution of the Cordon and Search.** The accuracy of the commander’s METT-T evaluation will be critical to making this decision, and for ensuring operational success. The execution of the operation may occur in the following steps either sequentially or concurrently.

(1) **Planning.** Applying the same steps for tactical decision making used in planning any operation (BAMCIS), the commander evaluates his mission, commander’s intent, etc., and arrives at decisions on the details of the execution. As in all cases, the quality of the information associated with METT-T becomes critical. The Commander asks, “What is the focus of our planning?”
(2) Task Organization. Some key decisions that will be made, and tasks that require assignment include the following:

(a) Organization (Command, Cordon, Search, Reserve)

(b) Location(s), size, and commander of each element.

(c) Main Effort and Supporting Efforts of the search.

(d) Cordon Element assets (MMG, Asslt, Mortars, FAVs, etc.)

(3) Isolation of the area: Setting the cordon. The cordon must be emplaced in such a manner that any guerrillas and/or insurgents cannot escape, remove supplies or equipment. As stated previously, this may be accomplished by a variety of techniques, with the key element being surprise.

(4) Seizure of the objective area.

(4) Search. Once the cordon element is set, the search element moves in to commence the search. The approach of the search element towards the village or town is most likely when the force will be engaged by sniper fire or booby traps. The probability of contact at this point is high. If the cordon was set successfully then the populace will be in a state of surprise. Known guerrillas or insurgent sympathizers will likely attempt escape or try to remain undetected.

9609. Attacking Insurgent Houses

In planning an attack:

· Secrecy is essential. Relatives, sympathizers, or intimidated natives can warn the enemy of the patrol's approach.

· Location of the house and the nature of terrain surrounding it are determined by ground or aerial reconnaissance, sketches, photos, or guides.

· The patrol approaches and occupies its position during darkness

· The patrol should be no larger than required to carry out the mission.

· Approach is quiet and cautious, using all available cover.

· Avenues of escape are covered physically or by fire.

· If the mission is to capture the occupants, and armed resistance is not expected, surround the house and approach it from all sides.
If the mission is to attack the house, and armed resistance is expected, the patrol is located so that every side of the building is covered by fire.
Appendix A

Military Symbols

1. General. Military symbols are used to identify and distinguish particular military units, activities, or installations. Listed here are some of the military symbols commonly used by the squad leader. Refer to MCRP 5-2A, Operational Terms and Graphics.

2. Colors. Colors are used to assist anyone reading a map or overlay. Rules for their use are as follows:

   a. Blue or black is used for friendly forces.

   b. Red is used for enemy. If red is not available, blue or black in double lines can be used.

   c. Green is used to show mine fields, demolitions, roadblocks, and other engineered obstacle activities of both friendly and enemy forces. It will not be used for any other military activity. If not available, black is substituted.

3. Type of Unit Symbol

   a. Infantry Unit

   b. Infantry Headquarters

   c. Infantry Observation Post
4. Sizes of units are indicated by the following symbols:

Fire Team
Squad
Section
Platoon
Company or Battery
Battalion or Squadron
5. Combining Basic Symbols

a. The arrangements of type unit symbols, size symbols, letters, and numbers to show specific troop units and observation posts are shown by the following diagram.

<table>
<thead>
<tr>
<th>Size of Unit</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit.....................................</td>
<td>Higher Echelons of Command Unit/Unit</td>
</tr>
<tr>
<td>Designation</td>
<td>Unit</td>
</tr>
</tbody>
</table>

b. Examples:

1st Plat, Co A, 3d Marines

Observation Post, 1st Fire Team, 2d Sqd, 1st Plat, Co A, 3d Marines

6. Positions of small infantry units are shown in this manner.

Fire Team (1st Fire Team, 2d Squad)

Squad (2d Squad, 3d Platoon)

Platoon (3d Platoon, Company A)

Squad size position proposed for occupation (supplementary position)

7. Weapons Symbols. Following are some examples of weapons symbols:

Rocket Launcher (SMAW)

Automatic rifle, showing sector of fire and principal direction of fire.

2d machine gun section on the FEBA. Heavy line shows limit of grazing fire on the final protective line. The break in the heavy line indicates deadspace.

AT-4

Claymore Mine
8. Obstacle Symbols. Following are some examples of obstacle symbols:

- Antitank Mine
- Antipersonnel Mine
- Antipersonnel Mine With Tripwire
- Concertina, Single
- Roadblock (completed)

9. Miscellaneous Symbols. Following are some miscellaneous symbols:

- Check Point
- Listening Post
- Contact Point
- Sentinel Post
- Rally Point
- Trenches
- Coordinating Point
- Radar Site

Ambush

Support by Fire.
10. **Enemy Positions.** Enemy positions are shown by blue or black double lines if red is not available. Examples are as follows:

- Enemy Trenches
- Enemy Squad-Sized Position
- Enemy Infantry Observation Post
- Enemy Unit
Appendix B
Method of Challenging by Sentries

1. Do not allow unidentified personnel to closely approach your position. Halt and identify them before they are close enough to be a danger to you. This precaution is important at night and during other periods of poor visibility.

2. The following definitions have been approved for Marine Corps use:

   a. **Challenge.** Any process carried out by one unit or person in order to determine the friendly or hostile identity of another.

   b. **Reply.** An answer to a challenge.

   c. **Password.** A secret word or distinctive sound given by a sentry.

   d. **Countersign.** A secret reply given in response to a sentry who has presented a password; for example, NUTS (password), WINE (countersign).

3. An example of how to use a challenge and reply, password and countersign is shown in Figure B-1.

**ACTION BY SENTRY ACTION BY PERSON OR GROUP CHALLENGED**

1. **HALT! WHO IS (OR GOES)**1. Halts and gives any reply which **THERE?** (challenge) Given when indicates the person or group is he does not recognize the individual. Authorized to pass; e.g., **Friend, Ally, Fire Team Returning From Patrol,** and so forth. (reply)

2. **ADVANCE (ONE) AND BE** 2. Person (or group leader) advances **RECOGNIZED.** Without replying.

3. **HALT!** (sentry halts person)3. Person halts until recognized by when he is close enough to be recognized by the sentry, he is allowed to pass. If not recognized by the sentry, he gives the password.
4. Password is given in a low tone. Countersign is given in a low tone.

5. ADVANCE ANOTHER ONE (or remainder) of group advances at order of sentry to NIZED. Sentry calls forward be recognized. Group leader, or remainder, singly or as a group, person designated by leader, must as the situation or his orders remain with sentry to assist in demand. Identifying the remainder of the group.

Figure B-1. Procedure for Issuing Challenge and Reply, Password, and Countersign.
Appendix C
Troop Leading Procedures

1. General. BAMCIS is viewed as a part of the decision making cycle - Observe, Orient, Act, Decide. The troop leading procedures listed below are aids in planning for and executing assigned missions. They assist squad and fire team leaders in making the best use of time, facilities, and personnel. All the steps should be considered, but depending upon the mission and time available, the degree of consideration for each will vary.

2. Steps of Troop Leading Procedures (BAMCIS)
   a. Begin Planning. When an order is received, the squad leader considers the time available to him. In so doing, he uses a planning sequence called reverse planning, meaning that he starts with the last action for which a time is specified (e.g., an attack) and works backward to the issuing of his order. This helps ensure that enough time is allowed for the completion of all necessary actions. During this stage, he also analyzes the terrain and the friendly and enemy situation. From his analysis, he formulates a preliminary plan of action to accomplish the mission. This plan is only tentative and will often be changed.

   b. Arrange for Reconnaissance and Coordination. The squad leader selects a route and prepares a schedule for reconnaissance and coordination with adjacent and supporting units. Normally, he takes his fire team leaders and the leaders of any attached crew served weapons teams with him on his reconnaissance.

   c. Make Reconnaissance. On his reconnaissance, the squad leader completes his estimate of the situation. Prearranged meetings with adjacent squads and supporting units are held as scheduled. He notes how the terrain affects his preliminary plan and adopts, alters, or rejects it as necessary. While on his reconnaissance, he selects a vantage point from which to orient his fire team leaders.

   d. Complete Plan. Upon his return from the reconnaissance, the squad leader completes his plan of action. He then prepares notes to be used in issuing his order.

   e. Issue Order. If possible, the squad leader issues his order to the same personnel he took with him on his reconnaissance from the vantage point he had selected earlier. If this is not possible, the team leaders are oriented from maps, sketches, or an improvised terrain model. He issues his order using the five-paragraph order sequence and includes everything his fire team and attached weapons leaders need to know.

   f. Supervise Activities. The squad leader continuously supervises his unit to ensure that his order is carried out as intended.
Appendix D

Estimate of the Situation

1. General. The estimate of the situation is a problem-solving process. It is a method of selecting the course of action which offers the greatest possibility of success. At the squad level, the estimate is a continuous, rapid mental process and should be followed no matter how quickly a decision must be made. It is part of the begin planning steps of BAMCIS.

2. METT-T. The squad leader analyzes the courses of action and considers the advantages and disadvantages of each by using the following yardstick:

   - Mission (M)
   - Enemy (E)
   - Terrain and weather (T)
   - Troops and support available (T)
   - Time available (T)

3. Estimate of the Situation Process. The squad leader selects the best course of action by applying the factors of METT-T to each possible course of action. This forms the basis of the squad leader's decision. An explanation of the factors represented in METT-T follows.

   a. Mission. The mission is a clear, concise, and simple statement of the task to be performed. It must be carefully examined and thoroughly understood. It is the basis for all actions of the squad until it is accomplished.

   b. Enemy. Information concerning the enemy comes from many sources. The most reliable information is obtained by personal reconnaissance and, time permitting, no decision should be made without a reconnaissance. The squad leader's aim is to find out the enemy's location, strength, composition, type of weapons, disposition, tactical methods, and recent actions.

   c. Terrain and Weather. The terrain and weather affect all plans and actions. They must be studied from both the friendly and enemy viewpoints. The squad leader's plan of action must take full advantage of the terrain. The weather, both present and predicted, will affect visibility, movement, and fire support. The military aspects of terrain (often referred to as KOCOA) are as follows:

      (1) Key Terrain. Key terrain is any feature or area which gives a marked
advantage to the force controlling it. Generally, this advantage lies in terrain which affords good observation and fields of fire. Squads should always make an effort to occupy and use key terrain as it provides instant position of advantage.

(2) Observation and Fields of Fire. Observation is the ability to view enemy locations or avenues of approach in order to gain information about or direct accurate fire onto the enemy. Fields of fire are the areas that a weapon or group of weapons can cover and are essential to the effective employment of direct fire weapons. Observation and fields of fire should be considered both from friendly and enemy points of view.

(3) Cover and Concealment. Cover is protection from enemy fire. Concealment is the hiding or disguising of a unit and its activities from enemy observation. Terrain features that offer cover also provide concealment. The greater the irregularity of the terrain, the more concealment is offered from ground observation.

(4) Obstacles. Obstacles are natural or artificial features which stop, delay, or restrict military movement. They may either help or hinder a unit, depending upon their location and nature. For example, a deep creek located across the direction of movement will slow an attacker, while the same type of creek on the flank of an attacker affords a measure of security. In general, obstacles perpendicular to the direction of movement favor the defender, while those parallel to the direction of movement may give the attacker an advantage by protecting his flanks and providing him with covered avenues of approach.

(5) Avenues of Approach. An avenue of approach is terrain which provides a force a route of movement. It should also provide ease of movement, cover and concealment, favorable observation, fields of fire, and adequate maneuver room.

d. Troops and Fire Support Available. The squad leader considers his unit's strength and abilities against that of the enemy. He should know what assistance he has available from supporting weapons (machine guns, rocket launchers, mortars, tanks, artillery, naval gunfire, and aircraft).

e. Time Available. The efficient use of time is always critical to success. The squad leader must determine how much time he has to plan and execute the required tasks. Time must not be wasted; on the other hand, the squad leader must not allow tasks to be rushed to the extent that they are done incompletely or not at all. When time is short, tasks must still be accomplished completely.
Appendix E

Squad Five Paragraph Order

The five paragraph order is derived from the operation order and is structured to meet the needs of the small unit leader. It is similar to the operation order in that it includes the situation, mission, concept of operation, orders to subordinates, and measures required to ensure coordination of administrative, logistic, command, and communication matters. The five paragraph order is structured for oral presentation while the operation order is structured to be written. The five paragraph order is used at company level and below. The squad leader issues his order orally, and can be done using a terrain model or may sketch.

Five Paragraph Order Format (SMEAC)

1. Situation

   a. Enemy Forces. Consists of the SALUTE: size, activity, location, unit, time, equipment estimate of capability (DRAWD), and an estimate of the enemy's probable action.

   b. Friendly Forces. A statement of the mission of the next higher unit, location and mission of adjacent units, and mission of non organic supporting units which may affect the actions of the Unit.

Higher Commander’s Intent:

c. Attachments and Detachments. Units attached to or detached from the squad by higher headquarters, including the effective time of attachment or detachment.

2. Mission

A clear, concise statement of the task and purpose which the squad must accomplish.

(5 Ws)

3. Execution

   a. Concept of operations. The concept of operation is the squad leader's brief summary of the tactical plan the squad is to execute.

       1. Commanders Intent
       2. Scheme of Maneuver

   b. Subordinate Tasks (Missions) In each succeeding paragraph, missions are assigned to each fire team and any attached units.
c. Coordinating Instructions. In the last paragraph, instructions that apply to two or more subordinate units are given.

4. Administration and Logistics
This paragraph contains information or instructions pertaining to rations and ammunition; location of the distribution point, corpsman, and aid station; the handling of prisoners of war; and other administrative and supply matters. Often reference to as the 4 B’s (Beans, Bullets, Bandaids, and Bad guys).

a. Administration.

b. Logistics.

5. Command and Signal

a. Signal. Special instructions on communications, including prearranged signals, password and countersign, radio call signs and frequencies, emergency signals, radio procedures, pyrotechnics, and restrictions on the use of communications.

b. Command

1. Location of the platoon commander.

2. Location of the platoon sergeant.

3. Location of the squad leader.

Any Questions?

Time is now___.


Appendix F

Reporting Information

1. General. Information must be reported quickly, accurately, and as completely as possible. The acronym SALUTE provides a simple method for remembering how and what to report about the enemy. It’s purpose is to assist in identification of an enemy’s capability and actions.

   S ize

   A ctivity

   L ocation

   U nit *(Enemy unit may be derived from unit markings, uniform, or through prisoner-of-war interrogation.)

   T ime

   E quipment

An example of such a report is "Seven enemy soldiers, traveling SW, crossed road junction on Black Ridge at 211300 August. They were wearing green uniforms and carrying one machine gun and one rocket launcher."

2. Shelling Reports (SHELREP). The squad should report enemy artillery and mortar fire, and aircraft bombings using a SHELREP. The following format is suitable for either a written or oral report:

   Alpha Observer’s call sign.

   Bravo Observer’s location.

   Charlie Azimuth to enemy gun.

   Delta Time shelling started.

   Echo Time shelling stopped.

   Foxtrot Coordinates of area shelled, if a map is available.

   Golf Number and types of weapons fired.

   Hotel Nature of fire: destruction, harassing, or registration.

   India Number and type of shells.

   Juliet Flashbang time in seconds.

   Kilo Damage (usually in code).
3. Spot Report. A concise narrative report of essential information covering events or conditions that may have an immediate and significant effect on current planning and operations that is afforded the most expeditious means of transmission. The format can take the form of SALUTE. Here is an example:

Enemy Sighting Report (SPOTREP)

Begin the report with the subject line of the message, the DTG, and map reference details as required.

ALPHA Units of Measurements.

BRAVO Size. This line gives the number and type of the enemy by using the following letter codes:

<table>
<thead>
<tr>
<th>Type of Observation</th>
<th>Letter Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infantry</td>
<td>A</td>
</tr>
<tr>
<td>Armored personnel carriers (type or describe)</td>
<td>B</td>
</tr>
<tr>
<td>Tanks (type or describe)</td>
<td>C</td>
</tr>
<tr>
<td>Field artillery (type or describe)</td>
<td>D</td>
</tr>
<tr>
<td>Antitank weapons (type or describe)</td>
<td>E</td>
</tr>
<tr>
<td>Anti-aircraft weapons (type or describe)</td>
<td>F</td>
</tr>
<tr>
<td>Military trucks (type or describe)</td>
<td>G</td>
</tr>
<tr>
<td>Light military vehicles (type or describe)</td>
<td>H</td>
</tr>
<tr>
<td>Helicopters (type or describe)</td>
<td>J</td>
</tr>
<tr>
<td>Aircraft (type or describe)</td>
<td>K</td>
</tr>
<tr>
<td>Radars (type or describe)</td>
<td>L</td>
</tr>
<tr>
<td>Command post (describe)</td>
<td>M</td>
</tr>
<tr>
<td>Minefield (dimensions)</td>
<td>N</td>
</tr>
<tr>
<td>Other tank obstacles (specify and describe)</td>
<td>P</td>
</tr>
<tr>
<td>Other (followed by description)</td>
<td>Q</td>
</tr>
</tbody>
</table>

This information is transmitted by prefixing the letter with the number of each observed. In the case of infantry, the number of men seen is reported. In the case of minefield, the number of minefields is reported. The dimensions of the minefields are reported by using the unit of measurement ALPHA for each from line minefield.

CHARLIE Activity. This line describes the activity of the enemy by using the following numerical code.

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Number Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the move (followed by direction and speed)</td>
<td>1</td>
</tr>
</tbody>
</table>
Stationary, but not dug in 2
In prepared positions 3
Other (describe) 4

DELTA **Location.** The position of the enemy is provided by using the grid reference or another agreed-on system of position reference.

ECHO **Unit.** An identification of the enemy unit is provided if it can be determined. If not, a description is given that might be helpful to the tasking agency. If a positive identification is made, indication is required as to how this was achieved.

FOXTROT **Time.** The DTG of the sighting is reported.

GOLF **Equipment.** The identity or description of any weapons or equipment observed is provided.

HOTEL **Remarks.** Any additional details are included that might help to clarify enemy activities, strengths, or intentions for an intelligence assessment.

---

**4. Estimating Range by the FlashBang Method.** Sound travels about 330 meters (1,100 feet) per second. When the observer sees the flash or smoke of a weapon, or the dust it raises, he starts counting seconds (one thousand one, one thousand two, and so forth). He stops counting when he hears the report of the weapon. If he stops on the count of one thousand three, for example, the range from the observer to the gun is three times 330 meters per second or 990 meters (3,300 feet). Marines should practice timing their count with the second hand of a watch to develop the correct speed.

**5. Crater Analysis.** (See fig. F-1.) If an observer is unable to determine the location of a gun by direct observation, he may be able to determine the line of flight of the projectile by examining the crater. Also, the type and caliber of weapon may be determined from the identification of shell or fuze fragments and tail fins found in the crater. Information on the line of flight and type and caliber of the projectile is passed to the platoon commander. Although not difficult to learn, crater analysis does require some training. Detailed procedures for conducting crater analysis is found in MCWP 3-16.6, *Supporting Arms Observer, Spotter, and Controller.*

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*Figure F-1. Example of Crater Analysis.*
Appendix G

Handling Prisoners of War

1. General. Enemy of war (EPW)s are one of the most valuable sources of information for intelligence purposes. They should be delivered to the platoon commander as quickly as possible.

2. The Five Ss and a T. The five Ss and a T of EPW handling are:
   a. Search. Prisoners are thoroughly searched for weapons and documents as soon as they have been captured. Weapons and documents should be tagged and immediately sent to the platoon commander.

   b. Segregate. Prisoners are segregated into groups: officers, NCOs, privates, deserters, civilians, and females. This prevents leaders from organizing escapes and issuing orders to subordinates.

   c. Silence. Silence is essential. Prisoners must not be allowed to talk to one another.

   d. Speed. Speed is required in getting prisoners to the platoon commander. Timely information secured from prisoners is essential.

   e. Safeguard. Prisoners are safeguarded as they are moved. They are restrained, but not abused. They are not given cigarettes, food, or water until authorized by assigned interrogators.

   f. Tag. Tag the prisoner with time, place, circumstances of capture. Any equipment and weapons the individual had in his/her possession at the time.
Appendix H
Cover, Concealment, and Camouflage

1. Each Marine must use terrain to give himself cover and concealment. He must supplement natural cover and concealment with camouflage. More information can be obtained from MCWP 3.11.3, Scouting and Patrolling.

2. Cover is protection from the fire of enemy weapons. It may be natural or manmade. (See fig. H-1.)

Figure H-1. Cover.

a. Natural cover includes logs, trees, stumps, ravines, hollows, reverse slopes, and so forth. Manmade cover includes fighting holes, trenches, walls, rubble, abandoned equipment, and craters. Even the smallest depression or fold in the ground gives some cover. Marines must look for and use every bit of cover the terrain offers.

b. When the enemy approaches a fighting position and brings it under direct and indirect fire, there must be cover to protect the troops. Natural cover is best as it is the most difficult for the enemy to spot.

c. Marines dig fighting holes to increase the protection afforded by natural cover against enemy direct and indirect fires. The type and extent of preparation will depend on the mission and the length of stay.

d. First, the Marine prepares a simple prone shelter. Then, as time allows, he prepares a more fully developed position, up to a complete fighting hole with overhead cover and trenches connecting it with other positions.

e. When moving, Marines use routes which put cover between them and places where the enemy is known or thought to be. They use ravines, gullies, hills, wooded areas, and other natural cover to keep the enemy from seeing and shooting at them. They avoid open fields. Units avoid sky lining on hills and ridges. In a desert, rock formations and depressions are cover. (See fig. H-2.)

Figure H-2. Covered Route.
3. Concealment is anything that hides a Marine, his position, unit, or equipment from enemy observation. Small unit leaders must enforce light and noise discipline, control movement, and supervise the use of camouflage. Well hidden fighting holes help conceal a unit's location from the enemy. The best way to use natural concealment is to refrain from disturbing it when moving into an area. Darkness alone does not hide a unit from an enemy who has night vision and other detection devices. (See fig. H-3.)

Figure H-3. Concealed Positions

4. Camouflage makes use of natural and manmade material. Used well, it reduces the chance of detection by the enemy. If camouflage material is needed, it should be brought from outside the fighting position. If used well, branches, bushes, leaves, and grass provide the best camouflage. Foliage used as camouflage must blend with that of the surrounding area. An open, exposed position can be concealed from enemy observation by using the right materials and procedures.

5. Some things the enemy will look for in trying to find friendly positions are listed below.
   a. Movement draws attention. An observer will catch movement in his field of view. Moves, such as arm and hand signals, can be seen by the naked eye at long ranges. A comparison of aerial photos taken of the same area at different times can reveal movement of troops and vehicles and will help the enemy find targets. (See fig. H-4.)

   It is obvious here to even the untrained observer that some activity is taking place at Both 1 and 2 and needs watching.

   Figure H-4 Movement

   b. Shadows draw attention. Camouflage should be used to break up shadows of fighting positions and equipment. Shaded areas offer concealment. This is particularly true of shadows of buildings in cities. (See fig. H-5.)

   Figure H-5. Shadows.

   c. Fighting positions should not be where the enemy expects to find them. They should be on the side of a hill, away from road junctions or lone buildings, and in covered and concealed locations. (See fig. H-6.)

   Figure H-6. Fighting Positions.
d. Shape is the outline of something. The shape of the helmet is easily recognized, as is the undisguised shape of a man's body. Both camouflage and concealment should be used to make familiar shapes blend with their surroundings. (See fig. H-7.)

Figure H-7. Shape.

e. Shine may be a light source such as a cigarette glowing in the dark, or reflected light from smooth, polished surfaces such as a worn metal surface, a windshield, binoculars, eyeglasses, a watch crystal, or exposed skin not toned down with face paint. The use of lights or the reflection of light may help the enemy detect friendly positions. Equipment that shines should be concealed, or covered with mud or paint. (See fig. H-8.)

Figure H-8. Shine

f. Contrasting colors are more easily detected; for example, against the dark green of jungle foliage, white skin shows up better than does black. Camouflage should match the surrounding area, rather than offer a contrast. Bright colors should not be used in camouflage.

g. Dispersion is the distance between men, vehicles, and equipment. If a squad is not dispersed, it is easier to detect and easier to hit. Distances between men, teams, and squads must be prescribed and enforced.

6. How to Camouflage

a. Before camouflaging, Marines study the terrain and vegetation of the area they are in and the area to which they are going. Grass, leaves, brush, and other natural materials must be arranged to conform to the USA Tree branches stuck into the ground in an open field will not fool anyone. Vegetation changes from area to area. As units move from one area to another, camouflage must be changed to blend with the vegetation.

b. Marines should camouflage or hide dirt from fighting holes and heads. If necessary, they take it away from the positions and camouflage it. (See fig. H-9.)

Figure H-9. Hiding Dirt.

c. Marines should use only that material which is needed. Too much camouflage (natural or manmade) may call attention to a position as easily as will too little. Camouflage materials should be gathered from a wide area. An area stripped of all its foliage will draw attention. (See fig. H-10.)

d. Dirt used in parapets and overhead cover must be camouflaged. If the fighting holes have no overhead cover, the bottom of the holes must also
be camouflaged to prevent detection from the air. When possible, open
areas should be covered by fire rather than physically occupied since it is
hard to conceal a position in the open.

e. Men must continue to camouflage their positions as they prepare them.
Work on a defensive position in daylight depends on the enemy air threat and
whether or not the enemy can see the position. When the enemy has air
superiority, work may be possible only at night. Shiny or light-colored objects
which attract attention from the air must not be left lying about. Mirrors, food
containers, towels, etc., must all be hidden. Shirts must not be removed, as the
exposed skin stands out and increases the chance of being seen. Fires must not be
used where there is a chance that the smoke or flame will be seen by the enemy.
Trails and other evidence of movement must be hidden.

Positions Must Look Like the Surrounding Terrain

Figure H-10. Natural Positions

f. After camouflage is complete, the fighting position should be inspected
from the enemy's point of view. Camouflage should be checked often to see that it
stays natural looking and conceals the position. If it looks like a camouflaged
position to the Marine inspecting, it is almost certain that it will look like a
camouflaged position to the enemy.

g. Helmets must be covered with the issue helmet cover or one made of cloth
or burlap colored to blend with the terrain. The cover should fit loosely. Foliage
should stick over the edges. This should not be overdone. If there is no material
for helmet covers, the surface of helmets can be disguised and dulled with
irregular patterns of paint or mud. Camouflage bands, string, burlap strips, or
rubber bands can be used to hold the foliage in place. (See fig. H-11.) Uniforms
must blend with the terrain. Badly faded equipment may be hard to hide. Units
should turn in badly faded equipment or use mud, a camouflage stick, paint, and
so forth, to color it until it can be exchanged.

h. When operating in snow-covered terrain, Marines should wear over
whites and, where possible, they should color equipment white. If over whites are
not issued, sheets or other white cloth can be used for camouflage. (See fig. H-12.)

i. Exposed skin reflects light and draws the enemy's attention. Even very
dark skin, because of its natural oil, will reflect light. Camouflage face paint sticks
are issued in three standard two-tone sticks. (See fig. H-13.)
(1) When applying camouflage face paint, men work with one another. They check each other. They apply a twocolor combination in an irregular pattern. Shine areas (forehead, cheekbones, nose, ears, and chin) are painted with a dark color. Shadow areas (around the eyes, under the nose, and under the chin) are painted with a light color. Exposed skin on the back of the neck, ears, arms, and hands should be painted.

(2) When face paint sticks are not issued, mud or charcoal can be used to tone down exposed skin.

Figure H-11. Foliage.

Figure H-12. Blending

Figure H-13 Camouflage Sticks.
Appendix I

Glossary

Acronyms

AAV ................................................................. amphibious assault vehicle
AAA V ................................................................. advanced amphibious assault vehicle
ADDRAC ............................................................ alert, direction, description, range, assignment, control
APC ................................................................. armored personnel carrier
CCW ................................................................. Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (otherwise known as the CCW Convention)
CP ................................................................. command post
EPW ................................................................. enemy prisoner of war
FASCAM ............................................................... family of scatterable mines
FCL ................................................................. final coordination line
FEBA ................................................................. forward edge of the battle area
FPF ................................................................. final protective fire
FPL ................................................................. final protective line
HE ................................................................. high explosive
HEDP ................................................................. high explosive dual purpose
IA ................................................................. immediate action
KOCOA ................................................................. key terrain, observation, cover and concealment, obstacles, and avenues of approach
LAW ................................................................. Light assault weapon

L P .................................................................. Listening post

METT-T .......................................................... mission, enemy, terrain and weather, troops and support available, and time available

MOUT ............................................................ military operations on urbanized terrain

NCO ............................................................... noncommissioned officer

NSDAPL ........................................................ nonselfdestructing/deactivating antipersonnel land mines

NSDATL ........................................................ nonselfdestructing/deactivating antitank land mines

OP ............................................................... observation post

PDF ............................................................. principal direction of fire

PLD .............................................................. probable line of deployment

POW ............................................................ prisoner of war (friendly)

RFL .............................................................. restricted firing line

RPM ............................................................. rounds per minute

SAW ............................................................ squad automatic weapon

SDAPL ........................................................ selfdestructing/deactivating antipersonnel land mines

SDATL ........................................................ selfdestructing/deactivating antitank land mines

SHELREP ..................................................... shelling report

SMAW ........................................................ shoulder-launched, multipurpose assault weapon

SOP ............................................................. standing operating procedure
WP ................................. white phosphorus
Appendix J

References

1. Marine Corps Doctrinal, Warfighting and Reference Publications
   MCDP 1-3                                  Tactics
   MCRP 3-01A                                Rifle Marksmanship
   FMFM 1-2                                  Marine Troop Leader's Guide
   MCWP 3-11.1/FMFM 6-4                      Marine Rifle Company/Platoon
   MCWP 3.11.3                               Scouting and Patrolling for Infantry Units
   MCWP 3-35.3                               MOUT
   MCRP 3-0B                                 How to Conduct Training
   MCRP 3-02A/FMFRP 0-1 B                    Marine Physical Readiness Training for Combat
   MCWP 3-35.1A/FMFRP 7-23                   Small-Unit Leader's Guide to Cold Weather
   MCWP 3-15.1                               Machine Guns and the Machine Gun Gunnery

2. U.S. Army Field Manuals
   FM 21-15                                  Care and Use of Individual Clothing and Equipment
   FM 21-18                                  Foot Marches
   FM 21-26                                  Map Reading and Land Navigation
   FM 21-60                                  Visual Signals
   FM 21-75                                  Combat Skills of the Soldier
   FM 21-76                                  Survival
   FM 23-14                                  Squad Automatic Weapon (SAW), M-249
   FM 23-23                                  Antipersonnel Mine, M-18A1 and M-18 (Claymore)
   FM 23-30                                  Grenades and Pyrotechnic Signals
   FM 23-31                                  40 mm Grenade Launchers, M-203 and M-79
   FM 10t-51                                 Operational Terms and Symbols
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