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**УЧЕБНИК ШТУРМОВИКА
ГОРОДСКОЙ БОЙ
УЧЕБНОЕ ПОСОБИЕ**

**Stormtrooper Textbook: Urban Combat Training
Manual**



Annotation

Book from the series Combat Training, Textbook
Stormtrooper, a training manual for servicemen term and
contract service, cadets and officers of the Armed Forces of
the Russian Federation.

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Chapter 1. fighting in the city group tactics

Acting in the city in mobile groups, having reliable communication with each other, it is necessary to take house after house, attic after attic, leaving in already captured buildings machine gunners, snipers, so that the enemy did not jump in and suddenly did not hit in the back. Fire cover is the law in war. Two groups, supporting each other with fire, will achieve more and have fewer losses than a group of larger composition, but which no one covers and does not support. A small unit must never break away from its own - they may be cut off and destroyed. In each group (platoon) create subgroups ("twos", "threes").

Movement on the street on foot

Movement on the street of the unit with military

equipment Actions during the seizure of a building

Fighting enemy snipers

Fighting in the city. Part 3: Group Tactics Moving
down the street on foot

When moving a unit (group) along a street on foot, automatically advance on both sides, along the walls at a distance of 6-7 (in some cases 3-4) meters from each other, rushing from cover to cover. With side vision, constantly recording possible movements on attics, windows, balconies, as well as being ready to jump into cover, which can be a concrete curb, burnt-out car, ditch, etc.

During their movement, the machine gunner (or machine gunners), who remain behind, supports and covers the unit (group) with fire, shooting to kill or firing in short bursts at all locations from which enemy fire is seen. The grenade launcher is next to the machine gunner and destroys fortified and dangerous enemy assets, machine gun nests and snipers.

When the unit(s) has advanced 60-70 meters, has taken cover and has opened fire, the cover group is pulled up. The riflemen fire at targets on the opposite side of the street, remembering to control the situation behind them. The cover team must also be vigilant - the enemy may appear in the rear.

Movement on the street of the unit with military equipment

The unit (group) moves along the streets under cover of the immediate guard, which is sent forward along the route of movement at a distance of 100 to 200 meters. The equipment moves in a stream along walls and fences, the squad usually moves along one side of the street, and the platoon (company) - on both sides of the street, providing mutual support by firing at buildings located on the opposite side of the streets.

Depending on the situation, the personnel can operate on foot, landing on armor, is in the landing compartment of combat vehicles.

When operating on foot, personnel move at the same level as the combat vehicles, covered by their armor from enemy fire. The personnel may move in two ways:

On sidewalks, pressing against the walls of houses, fences (applied in those cases when the traffic is carried out on streets with adjacent multi-storey buildings);

On the carriageway of the street (applies when driving through a residential area with low-rise buildings).

Surveillance while driving on the street shall be organized in tiers. The entire opposite side of the street must be under observation and fire. On the armor it is necessary to have open boxes with ammunition and grenades for quick replenishment in the course of the battle.

On wide streets armored vehicles move in pairs on opposite sides of the street, and on narrow streets - in a "snake", pressing against the walls of buildings. The normal distance between armored objects is 50 - 70 m. If the battle one of the vehicles breaks down, the other vehicle stops and provides its repair (evacuation) by fire from the spot.

When the enemy is detected, fire is directed at all floors, basements and roofs of buildings. In addition, small arms fire and grenades destroy the enemy in the basements of buildings located on "their" side of the street. Simultaneously with the advance of the main forces along the streets, the units not involved in the landing carry out "mopping-up" operations

adjacent neighborhoods from small enemy groups, the following rules must be observed:

Scouts must reliably determine whether other units are coming from the right and left.

Strictly adhere to the front line, do not lag behind or pull ahead of anyone.

Do not leave behind unchecked objects. Buildings cleared of the enemy are secured by specially assigned units from the second echelons.

Actions in the event of a building takeover

When assaulting an object, approach it with fire support from a cover team. The best way to penetrate a building occupied by the enemy is to use the breaches in walls made during the fire preparation of the assault. For this purpose, tanks and guns firing direct fire, ATGM launchers, etc. should be used.

You should rush inside the building immediately after your grenades burst, but be aware that the enemy may have time to throw this grenade back. At the moment of throwing, the command "Shrapnel" should be given to warn your comrades. If the grenade is thrown by the enemy, the command "Grenade" is given. The first to enter the room move sharply away from the entrance and fire at all darkened and dangerous places. The task of the first to break into the room is to give the main forces of the unit (group) a chance to break in, clear the way for them by fire, and cover them. Then, after reloading their weapons, they will move in the second echelon. It takes a lot of ammunition to break into a building.

After the seizure, the room is thoroughly searched. One soldier provides fire cover at this point, taking up a position at the doorway outside the room. During such actions, pre-established commands and signals are used to indicate the location and course of action of the soldiers. After completing the inspection, the unit commander commands "Clear" and then "Come out", thus informing the outside cover that the team has left the room. The inspected room is marked with a designated sign.

B in the course of traveling in stairwells flights is given command

"Going up" or "Going down." The most appropriate direction

"In this case, enemy will be forced out of the building and destroyed.

In the case of a bottom-up sweep, the enemy may fortify himself on the upper floors or escape through the roofs of buildings. During the assault, various improvised means can be used to penetrate buildings: portable ladders and "cats", gutters and drainage pipes, roofs and windows of adjacent buildings, nearby trees, and even helicopters.

The seizure of the objective must occur as quickly as possible, with a stunning onslaught on the first attempt. The assault should be conducted without regard to casualties, and each member of the assault team should be unrelenting.

This has a demoralizing effect on the enemy.

If the assault fails, a second attack will be ineffective. The enemy has an opportunity to analyze the situation and orient himself. Combat experience shows that it is harder to attack a second time. Personnel losses during the second assault will be greater. Failure will affect the fate of their own wounded comrades who remain at the object occupied by the enemy.

In a room that has just been left by the enemy, be careful (there may be 'stretch marks'), try not to open doors by hand (have a stick or a rope of 10 meters if possible). Corpses can be booby-trapped, as well as VCRs, tape recorders, cabinet drawers, curtains on windows (the explosive charge explodes when you pull them off), etc.

It is very common for the enemy to lock residential entrance doors from the inside. This is an insidious technique. Inexperienced soldiers gather near the door, decide what to do next, and try to break the door down with rifle butts.

And get a line through the door at the level of the stomach. In the correct variant, the lock is shot off with shots from an automatic rifle (when firing from AKS-74 be careful - unpredictable ricochets are observed). The attackers are on the sides of the door. After shooting the lock, the door is swung open with a kick from the side, at the same time a grenade is thrown into the opened door. After its explosion, the assault group breaks into the room with a sharp rush, the servicemen immediately move away from the doorway, fixing the situation with their side vision and using weapons if necessary. Again, the main task of the first to break into the room is to cover the other soldiers of the assault group with fire. To divert the attention of the enemy in the room, before breaking into the room, any bulky object is thrown through the open door, not directly, but to the side - a hat, a cotton coat, an overcoat, etc. The first of the stormers bursts into the room through the open door askew, ducking down, in the opposite direction to the one where the distracting object was thrown.

Do not go close to the windows, it is better to stand on the side, open aisles in entrances and rooms overcome, ducking, running: there is no guarantee that from the neighboring building for this room is not watching the sniper.

To penetrate into a neighboring room (apartment), make breaches in non-capital wall panels (in kitchens, toilets, bathrooms, etc.), as well as use balconies and loggias. To destroy the enemy in the neighboring entrance, use breaches in walls through which you can penetrate into the premises of the neighboring entrance without going outside.

You should always try to attack the enemy from the top down, for this purpose through the breaches in ceiling ceilings it is necessary to penetrate to the upper floors in relation to the enemy, throw grenades at him and attack.

When operating up staircases, the upper floors of the building should be broken through with their backs against the walls, immediately following the bursting of their grenades.

In the building, in the basement, in the attic do not make noise, what the eye cannot see, the ear can hear: groaning, rustling, shutter clanking and other characteristic sounds.

The actions of each member of the assault team must be agreed in advance. The unit should constantly practice different variants of actions so that everyone does his job without command and is ready to replace his comrades who have fallen out of formation.

If you occupy a building, secure it immediately. Barricade the lower floors and semi-basements. Determine the sectors of fire. Determine the firing system so that you can alternate firing from different positions to prevent the enemy from taking aim and creating a false impression of your numerical superiority. Several buildings overlapping each other's firing sectors form a truly impregnable fortress. A stronghold is a base for further offensive, a shelter for the wounded, an opportunity to defend yourself in case of complications. Do not leave uncontrolled objects in the rear - they can be retaken by the enemy.

Radio communications in preparation for an assault must be silent. During the assault it must work in all units clearly - without it it is impossible when the situation changes.

Fighting enemy snipers

The tactics of snipers in the city is that on the upper floors of the building and attics the sniper sets up 2-3 observation and 3-5 firing points, he is provided with a guard (3-5 machine gunners), which is located next to and floors below the sniper. Surveillance is conducted in all directions by the sniper and the guards. Targets are selected as follows: our snipers, command staff, mechanics-drivers, gunners-operators of combat vehicles, collective weapons calculations.

The sniper fires at the maximum range at the neighboring streets from the depth of the room or from behind an opening, door jamb, or internal capital wall. Although this narrows the view and increases the dead space, it ensures greater survivability of the sniper after the shot, because if this window is detected, the room will immediately be fired from grenade launchers and small arms, and the sniper in this case has time to run away from the opening along the capital wall and lie down at its base.

During the fighting for Grozny, Chechen snipers developed a specific tactic. At first, the snipers sought to hit the leg of a fighter. When other soldiers reached the wounded soldier to evacuate him from the battlefield, they also aimed to hit him in the legs. Three or four men would be "shot" in this way, and then the sniper would methodically finish them off.

To destroy the sniper, a group of 4-6 men is created (its composition: group commander, sniper, the rest are armed with automatic rifles and grenade launchers; at night with night sights). The tactics of the group are as follows:

Make a "bait" - stuff old uniforms with whatever comes to hand, show this "bait" from different windows, changing hats and helmets on the bait, let the bait fall when a successful hit, put the enemy sniper's vigilance to sleep. At night, as a "decoy" you can use the imitation of violation of the measures of light camouflage.

To simulate the light spot created at night on the face of the shooter working night vision device, you can in the depth of the room or in the window opening periodically show a phosphorescent object suspended on a pole (for example, the head of a medium-sized fish) and this "bait" causes the fire of the sniper using a night sight.

After the sniper has been shot, establish his position by observing from different points (observe from the windows next to and above or below the window from which the decoy is shown).

Use your sniper rifle, automatic rifles and grenade launchers to destroy the enemy sniper. If possible, fire grenade launchers in such a way as to hit not only the window opening from which the sniper fired, but also the inner doorway of this room, behind which the sniper could take cover after the shot.

There are immeasurably more variations in the real reality of war. It is impossible to describe everything. In a combat situation, everyone must be able to think directly at the scene of the event, to learn to orient themselves

and make instant decisions. There are no patterns. Not all of us are equally resourceful. One of us, in a critical situation, will immediately guess what needs to be done. Another needs a set of ready-made, correct solutions for all occasions.

Chapter 2: Entering a room with a USING SPECIAL TRIGGER DEVICES

Presented are variants of exercises used in the training of members of high-altitude assault teams of special units.

High-altitude assault training is a set of techniques and methods that allow you to perform service and combat tasks on objects, on the outer vertical of the building, or other hard-to-reach places. Practically, it is the ability to perform a service task or to conduct combat operations in those directions from which the enemy does not expect a blow, thus achieving maximum effect, the ability to penetrate into the most inaccessible places of the object.

In everyday activities and in the performance of service and combat tasks in the emergencies, employees of special units of law enforcement agencies have to face problems that require skills of high-altitude assault training. There are many examples of this and the most difficult are operations conducted in urban environments.

They are complicated by the fact that the peculiarities of multi-story buildings create a number of additional difficulties that must be taken into account by the operation manager and tactical team commanders. Premises located in multi-storey buildings are usually difficult to penetrate and require special training of personnel and movement techniques.

When conducting special operations in high-rise buildings, several tactical groups are involved, and one of the most important places is reserved for the high-rise assault group. In order to equip personnel with sustainable skills to operate in this element of the combat order

It is necessary to conduct regular high-altitude assault sessions and reinforce the acquired skills in emergency drills and tactical and specialized exercises.

The use of special rappelling devices (SRDs) involves a risk to life and safety measures must be strictly adhered to.

- Only tested and certified SSAs may be used for descents and the manufacturer must be licensed to manufacture them.
- Descents may only be carried out under the supervision of personnel who have received special training in the use of the SSA.
- When practicing descents to control the correctness of passing the halyard through the carabiner and the "figure eight" on the upper floors of the instructors appointed from among the instructors to release, and on the ground - a guard who holds the free end of the veil.
- To avoid head injuries during descents, trainees must wear a helmet, either a safety helmet or an assault helmet.
- The training area must be prepared in advance, objects that could cause injury must be removed from the ground at the landing site.

It is reasonable to divide the training of employees in high-altitude assault training into stages.

First stage

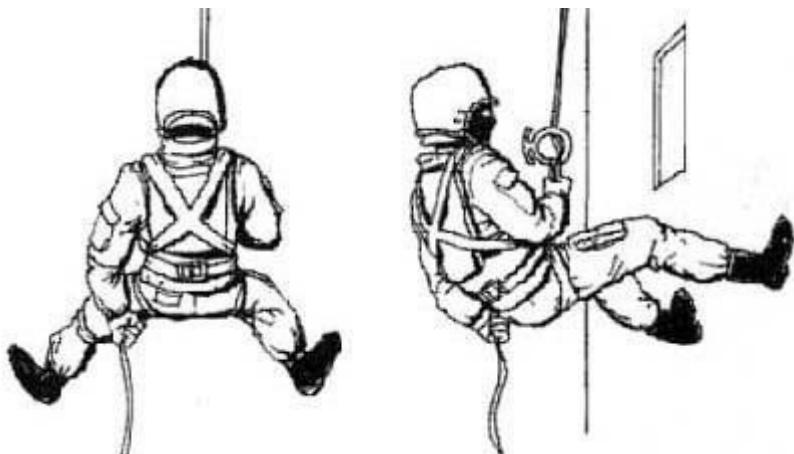
- study of the material part of the SSA and the principle of its operation
- study of safety measures in altitude training classes
- Passing the tests on safety measures at altitude training classes
- assigning a specific (individual) trigger device to each employee

Fastening of equipment assemblies, position of arms and weapons. Second stage

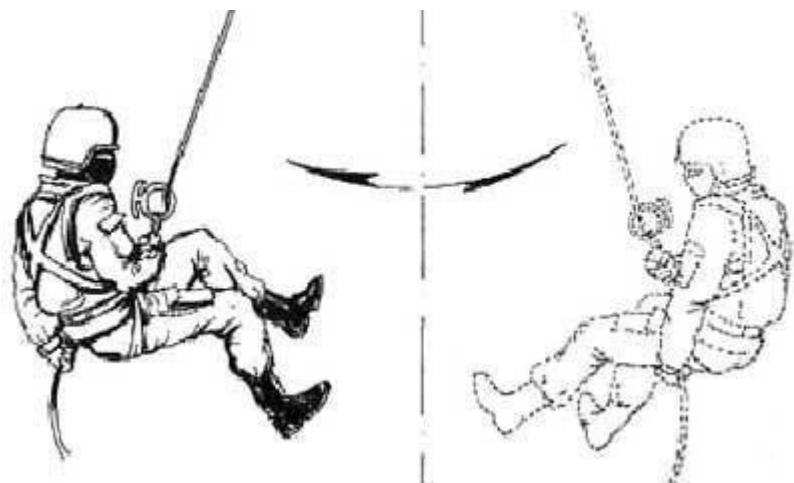
- trainees are trained in putting on and taking off the suspension system, attaching the brake block (carabiner or "figure eight") to it and fixing the halyard.
- trainees practice attaching the halyard to the building
- trainees practise going out of a window (start from the first floor)

Performing preparatory exercises first at low height (2nd floor).

1-e exercise: Push yourself away from the window and come back.

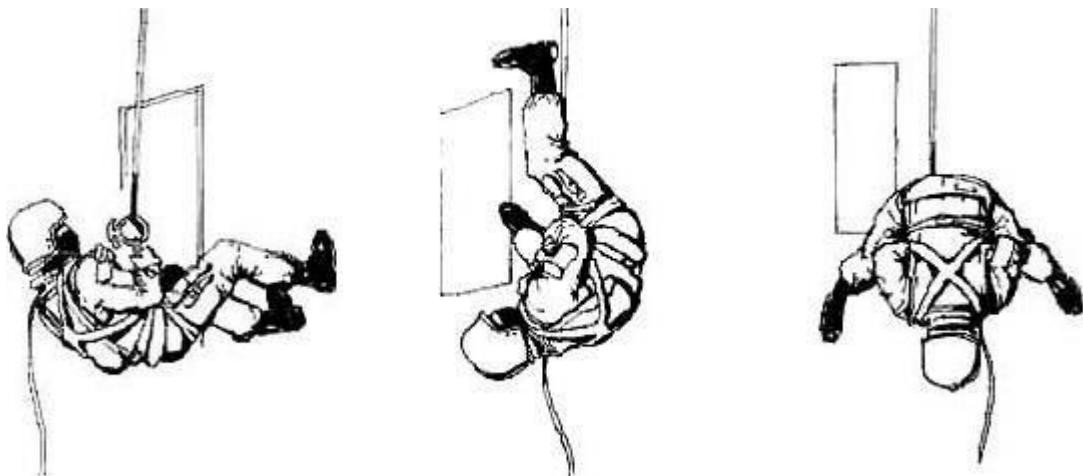


2-e exercise: "Pendulum". Move along the wall from window to window without pushing away from the wall.

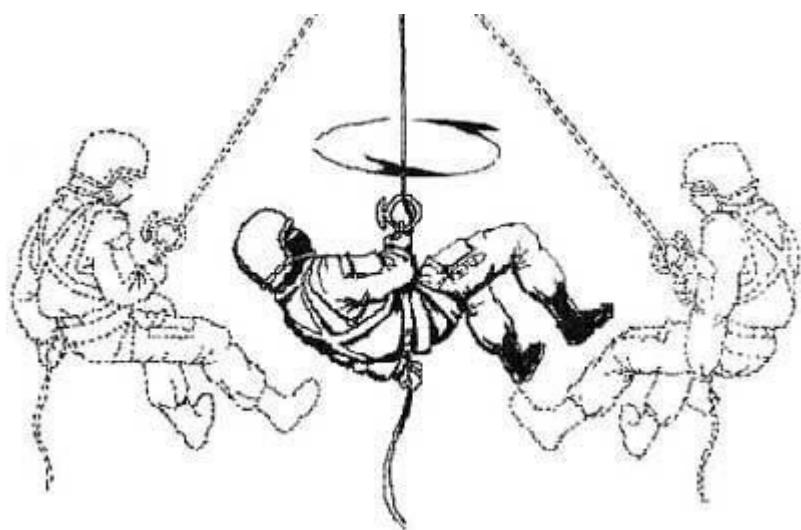


3-e exercise: "Turn". Push off the wall and turn 360°.

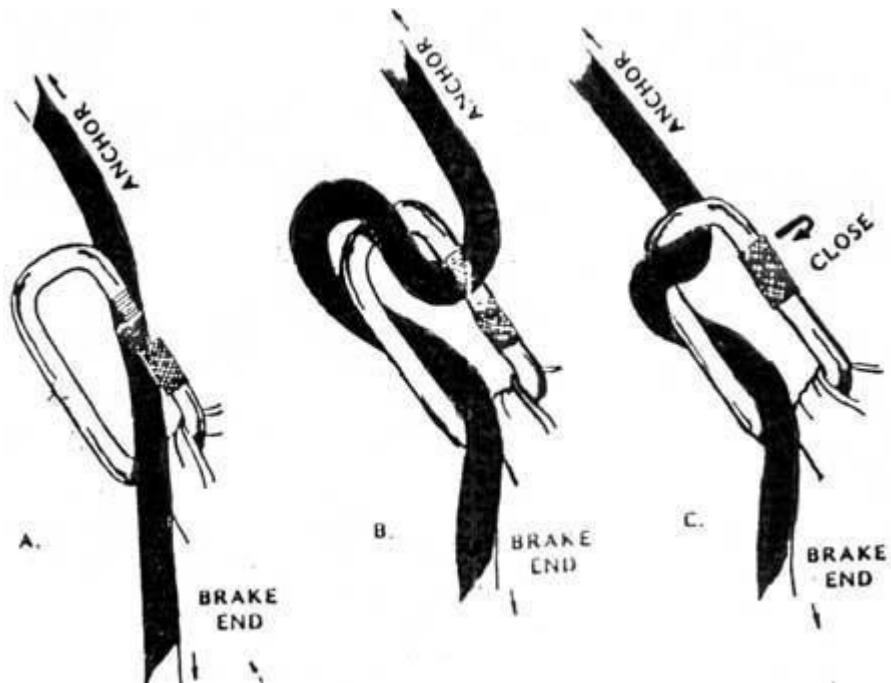
4-e exercise: "Pendulum with a turn". Push forward and to the side, make a 360° turn from one window to another.



5-e exercise: Descent on to the ground. After mastering exercises they are successively performed at the height of the 3rd, 4th and 5th floors.



A variant of attaching the halyard to the suspension system, via a carabiner without a "figure eight", for descending.



Third stage

Initially, the trainee trains without weapons and personal armor protection equipment (PAPE); as techniques are mastered, the trainee puts on equipment and uses weapons.

- Descending from the 5th floor with a brief stop on each floor.
- performing a descent from the 5th floor with a brief stop across the floor.
- Descending from the 5th floor with a stop on the ground.
- Descending with flying into a window on the 3rd and 1st floors.
- hovering, head down.

Stop Kick Swing

Head-down position

To stop and release the arms, the halyard is tied and secured to the whiskers on the "figure eight". As shown in the illustration.

Fourth stage

Special Tactical Exercises (STE), descents are performed in SIS, with weapons.

1 - e STU Throwing an assault grenade through a window while descending using an ATP.

The trainee is on the 5th floor of the training building. At the supervisor's command, he attaches the brake unit of his trigger device to the halyard and begins to descend to the 4th floor, makes a short stop, prepares an assault grenade for use, at the signal descends down, makes a short stop on the 3rd floor, kicks out a model window, throws an assault grenade into the room and descends down.

The time countdown goes from the signal to action until touching the ground. Execution time of the exercise is 25 s.

2 - e STU Diversionary firing of blank cartridges from a rifle while descending using an SSA.

The trainee is on the 5th floor, armed with an automatic rifle, 10 blank cartridges in the magazine. At the supervisor's command, the trainee attaches the brake block of his trigger unit to the halyard and assumes the initial position for release. (The cartridge is then inserted into the chamber).

On command (signal) starts descending, makes a short stop on the 3rd floor, knocks out the window model with his foot, gives a queue of blank cartridges into the window, and then descends to the ground.

The time countdown goes from the signal to action until touching the ground. Execution time of the exercises is 25 s.

H - e STU Descending a building with diversionary firing and throwing an assault grenade.

The trainee is on the 5th floor of the training building, at the command of the supervisor attaches the brake unit of his SSU to the halyard and assumes the starting position for descent. On the signal starts moving, stops on the 4th floor, fires blank cartridges from the automatic rifle and prepares an assault grenade, descends to the 3rd floor, knocks out a model window with his foot and throws an assault grenade into the window and then descends to the ground.

The time countdown goes from the signal to action until the landing. The time to perform the exercise is 30 s.

4 - e STU Descending through a building using a head-down SSA.

The trainee is on the 5th floor of the training building, at the command of the supervisor attaches the braking unit and takes the initial position for descent, on the signal starts the descent, after passing 2-3 meters, stops, makes a turn and starts the descent head down, before the ground a stop is made, turn to the normal position.

The exercise is performed without taking time into account. The exercise can be made more difficult as you learn.

- a: During the descent, breaking a window and throwing an assault grenade into the room.
- b: During the descent, setting up to fire at a target representing a terrorist in the building.

Chapter 3. Preparing for SPECIAL WARfare in CITY

Because of the increasing population and accelerated growth of cities, the problems of combat in a populated area have become particularly important to the U.S. Army. This type of combat cannot be avoided. The structure and layout of small as part of an urbanized complex makes isolating enemy fire occupying one or more of these small communities increasingly difficult. Combat operations in the urbanized landscape are expected to be conducted in the European and Asian theater, with brigade and higher level commanders focusing on these operations. This guidance provides the infantry battalion commander and his subordinates with tactics, techniques, and procedures for fighting in a populated area.

Friendly and adversary doctrine emphasize the need for special attention to the urban battlefield environment. Urban expansion affects military operations because this expansion changes the landscape. While accepted conventional doctrine also applies in these environments, the increasing focus on urban operations in low-intensity conflicts, urban terrorism, and civil unrest shows that urban combat is inevitable and requires some additions in tactics, techniques, and procedures.

Air-land battle doctrine describes the Army's approach to mobilization and the application of combat power at the operational and tactical levels. It is based on aggressively seizing or holding the initiative to accomplish the mission. The four basic and constant principles of air-ground combat are initiative, rapidity, depth, and synchronization. During combat in a populated area, the principles of air-ground combat apply as before, only the landscape in which these engagements will be conducted will be different.

Urbanized Landscape Combat - All military actions that are planned and conducted in such a landscape where man-made structures affect the tactical parameters available to the commander. These operations are conducted to defeat an enemy that may be mixed with civilians. Therefore, rules of engagement (ROE) and use of combat power are more restrictive than in other battlefield environments. Because of changes in the political environment, advances in technology, and the role of the military in maintaining world order, combat in the urbanized landscape now takes new forms that did not exist before. These new forms determine how groups fight or accomplish their assigned missions. The following definitions provide clarity for commanders conducting tactical planning for combat operations in the urbanized landscape. The terms "surgical operations" and "precision operations" are used only to describe the nature of operations. These terms reflect the conditions of operations but do not change doctrine.

- a. Population center. A settlement is a concentration of buildings, systems and populations that form the economic and cultural center for the surrounding area. There are four categories of settlements - large cities, towns, and small towns, villages, and strip areas.
- b. Surgical operations. These operations are usually conducted by special operations forces. They include raids, evacuations and other special operations (e.g. hostage rescue).
- c. Precision Operations. Conventional forces conduct these operations to defeat the enemy mixed with civilians. These operations are conducted carefully to limit civilian casualties and collateral damage. Precision operations require strict accountability for the actions of the team and each soldier to fulfill strict

rules of engagement. They also require special tactics, special techniques, and procedures to accurately utilize combat power (as in Operation Just Cause). (See Appendix G for more details.).

Cities are financial, political, transport, communication and cultural centers with a concentration of industry. Therefore, they were often important battlefields.

- a. Operations in population centers are conducted to exploit the strategic and tactical advantages of the city and to prevent the enemy from exploiting those advantages. Often, whoever controls the city has a psychological advantage that can be significant enough to influence the outcome of major conflicts.
- b. Even in insurgencies, the battle is fought in cities. In developing countries, managing only a few cities often means managing national resources. The urban riots of the 1960s, guerrilla and terrorist operations in Santo Domingo, Caracas, Belfast, Managua, and Beirut show that many such situations can end in fighting in population centers.
- c. Human settlements also affect warfare by altering the landscape. In the last 40 years, cities have grown even larger, losing their clear boundaries and extending into the countryside. New road systems have opened access to remote areas and made them passable. Highways, canals and were built to connect the centers. Along these connections, industrialized areas grew, creating "strip regions." Rural areas, although retaining their agricultural character, are connected to the villages by a network of secondary roads.
- d. These changes have occurred in most parts of the world, but they are most noticeable in Western Europe. European cities tend to interconnect and form one vast population center. Entire regions take the form of continuous population centers, such as the main complexes of Ruhr and Rhein. This type of region blocks the approach of armored forces and reduces the maneuver options available to an attacker. It is estimated that a typical brigade sector in the European Theater of Operations will include 25 small brigades.

townships, most of which will be routes. of which to be located on the main approach

e. Extensive urbanization provides an environment that defending forces can exploit. By using mobile forces in a contiguous landscape, antitank forces located in a populated area, and dominating approaches, very strong defenses can be established. f. Forces operating in such areas may have their elements in open terrain, villages, townships, small towns, and large cities. Each of these areas requires different tactics, operational organization, fire support, and logistics.

The Commonwealth of Independent States and other countries that utilize Soviet doctrine have traditionally devoted much time to training their armies in urban combat. Military leaders in these countries realize that such combat is inevitable in future conflicts. But the enemy's methods of fighting in populated areas are not limited to the old Soviet doctrine. In many Third World countries, combat in populated areas is possible in the form of insurgent, guerrilla, and terrorist operations. (Information regarding operations in this environment is available in the list of references).

Characteristics and categories of settlements

One of the first requirements for operations in populated areas is to

- An understanding of the general characteristics and categories of such fields. Settlements consist mainly of man-made features - buildings. Buildings provide cover and concealment, limit sectors of observation and fire, and block the movement of troops, especially mechanized troops. Thick-walled buildings provide ready-made, fortified positions. Thin-walled buildings that have adequate sectors of observation and fire can also be important for defense. Another important aspect is that populated areas complicate, confuse, and degrade command and control.

a. Streets are usually approaches. However, the movement of forces along streets is often blocked by buildings and, therefore, groups have little room to maneuver off the road. Thus, obstacles in the streets of populated areas are usually more effective than roadblocks in open terrain because they are more difficult to bypass.

b. Underground systems present in some communities are easily blocked but may be important to the outcome of operations. These include subways, collectors, basements, and service systems (Figure 1-2).

c.

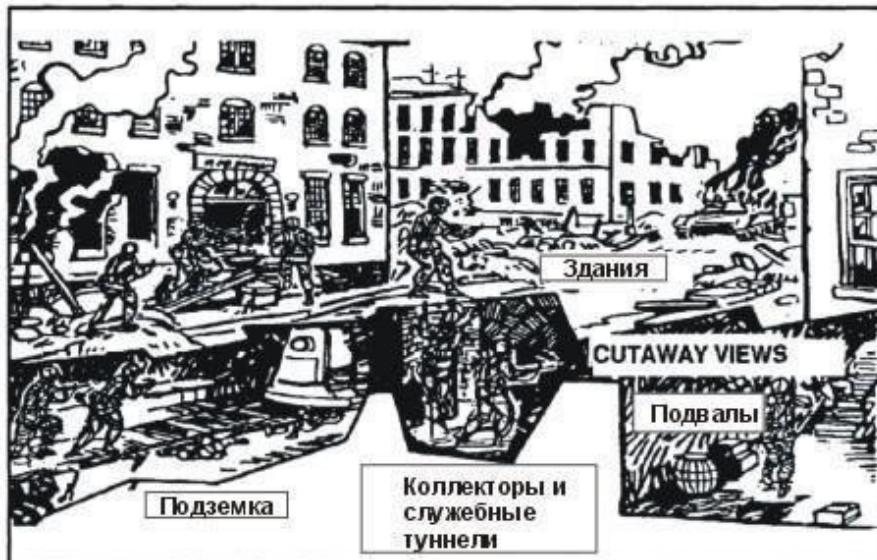


Figure 1-2. Подземные системы

Settlements are classified into four categories: Villages (population 3,000 or less).

ROW areas (urban areas built along roads connecting the townships or cities). Villages or small towns (population up to 100,000 and part of a main urban complex).

Large cities with suburbs (population of 100,000 or more, hundreds of square kilometers). Each of these areas affects operations differently. Villages and strip areas are usually the responsibility of companies and battalions. Villages and small towns have brigades or divisions. Large cities and major urban complexes are in the corps area of responsibility and above.

Several of the considerations described below apply to fighting in the built-up area.

Fighting in populated areas

In populated areas, it is common for things to happen when:

The city is located between two natural obstacles and there is no detour.

Capturing the city contributes to the main objective.

The city is on the main route of advance and cannot be surrounded or bypassed. Political or humanitarian considerations require the capture of the city.

Observation range and sectors of fire in the city are reduced due to buildings, dust and smoke. Targets usually appear momentarily at ranges of about 100 meters or less. As a result, combat in a built-up area consists primarily of close, intense fire contact. Infantry forces will use primarily light and medium anti-tank systems, automatic rifles, machine guns, and hand grenades. Anti-tank guided missile capabilities are reduced due to short ranges and numerous obstacles that impede missile flight.

Groups fighting in a populated area will often be isolated and therefore the fighting will be a series of small unit engagements. Soldiers and small unit commanders must be proactive, trained, and brave to accomplish their tasks in isolation from their main units. In this type of combat, skilled and well-trained defenders have tactical advantages over attackers. The defenders hold strong positions and the attackers must expose themselves to their fire in order to advance. Very reduced line of sight, obstacles, and closed terrain require large numbers of troops. Group densities for attack and defense in populated areas may be three or five times greater than for attack or defense in open terrain. Every soldier must be trained and prepared psychologically for this type of operation.

Forces fighting in populated areas expend large amounts of ammunition because of the need for reconnaissance fire, which is essential due to short ranges and limited visibility. LAW or AT-4 RPGs, rifle and machine gun ammunition, 40-millimeter grenades, hand grenades, and explosives are heavily used in this type of combat. Groups engaged in combat in populated areas should also have specialized equipment such as hooks, ropes, sledgehammers, collapsible ladders, rope ladders, construction material, crowbars, and sandbags. Whenever possible, this equipment should be stored close to the front line or delivered on call so that it is easily accessible to the troops.

Communication

Urban operations require centralized planning and decentralized execution. Communication is therefore essential. Commanders must trust the initiative and training of their subordinates who have received good training. The level of training of the team is one of the deciding factors in the success of an operation in a populated area.

- a. Wired communications are the primary means of controlling the defense of a city and providing security. However, wired communications can be interrupted if the enemy gains access to them.
- b. Radio communications in populated areas are usually impaired by buildings and a high concentration of power lines. Many buildings are built in such a way that radio waves cannot pass through them. A new family of radios can reduce this problem, but all groups within a built-up area cannot have these radios. Therefore, radio is an additional means of communication.
- c. Visible signals can also be used, but they are often ineffective due to buildings, walls, and

etc. Signals should be planned, widely distributed and understood by all staff and assigned forces. The use of audible signals is ineffective because of increased noise. d. Messengers and other means of communication may be used.

Stress

The psychological problem of combat in a populated area is stress. Continuous close combat, intense fire, high casualties, instantaneous appearance of targets and fire from an invisible enemy lead psychological stress and physical fatigue of soldiers. This stress can be countered by high moral and psychological training of soldiers and officers. Stress can be reduced by periodically replacing groups that are engaged in heavy combat.

Limitations

The Law of War prohibits unreasonable damage to civilians and their property. This requirement may limit the use of

commanders of certain weapons systems and tactics. While this is a disadvantage to the troops, such a restriction may be necessary to preserve national cultural institutions and to maintain the loyalty of the civilian population. Groups must be highly disciplined to abide by the laws of ground warfare and the rules of engagement. Commanders must issue strict orders against looting and quickly stop violations.

Preventing casualties from friendly fire

The goal of any tactical operation is mission accomplishment. Commanders must consider measures to avoid friendly fire losses their battle planning because of the decentralized nature of operations in built-up areas. However, they must weigh the risk of loss from friendly fire against the risk of loss from enemy fire when selecting a course of action. Ways to avoid friendly fire losses are in doctrine, tactics, techniques, procedures, and training.

a. Doctrine. Doctrine provides the basic foundation for accomplishing the mission. Commanders must have a full understanding of U.S., joint force, and host nation doctrine.

b. Tactics, techniques, and procedures provide practical guidance for the actions of individual Soldiers and units. Tactics, techniques and procedures are presented in manuals and in the SOP.

(1) Tactics. Tactics consider the use of groups in combat, their interaction, positioning, and maneuver relative to each other and to the enemy to exploit their full potential. (2) Methods. Methods are the general or detailed modes of action used by troops or commanders to accomplish assigned tasks and functions. Special methods refer to the manner in which weapons and personnel are employed.

(3) Procedures. Procedures describe standard, detailed ways of doing things to accomplish a task.

(4) Planning. A simple, flexible maneuver plan that is extended down to the lowest level of command ensures that losses from friendly fire are avoided. Plans should maximize the use of SOP and battle formation at the squad level. They should include adequate control measures, fire support planning

and coordination to assure the safety of friendly forces and to allow for changes after the operation has begun. (5) Execution. Execution of the plan must be monitored, especially with respect to the location of friendly forces and their position relative to friendly fire. Subordinate groups must realize the importance of accurately reporting their positions.

c. Training. The most important factor in preventing friendly fire casualties is individual and unit training to deal with a variety of situations during combat in a built-up area.

(1) Understanding Situation. Well-trained soldiers perform standard tasks instinctively and automatically. This allows them to focus on developments on the battlefield. They can maintain control over the location of enemy and friendly forces.

(2) Rehearsal. Rehearsal is the practicing of actions for a specific task. Commanders at all levels must allow time for this important task.

(3) Standardization of training. Soldiers who are trained to Army standards act in a predictable manner. This predictability will assist any soldier or officer observing their maneuver in determining whether they are friendly or enemy forces.

Chapter 4. ANALYSIS CITIES

Preparation of battle area data is essential for all operations conducted in populated areas. Complete data is an important foundation for every combat decision. To achieve success in combat in a built-up area, commanders must know the nature of populated . They must analyze their effects on the enemy and on friendly forces. The material presented in this chapter focuses on the problems of urban analysis and what commanders and staffs must know before conducting battle area data preparation.

Each type of urban area has distinctive characteristics. Most urban areas resemble the generalized model shown in Figure 2-1.

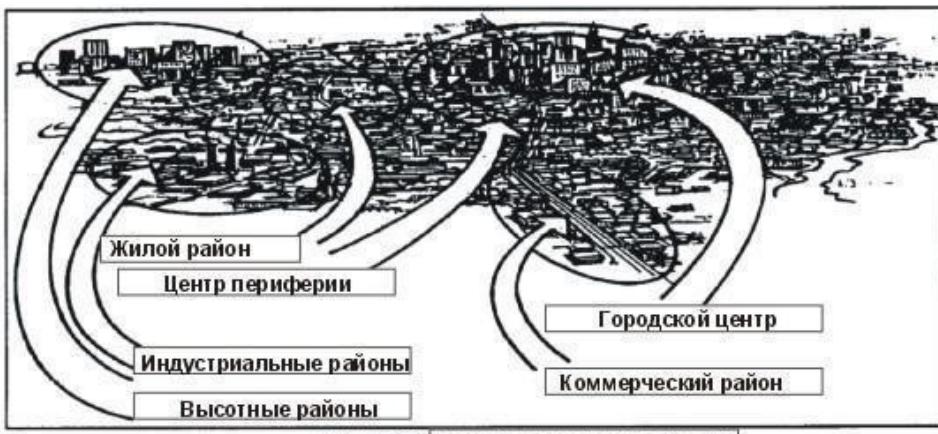


Figure 2-1. Типичная городская область

The world's cities are characterized by building and population density, street types, building types, modernization and the presence of service systems. Differences in built-up areas can be in size, level of development and style.

- a. Because of colonization, most major cities around the world have European characteristics. They have combined street types, different economic and ethnic divisions and areas known as slums. All types present significant obstacles to transportation. Concrete and steel high-rise buildings also prevent infantry from passing through walls and limit radio communications.
- b. Urban differences are mainly due to differences economic and cultural development. Cities in developed and developing countries differ in size and style rather than in buildings and functions. The main urban features are: high-rise residential buildings, reinforced concrete structures, industrial areas, shopping centers, individual buildings, suburbs, and apartment complexes.
- c. The spatial expansion of cities around the world over the past three decades presents challenges for military operations in an urbanized landscape. The increased use of reinforced concrete in prefabricated structures is just one example of a feature in the use of lightweight structures that affects how forces will attack or defend such an area. Another example is the increasing residential complexes, shopping centers, and industrial areas that

lie on the outskirts of townships and cities. This change in style makes it harder to attack and easier to defend such an area.

A summary of regional urban characteristics is as follows:

- a. Middle East and North Africa. All areas in this region can be reached by sea and their level of urbanization is quite high. Summers in this region are long, hot and dry and winters are temperate, making life outside of the city difficult. Despite its vast deserts, the greater urban cluster has ended. Ancient cities were enlarged to modern complexes and many new cities were created because of the oil industry (mainly in the Persian Gulf). European influence and oil revenues led to the formation of urban centers with modern neighborhoods of high-rise buildings.
- b. Latin America. Large urban centers can be reached by sea. This region has a mainly tropical climate. There is a strong Spanish influence, characterized by wide avenues that diverge from a central square with a large church and town hall. Upper and middle class neighborhoods are combined into urban centers, while lower class neighborhoods are located on the outskirts. Poorer neighborhoods are located in slums on the outer edges of the city.
- c. Far East. Apart from Mongolia, all countries in this region can be reached by sea. Urbanization is dense, especially in coastal cities, where modern commercial centers are surrounded by vast industrial areas and residential areas.
- d. South Asia. This region has a large European influence with wide streets that are constantly congested. Urban centers may consist mainly of poor neighborhoods with no (or minimal) public services and alleyways no wider than a yard.
- e. Southeast Asia. This region, too, has a strong European influence, which is particularly noticeable in the capital cities and in the main cities that are seaports. The urban centers also consist of older, high-density residential neighborhoods with

temples or religious shrines and from modern neighborhoods with boulevards, parks, and warehouses.

f. The Sahara region of Africa. Unlike other regions, this region cannot be reached sea and the terrain is impassable. If it were not for a few kingdoms, population centers would not have existed before the arrival of Europeans. As a result, the urban areas are relatively new and have no old neighborhoods, although many have slums.

The Atypical Urban Area consists of the downtown, commercial district, peripheral center, residential areas, outlying industrial areas, and outlying high-rise areas.

a. In most cities, the centers have undergone more modern development than those of the periphery. As a result, the two areas are often very different. Typical urban centers today consist of high-rise buildings that vary widely in height. Modern settlement planning considers more open space between buildings than in older urban centers or peripheral centers. Remote high-rise areas are even more open than urban centers (Figures 2-2 and 2-3).



Figure 2-2. Центр города



Figure 2-3. Отдалённая жилая область

b. Commercial districts consist of rows of warehouses, shops, and restaurants that are built on both sides of the main streets that run through the settlements. The usual width of such streets is 25 meters or more. Buildings are two to three stories high (Figure 2-4).



Figure 2-4. Коммерческий район

4).

c. The center of the periphery consists of streets 12 to 20 meters wide with a continuous front of brick or concrete buildings. The height of buildings is rather uniform - 2 or 3 floors in small villages and 5 to 10 floors in large cities (Figure 2-5).



Figure 2-5. Центр периферии

d. Residential neighborhoods and outlying industrial areas consist of low buildings 1 to 3 stories high. Buildings are spaced apart and placed haphazardly along streets with plenty of open space (Figures 2-6 and 2-7).



Figure 2-6. Жилые районы

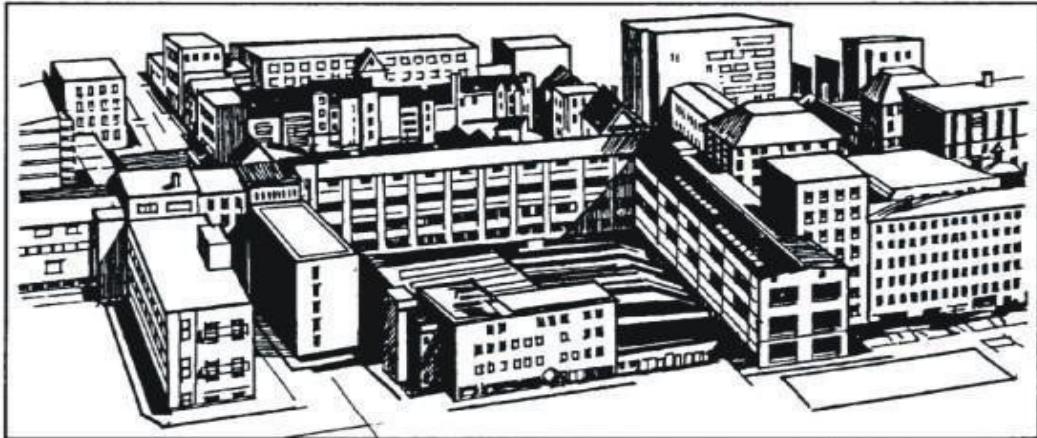


Figure 2-7. Отдалённые индустриальные районы

Terrain assessment for urban combat differs significantly from that for open terrain combat. Although the characteristics of the urban environment must be taken into account, the weather analysis for urban combat is essentially the same

the same as in the other operations. (See Appendix H for more details.)

Several special points are important in terrain assessment and should be considered when developing a tactical battle plan. Special terrain documents should be developed that include specialized overlay programs, maps, and plans enlarged vertically or portably. Terrain assessment should take into account passable, partially passable, impassable areas, obstacles, approaches, key terrain, observation and firing sectors, cover and concealment.

- a. Military maps, usually the primary tactical tool for terrain assessment, do not provide sufficient detail for terrain assessment in settlements. In towns and cities, new buildings are constantly being added and old ones destroyed. Therefore, any map of a settlement, including city maps or plans issued by a city or national government, will be inaccurate.
- b. Combat can radically change the landscape in a populated area in a short period of time. Unforeseen or deliberate destruction of buildings can alter the topography of an area and destroy landmarks, create obstacles to movement, and provide additional defensive positions for the defender.
- c. Maps and diagrams of collector systems, subway systems, water supply systems, fuel and gas supply, storage, power plants and emergency systems, media and communications (radio, telephone) are of key importance during urban operations. Collector and subway systems provide covert penetration and avenues of approach. Service life support systems are key targets for insurgents, guerrillas, and terrorists, the destruction of which can hinder defense capabilities.
- d. Some public buildings should be identified during the terrain assessment phase. Hospitals and clinics are important because the laws of war prohibit their attack unless they are used for military purposes. If centralized supply is disrupted during urban operations, hospitals will be an important source of medical supply for troops. Locations of facilities

Civil defense, bomb shelters and food supply sites are essential in operations dealing civil affairs. So too are insurgencies, counter-guerrilla operations or counter-terrorism actions.

e. Stadiums, parks, athletic fields, and school playgrounds are of high importance during both conventional and unconventional operations in the built-up area. They provide civilian assembly areas, debriefing centers, filtration areas, and POW collection areas. These open areas also provide helicopter landing pads. They can be materiel and refueling areas because they are often located in the center of a city.

f. Factories and commercial organizations such as brickyards, steel mills, and railroads serve as primary sources of barrier materials when ruins cannot be created or are insufficient. They can also provide engineers with materials to reinforce existing barriers made from building ruins or materials for anti-tank hedges and for blocking roads with frame type barriers.

g. Roads, rivers, canals, and bridges provide fast travel routes. They also provide locations for engineering support teams to analyze targets for demolition and estimate the amount of explosives required.

h. Public baths, swimming pools and water systems are useful in ensuring the personal hygiene of troops. They also provide an additional water source in the event of a water outage.

i. Close liaison and working relationships should be established with local government and troop officials. In addition to information regarding elements of special interest, they can provide information regarding the population, size and density of the locality; fire fighting capability; location of hazardous materials; police and security; civil evacuation plans and key public buildings. They can also provide interpreters if necessary.

Here are some atmospheric influences specific to urban environments.

- a. Rain or melting snow often floods subway systems and basements. This happens especially when automatic pumping systems are without power. Rain also makes storm drains and other collector systems dangerous or impassable. Chemicals are washed into underground systems and settle there. As a result, these systems contain concentrations of substances much higher than surface areas. These effects will become more pronounced when substances are absorbed by brick or concrete collector walls.
- b. Many major cities are located along canals or rivers, which often create fog in low-lying areas. Industrial and transportation areas are most prone to fog because of their proximity to waterways.
- c. Layers of smog are common over cities, especially when the city is located in a lowland or river valley. Smog consists of dust, chemical agents, and other pollutants, reducing visibility and often creating a greenhouse effect that increases ground and air temperatures.
- d. The heating of buildings during winter, reflections and absorption of summer heat make populated areas warmer than surrounding open areas during both summer and winter. This difference can be very large, 10 to 20 degrees, and can add additional requirements to the already high materiel requirements of urban combat.
- e. Cold winds are not a problem in populated areas. However, street configurations, especially in closed neighborhoods and high-rise areas, can cause accelerated wind movement along the street in a direction other than the primary direction. This increases wind effects on streets that are parallel to the wind direction, while cross streets remain relatively well protected.
- f. Lighting data is of particular importance during urban operations. Night and periods of reduced visibility endorse the use of surprise, infiltration, detailed

reconnaissance, attacking through open terrain, capturing strongholds and neutralizing defended barriers. However, the difficulties of night navigation in a restrictive landscape, without landmarks and close to the enemy, require the use of a relatively simple maneuver with easily recognizable objects.

Threat assessment for urban warfare uses a three-step process: developing a threat database, identifying enemy capabilities, and developing doctrine following the template: open terrain threat assessment. Because of the unique aspects of urban combat, certain operational factors and capabilities of the future threat must be recognized. These factors must be considered before preparing the required templates during the integration of the threat into the process.

The basic tenets of air-land battle doctrine are the rapid deployment and employment of U.S. forces across the operational spectrum to achieve national and strategic objectives. This concept and recent developments in international security suggest an increased chance of regional conflict. These conflicts will be fought by conventional forces from one or more Third World nations and will involve regional wars or, at the lower end of the operational spectrum, fighting against insurgent forces. Because of the political and socioeconomic situation in Third World countries, urban combat will be very likely in the future.

- a. Most regular armies emphasize the primary importance of combined arms combat in populated areas. Conventional forces in poorer countries cannot maneuver and sustain forces well enough outside rear areas. The critical environment in some regions also limits operations outside urban centers.
- b. Urban characteristics include social, cultural, and economic factors. These elements are the primary reasons why urbanized landscape warfare doctrines and tactics differ from country to country. Together with the restrictive nature of urban combat, differences in tactics may be superficial. The advances in high technology and the development of precision weapons available to developed nations are influencing changes in and

modifying their urbanized landscape warfare doctrine and tactics more than any other factor. The study showed the need to examine many factors when planning and executing combat operations in the urbanized landscape. Some decisive factors are:

- (1) Urban combat takes place in a variety of terrain and takes a long time. A well-designed defense, even in isolation or with minimal air, armor, or artillery support, can delay an attacker for a very long time.
- (2) The ability to control military operations in highly decentralized urban combat remains a priority for both the attacker and the defender. Training and moral motivation remain as important as equipment and force balance factors.
- (3) The size of the attacking force required depends more on the quality of intelligence, the degree of surprise, and the degree of superior firepower of the attacker than on the degree of sophistication of the city defense system established by the defender.
- (4) The degree of resistance of the defender depends on whether his forces are truly separated from the local population, completely or partially cut off from external support, and have effective communications systems.
- (5) The statement that armored vehicles play no role in urban combat is not true. Tanks and BMPs make a strong argument for an attacker operating inside a city as long as they are protected by hasty infantry.
- (6) If the attacker has any restrictions, the defender has a good chance of winning, prolonging the fight, or increasing the cost and loss to the attacker.
- (7) The defender has three tactical parameters: echelon defense, decisive area defense, and maneuver defense. Defense in depth refers to a combination of external and internal defenses; decisive area defense refers to the defense of strongholds in critical positions that control the main approaches; maneuver defense is based on a

counterattacks. All these types of defense are not mutually exclusive.

(8) Infiltration and movement within the city in small groups is easily accomplished during the night.

(9) Preventing the enemy from reoccupying already cleared buildings will be a significant problem for both the attacker and the defender.

(10) In this type of combat, mortars can be used more intensively than other artillery because of their mobility, rapid deployment and mounted fire.

(11) The use of snipers in urban combat can be extremely effective for both the attacker and the defender. Snipers are usually positioned two to three stories below the roof in tall buildings. (12) In an urban environment, ammunition consumption is five to ten times greater than in other environments.

Chapter 5. URBAN WARFARE VS. AGAINST INSURGENTS, AGAINST GUERRILLAS AND AGAINST TERRORISTS.

During urban combat operations against insurgents, against guerrillas and against terrorists, the threat assessment is similar to that for low-intensity conflict. Five conditions must be met in these operations - political predominance, unit of effort, adaptability, legitimacy and persistence.

a. Data should be prepared on the state of the city's population, showing areas of potentially loyal or hostile . Data should also be prepared showing buildings that may not contain insurgents or terrorists, insurgent or guerrilla headquarters, known combat areas, points of contact, and sources of weapons supply. This data should include buildings that are or may be storage sites for explosives, ammunition, or weapons.

b. Underground routes are of primary importance when considering insurgent and terrorist approaches. Collectors, subways, tunnels, cisterns, and basements provide mobility, shelters, cover, and storage areas for insurgents and terrorists. Upland railroads,

Bridge spans, rooftops, fire escape ladders, and balconies provide mobility and cover and can serve as relatively good fighting or sniper positions.

c. Although doctrinal templates have not been developed for urban combat operations against insurgents and terrorists, analysis reveals what an insurgent or terrorist group uses and what its primary objectives are. When the group's method of operation is determined, maps of the insurgent environment can be developed. These maps identify likely targets for sabotage, kidnapping, or assassination, points of possible ambushes, and targets for subversion. The development of these maps should take into account power sources and transmission facilities, gas and pipelines, water and sewage, factories, telephone networks and facilities, and radio and television stations as primary insurgent and terrorist targets.

d. If the enemy is mixed with the civilian population for any reason, a greater degree of control is required for military operations. Enemy forces operating without uniforms are very difficult to detect, while they use some of the usual characteristics of guerrillas, insurgents and terrorists.

(1) As in any operation of this type, intelligence, not force, dominates. Known members of the insurgent forces, their associates, and the underground must be identified and arrested or removed from the masses. The use of minimal force critical. As a last argument, flaps and search operations in suspected or known hostile areas can be used. This is the least favored method because it will inflict moderate to severe casualties on both friendly forces and local civilians.

(2) Support of the enemy by the local population may be forced or voluntary. In either case, measures must be taken to separate the enemy from the local population. The population may be coerced into support by a combination of terrorism (coercion or intimidation) and harassment. The commander must be sensitive and considerate to the needs of the local population before the population begins to assist friendly forces.

(3) Logistical support will be of lesser necessity. The adversary will need to rely on the local population to support the distribution of materiel so that identifying and destroying the basis of his materiel will be more difficult.

Then, in order to cut off enemy supply, friendly forces would have to stop all movement within a populated area. This, of course, is not acceptable. Therefore, the priority of intelligence tasks should be to identify and destroy the enemy's base of material support.

(4) Soldiers must be aware of and consider the political and psychological impact of their actions if they use force. The local population may be neutral or partially supportive of friendly troops, but excessive use of force will cause civilians to support the enemy. Special attention should be paid to the media (newspapers, television, magazines, etc.). Because of the large number of journalists, amateurs and/or professional photographers in populated areas, any negative images of friendly forces will quickly appear in publications and reports. This negative publicity could have a serious adverse effect on both civilian opinion and the political interests of the United States. Conversely, positive publicity can bring success to friendly operations and morale. It can also alienate the local population from the enemy. Therefore, all members of the media must be accompanied.

(5) Infantry forces have historically been used as part of a force to separate the enemy from the local civilian population. Some teams may be assigned specific tasks to provide civilian services such as public order patrols, cleanup and removal of debris, or restoration and maintenance of electrical, telephone and water networks.

Some Third World countries will use their wealth to modernize their armed forces through new technologies. Therefore, the armed forces of these countries may be better armed than or equal to those of the United States. Projected future capabilities of likely adversary forces:

New munitions like fuel-air explosives, advanced blast, intense radiation, and other improved ballistic technologies.

Systems with interchangeable warheads, some of which are designed specifically for combat in an urbanized landscape.

Guided munitions.

Robotics.

Day or night detection systems. Guidance systems.

Improved engineering ability to eliminate or set up barriers.

Anti-tank man-portable "soft-shot" systems and flamethrowers.

Non-lethal, disabling chemical or biological agents used by conventional forces.

Deadly chemical or biological agents, used by insurgent forces. Improved personal protection (body armor).

Enhanced communication.

Chapter 6. OFFENSIVE OPERATIONS

A populated area gives the defender the advantage of cover and concealment. The attacker must attack well-defended positions on the outside of the population center. While the decision to attack a major built-up area is normally made at the level above battalion, commanders at all levels must be prepared to fight in such areas.

The commander must decide whether attacking the population center is necessary to accomplish his objectives. He must consider the issues discussed in this section.

The commander should consider the following reasons for attacking built-up areas.

- a. Key routes pass through a city and control of the city provides a tactical advantage to the commander. Control of city facilities and systems, such as bridges, railroads, and road networks, can significantly future operations. The need for supply bases, especially ports or airfields, can play a major role in an attack.
- b. The political importance of some

The capture of a city can be a decisive psychological blow and \or cause a morale boost for the people within the city. Capturing a city can be a decisive psychological blow and \or cause a morale boost for the people within the city.

- c. Although the terrain surrounding a population center may allow for easy , the enemy within the urban area may be able to cover the bypass routes with fire. Therefore, the situation may require suppression of enemy forces. Also, the urban area itself may be located on dominant terrain that prevents combat support and logistics elements from bypassing it.
- d. The results of the commander's and his staff's assessment may preclude a bypass. The combat mission itself may be to attack built-up areas.

The troop objective allows for the bypass of the urban area. The commander should consider the following reasons for not attacking a population center.

- a. The commander may bypass if he determines that there is no significant threat in the locality that could flank his forces during the bypass. Also, the commander's intent to bypass may be dictated by the rapidity required to accomplish the task. Since combat in an urban area takes an enormous amount of time, the commander may bypass the urban area to save time.
- b. During the assessment process, the commander and staff may determine that they do not have sufficient forces to capture and clear the population center. In another situation, there may be more than sufficient forces to accomplish these tasks, but logistically the attack cannot be supported. If the tactical and political situation permits, the commander should avoid attacking population centers.
- c. A population center is declared an "open city" to prevent civilian casualties or to preserve cultural or historical sites. An open city, according to the law of ground warfare, is a city that cannot be used for defense or attacked. The defender must immediately evacuate the open city and may not distribute weapons to the inhabitants of the city. The attacker accepts the

administration of the city and should treat its citizens as civilians in an occupied country.

Offensive operations in urban areas are based on offensive doctrine modified to fit the area. Urban combat also imposes a number of problems such as the need for sufficient infantry, maneuver, and equipment. As in all offensive operations, the commander must use his ability to reconnoiter enemy positions and maneuver. Because of the nature of combat in populated areas, larger numbers of infantry are usually required than in other combat environments. This is required primarily because of the need to clear buildings in the area or facility, to control refugees, and because of possible increased losses to friendly forces.

- a. Because of the need to clear buildings and secure attacking forces, the number of troops required for the offensive is much greater. Some forces must be left behind in buildings once they have been cleared to prevent the enemy from taking up positions or counterattacking.
- b. Commanders must also consider soldier fatigue. Clearing rooms is very labor intensive and will tire quickly. Commanders must plan to replace their forces before they are exhausted.
- c. Additional forces may be necessary to control civilians in the built-up area. These forces should protect , provide them with medical care, and prevent them from being in the area used for troop movements.
- d. Urban combat usually results in more casualties than conventional combat. Compared to conventional field combat, in urban combat the enemy is fleetingly visible and the combat itself is fought at very short ranges. Casualties from friendly fire can be a serious problem and must be considered in detail by the commander for prevention. Evacuation of wounded and killed from the city is also a problem.

Combat operations in a populated area have a slower tempo and an increased number of methodical, synchronized operations. Unlike open terrain, the commander cannot maneuver forces quickly because of the closed, densely built environment. Clearing buildings and searching for antitank ambushes reduce the rapidity of operations, thus

thus increasing the duration of contact with the enemy. Because of the densely built environment and the limited ability to use all available weapon systems, synchronizing combat power will be one of the commander's biggest challenges.

Commanders conducting a population center attack must be aware of some important limitations on the use of available assets.

- a. In general, the use of canopy fire is much more limited in a built-up area than in open terrain. The effects of canopy fire on destruction and civilian casualties must be considered. Mounted fire must be applied en masse to achieve the desired effects. Destruction caused by massive preliminary mounted fire will adversely affect the maneuver of troops in an attack.
- b. Communications equipment cannot function properly because of buildings and the environment. More control measures and understanding the commander's intent at all levels will also become more important to accomplish the mission.
- c. The commander and his staff should consider the effects of illuminating the city with flares, fires, and background lighting that will affect night vision devices.

Offensive operations in a populated area are planned and executed based on factors and established doctrine. At the battalion level, the offensive is conducted as a quick attack or as a planned attack. Both quick and planned attacks are characterized by precise planning, reconnaissance, and coordination as time and situation permit.

Battalions and companies conduct a quick attack on the move to establish contact with the enemy, in counter combat, or in casual contact with the enemy during movement; after a successful defense or part of a defense; or in a situation where the group has an opportunity to attack vulnerable enemy forces. When contact with the enemy is established, the commander immediately deploys his forces; suppresses the enemy; attacks the gap between enemy units, his flank, or his weak point; and reports to his superior commander. Preparation for a quick attack is similar to that of a planned attack, but time and resources are limited by what is available. A quick attack in a populated area differs from a quick attack in open terrain in that the enclosed nature of the landscape makes command, control, and communications difficult.

Also, concentrated fire to suppress the enemy can be difficult.

- a. In populated areas, incomplete intelligence and the availability of cover may force maneuver teams to move through friendly forces in contact with the enemy rather than around them. Control and coordination will be particularly important issues to reduce the concentration of forces on the edge of a populated area.
- b. Forces conducting a rapid attack may be given preliminary tasks, preparation tasks, or private orders to respond to contingencies as soon as their objective is captured.

A planned attack is a fully synchronized operation that uses all available assets against enemy defenses. It is necessary when enemy positions are well prepared, when the population center is large or crowded, or when the surprise factor is lost. A planned attack is characterized by precise planning based on detailed information, complete reconnaissance, preparation, and rehearsal. Given the nature of the urban landscape, a planned attack on a populated area is similar to the methods used in assaulting a stronghold. Avoid attacking the enemy's main force and concentrate combat power on the weakest point of his defenses. A planned attack on a population center is usually conducted in the following phases:

- a. Site Reconnaissance.
- b. Motion to object.
- c. Object Isolation. Isolating the objective means capturing the landscape that dominates the area so that the enemy cannot supply or reinforce the defenders. This step can be taken at the same time that a supporting bridgehead is captured. If isolating the objective is the first step, the next steps should be conducted as quickly as possible so that the defender does not have time to respond (Figure 3-1).

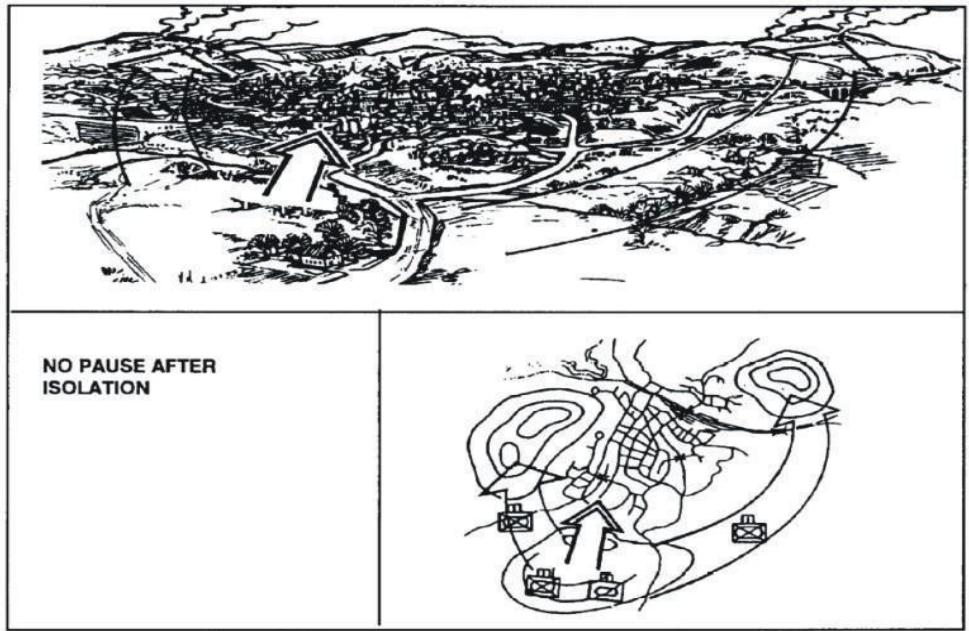


Figure 3-1. Изоляция области батальонной оперативной группой

- d. Seizing a strongpoint bridgehead. Seizing a strong bridgehead involves seizing an intermediate objective that provides cover from enemy fire and a place for infantry to deploy to enter a population center. The supporting bridgehead usually includes one or two city blocks and is the company's intermediate objective. The company attack to seize the supporting bridgehead must be supported by suppressive fire and smoke (Figure 3- 2).

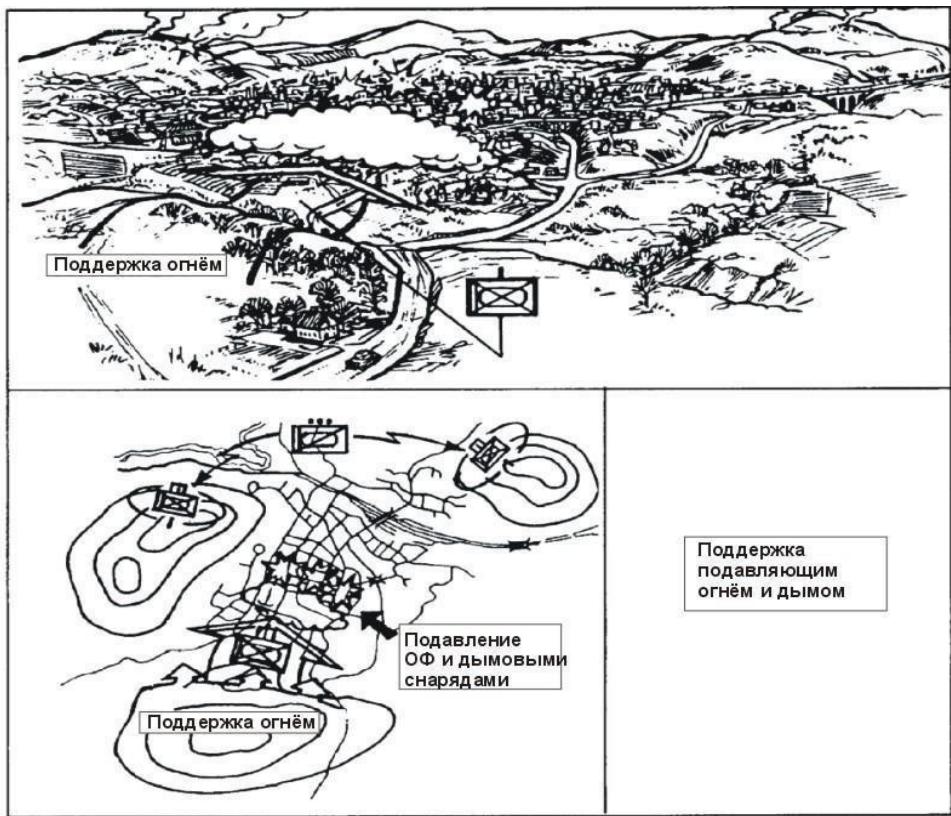


Figure 3-2. Опорный плацдарм батальона

e. Settlement clearance. Factors must be considered before determining to what extent a built-up area must be cleared. A commander may clear only those units necessary to successfully accomplish his mission if:

The facility needs to be captured quickly.

Enemy resistance is light or scattered.

The buildings in the area have a lightweight design with large open areas between them. In this case, it can clear only those buildings that are located along the approaches to the site or are necessary for security purposes (Figure 3-3).



Figure 3-3. Зачистка зданий вдоль маршрута атаки

The team may be tasked with systematically clearing an entire area of the enemy. Through detailed analysis, commander can expect to encounter strong, organized resistance or to operate in areas with solidly constructed buildings close together. Therefore, one or two companies may attack the weakest enemy sector on a narrow front. They move through the area slowly, systematically mopping up building after building and room after room. The other company supports the sweep teams and takes over their tasks if necessary (Figure 3-4).

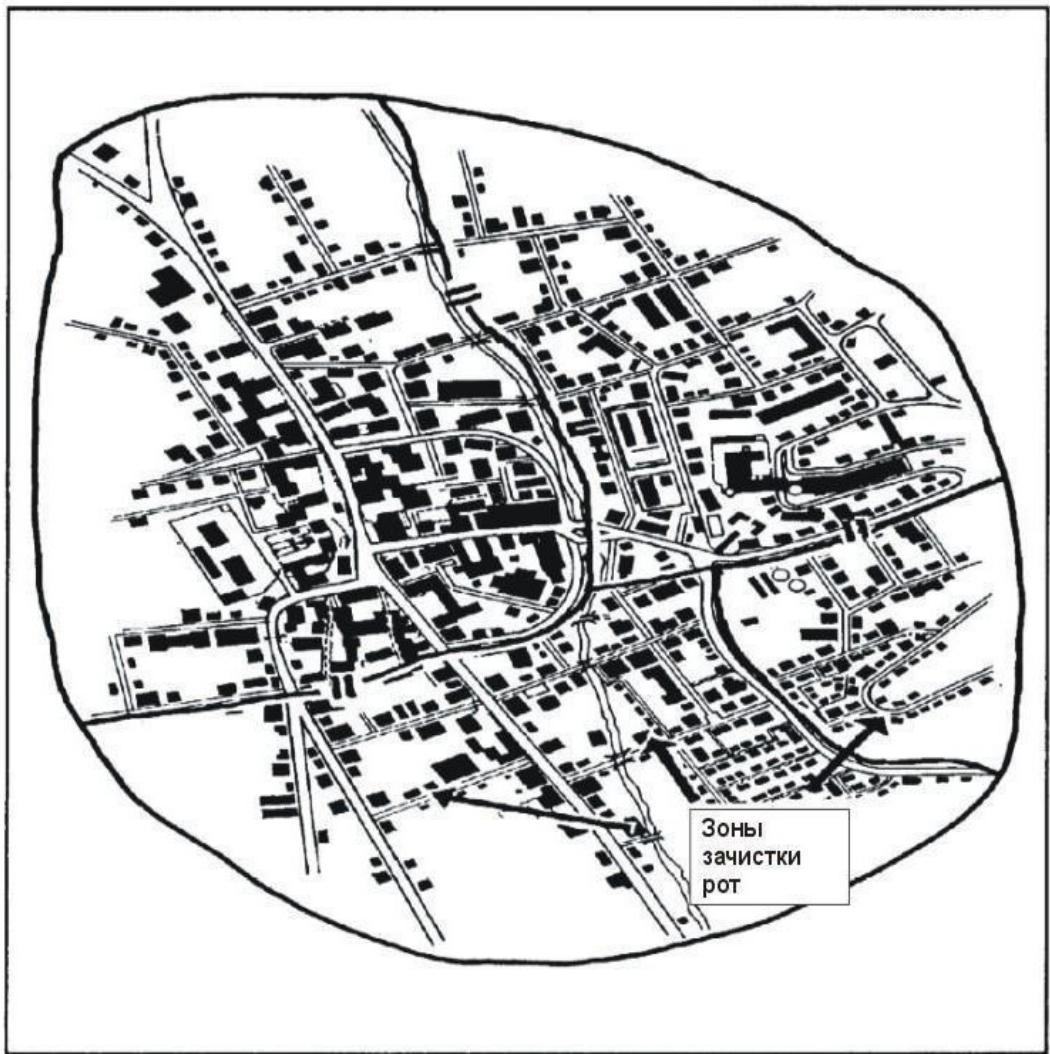


Figure 3-4. Систематическая зачистка назначенных секторов

The planning, preparation, and execution of offensive operations in an urban area are the same as any other offensive operation. The plan of attack for a well-defended population center must be factor-based. Commanders must focus on synchronizing maneuver teams and the fire support plan to accomplish assigned tasks. Combat support and logistics will play a critical role in the offensive. When conducting the assessment, commanders and staffs must consider the full intent of the operation in relation to the requirement to clear the urban area. The commander must determine whether a sweep of every building, block by block, or only a sweep along the axis of advance is required when capturing a key objective.

The enemy is analyzed in detail using the process. The particular issue the commander must focus on to complete the process is the type of enemy forces he is attacking. He must determine whether the enemy forces are regular or irregular. This will

affect the operational organization of the battalion or company and how combat power will be synchronized.

a. Regular forces. Most Third World countries have adopted the urban combat methods of either the United States Army or the Commonwealth of Independent States (CIS) Army. Therefore, the motorized or mechanized rifle battalion, a highly effective unit for urban combat because of its inherent mobility, armor protection, and ability to quickly adapt buildings and other structures for defense, is considered a future threat. (1) The enemy defenses are organized in two echelons to provide greater depth and reserves. Company strongpoints are prepared for a circular defense and form the basis for the battalion defense position. The reserve is located in a separate stronghold. Ambushes are placed in the gaps between the strongholds. False strongpoints are created to deceive the attacker. Positions are established to defend entrances and exits of underground structures and routes. Guard positions are placed in front of the first echelon defense position.

(2) Within a populated area, a motorized/mobilized rifle company may defend several buildings with mutual fire support or a large single building. Each platoon defends one two buildings or one / two floors of one large building.

b. Irregular Forces. The analysis of the enemy is similar to **the** analysis for during urban counterinsurgency, counter-guerrilla, and counter-terrorist operations.

Offensive operations must be tailored to the urban environment, based on a detailed analysis of each urban landscape feature, taking into account settlement types and existing building types. Commanders and subordinate commanders should consider the following special planning considerations when conducting an offensive operation in an urban environment:

Military maps that provide a fairly detailed analysis of the urban landscape and show subway collector systems, subways, subway water supply, major routes and their suitability for troop use.

The natural landscape surrounding the .

Key and decisive landscape (stadiums, parks, sports fields, school playing fields, public buildings and industrial assets).

Restrictive locations that limit observation, sectors of fire, and maneuver, and limit the ability to concentrate fire at critical points.

Covered and concealed routes to the urban area.

Covered and concealed routes within a .

Limited ability to use maximum combat power due to the need to reduce the effects of destruction and damage.

Increased demand for ammunition and supplies, thus placing unusual strain on the elements of materiel support.

Problems with conducting effective reconnaissance during these operations. (Combat reconnaissance is becoming the most effective reconnaissance tool. This method involves exploring defenses in successively larger groups until enemy positions are exposed and then successfully attacked. During operations against irregular forces, reconnaissance and security are easily accomplished by both sides and can be conducted continuously.)

In an attack on a large population center, the battalion will probably participate as part of the attacking brigade. In this case, the battalion will probably have to isolate the objective or capture a supporting bridgehead. If the objective is a smaller population center, the battalion or company can accomplish the entire task independently by assigning tasks to its companies or platoons. In either case, maneuver platoons execute the entry and clearance tasks as explained in appendix F.

a. When attacking to seize a strong beachhead, the battalion normally assigns its forward company the first block as the first objective. When the objective is located along a street and across the direction of attack, only one, near side of the street is included in the objective area. The company's final objective may buildings on the far edge of the built-up area or a key piece of terrain on the far edge. Key buildings or groups of buildings may also be designated as intermediate targets. Buildings along the attack route should be identified by numbers to simplify targeting and reporting (Figure 3-5).

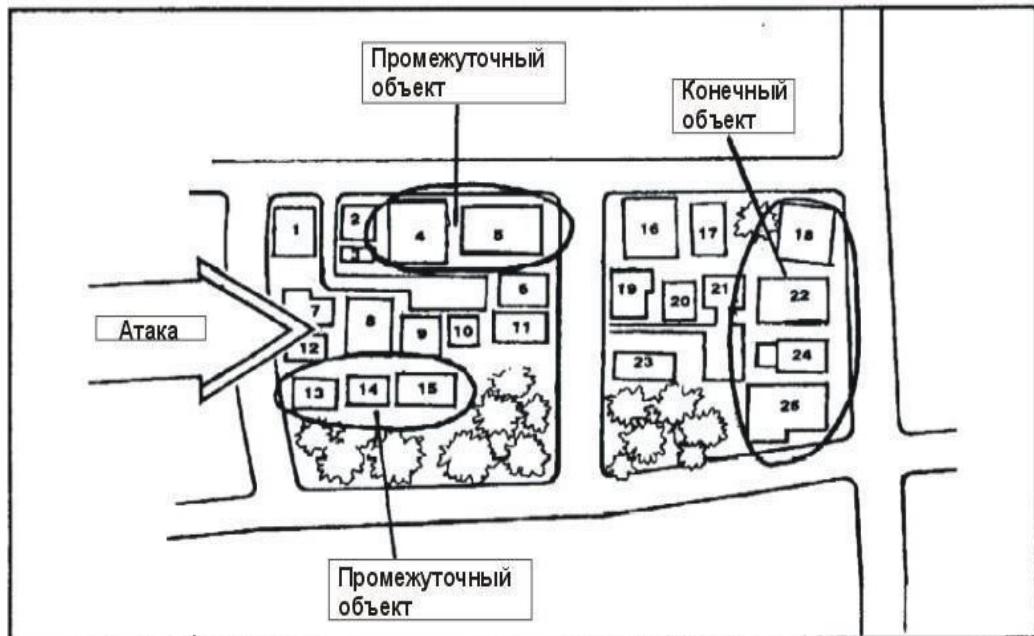


Figure 3-5. Меры контроля и пример системы нумерации

- b. When a team is clearing, bypassing buildings increases the risk of enemy attacks to the rear or flank. Thus, a sweep team must sweep each building in its area of effect sequentially. A single building can be a target for a squad or, if the building is large, for a platoon or even a company. When the commander's concept is based on rapidity or on conducting a quick attack, the battalion may not sweep its entire zone.
- c. Control lines should be used to report and control the advance of attacking groups. Major streets, rivers, and railroad lines are suitable targets for control boundaries, which should run along the sides of streets or open area. In a systematic sweep, a group may have the task of sweeping its area of operations to a control boundary. In this case, the group commander himself designates the targets when tasking his subunits.
- d. Battalion and company boundaries are usually defined within blocks so that a street falls within the zone of a particular company and both sides of the street fall within the zone of a particular group. (Figure 3-6).



Figure 3-6. Зона и границы

RW - control boundary

e. Control points and rendezvous points are planned at street corners, at buildings, railroad crossings, bridges, or any other easily identifiable objects. Control points assist with location reports and traffic control. Encounter points are used to identify locations where groups make physical contact.

f. The initial attack area may be occupied by advance teams for final preparation and coordination. The initial area is more often located behind or inside the last large building before crossing the starting line. The initial line should be along a street or railroad line. g. The group's assigned attack front in a populated area depends on the size of the buildings and expected resistance. A company will normally attack on a two-block front and a battalion on a four-block front, based on the length of city blocks, which averages 175 meters.

h. The first phase of the attack should be conducted in poor visibility. Troops should use poor visibility to cross open areas, pass over rooftops to infiltrate enemy territory, and occupy a stronghold. If attack should be conducted when is good.

visibility, groups must use smoke to conceal movement.

i. The formation used in the attack depends on the width and depth of the area to be cleared, the nature of the area, enemy resistance, and the formation adopted by the higher unit. j. The reserve must be mobile and prepared for use. Since there is plenty of cover in populated areas, the reserve may be close to forward groups. Battalion reserves normally follow one

- two blocks behind the leading company. If a company reserve is available, it follows within the same block so as to influence the attack immediately if necessary. A group performing reserve tasks may perform one or more of the following tasks:

An attack from the other direction.

Taking advantage of the enemy's weaknesses or the success of their forward units.

Clearing out bypassed enemy positions. Covering the rear or flank.

Maintaining contact with adjacent groups. Supporting or counterattacking with fire.

k. The reconnaissance platoon is normally used to scout the flanks and rear of the battalion. Its reconnaissance and security capabilities are somewhat reduced in populated areas.

A reconnaissance platoon may also assist in isolating a village or small settlement. It must be prepared to operate on foot and to pass through buildings for reconnaissance or to establish an observation post (OP). Infantry platoons and squads conduct reconnaissance patrols and reconnaissance from a CP to supplement the efforts of the reconnaissance platoon.

l. Leading companies may have engineers assigned to provide close support. Engineers are equipped with the M728 Combat Engineer Vehicle (CEV), which can quickly clear rubble and other obstacles using a blade or 165-millimeter gun. Other engineer tasks include:

Preparing and using explosives to break through walls and clear obstacles.

Detecting and detonating mines on site, or removing them to safety.

Destruction of fortifications at a range of 925 meters with a 165mm CEV gun.
Clearing barricades and debris for freedom of movement.
Destruction of roads and other measures to limit enemy mobility.

m. Security in a populated area presents a special challenge. All troops must be prepared for the enemy to emerge from the flanks, from above, or from underground systems (Figure 3-7).

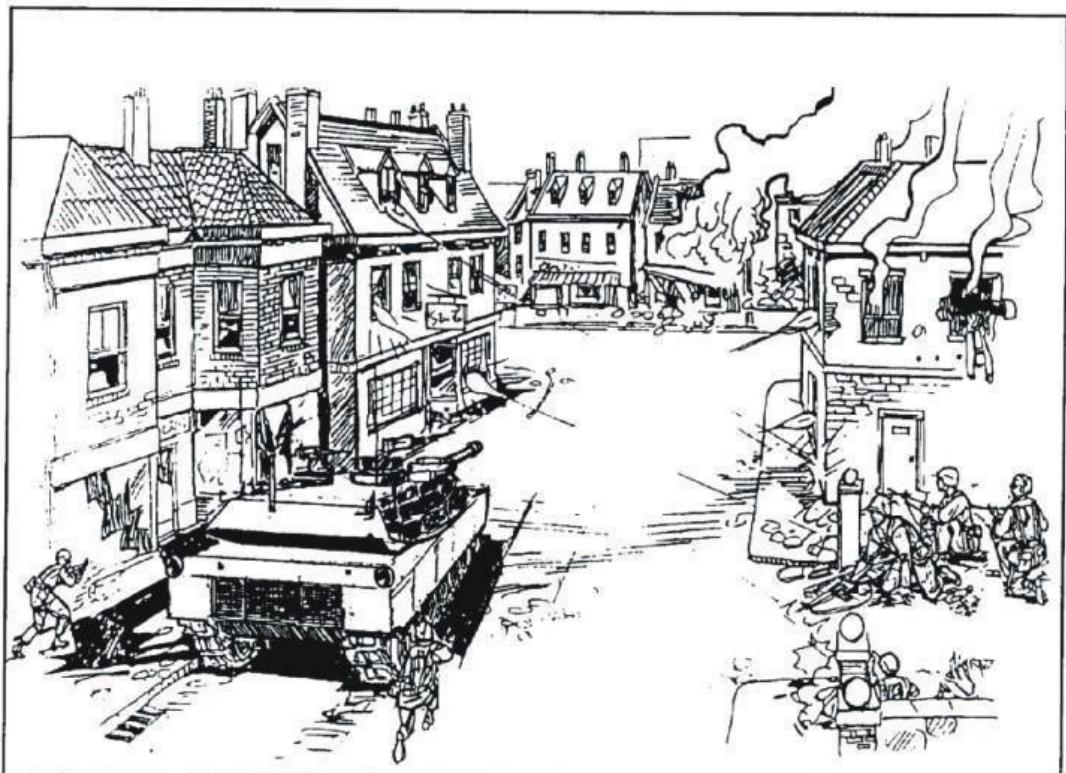


Figure 3-7. Огонь противника с фланга

n. The fire support plan may require extensive air and artillery preparation prior to attacking a population center. This support suppresses the defender's fire, restricts his movement, and possibly destroys his position. However, the use of mounted fire in populated areas with heavy structures creates rubble. This can be used effectively to create cover, but it can also restrict the movement of attacking troops. For this reason, artillery preparation should be short and strong. Attacking troops should follow directly behind the artillery fire to exploit its effect on the defenders. While the enemy is suppressed by supporting fire, maneuver groups move about the **FCL**. When the attacking force begins to assault the objective, fire ceases

or is moved to block the enemy's withdrawal or the approach of his reinforcements.

o. Prior coordination is needed to determine methods and procedures for communications, target identification, and fire transfer. Additionally, civilian populations, religious facilities, medical centers, schools, public services, and historic sites should be considered.

The fire support plan may include integration of tank, infantry weapons, artillery, and CEV.

Fire support can be categorized by mounted fire and direct fire.

(1) Mounted artillery fire is used in its normal role of supporting maneuver groups. (A) Mounted artillery fire is planned to isolate objectives, prevent reinforcement and supply, neutralize known and suspected command and control points, and suppress the defender.

(B) Mortars are the most rapidly trained mounted fire that can be used to engage targets at close ranges typical of combat in populated areas. Forward observer-adjusters move with forward groups to adjust fire. (2) Direct fire system is the most effective fire support in a built-up area. If the target is located in a building, one or two rounds of direct fire can do what entire salvos of mounted artillery cannot. Direct fire support is the foundation of success in combat in populated areas. The best direct fire support is provided by BMPs, but it can also be provided by tanks, howitzers, and CEVs. (See Chapter 8 for specific weapon effects.) Tanks, howitzers, and CEVs can create debris and damage streets, which can restrict the movement of attacking forces.

(A) Tanks may support with fire as forward units seize a supporting bridgehead. During a population center attack, tanks observe initial infantry assault before entering the area. Tanks must be supported by standard infantry weapons to suppress enemy strongholds and ATGMs while tanks move to cover positions. The commander must use tanks to take advantage of the long range of their main gun. This is usually accomplished by using tanks outside of a populated area,

when they're covering tank-prone areas. This is especially necessary during the isolation phase. (B) In house-to-house and street fighting, tanks and \ or BMPs move through the streets and are defended by infantry that are clearing the area of enemy anti-tank weapons. Tanks and BMPs, in turn, support the infantry with their main guns and machine guns and stay at a safe distance from enemy positions. Tanks are the most effective weapon against buildings and can be used to clear rubble by pile-driving (Figure 3-8). BMPs can provide support with accurate suppressive fire from a 25mm cannon.

(C) Large caliber artillery shells used by direct fire are effective in destroying targets in buildings. Self-propelled 155mm howitzers can be used for direct fire to destroy or neutralize bunkers, heavy fortifications, or enemy positions in reinforced concrete buildings (Figure 3- 9).

Self-propelled 155-mm howitzers can also be used to clear or create passageways. 105-mm and 203-mm artillery can also be used in this role. However, because of their open calculation positions, they cannot be used extensively enough in operations in built-up areas. In any case, whenever artillery is used in the direct fire role, it must be positioned close to the infantry, which provides protection from enemy attack. Careful advance coordination must be made to prevent their infantry from being hit by shrapnel from bursts, since most field artillery shells are OEF shells.

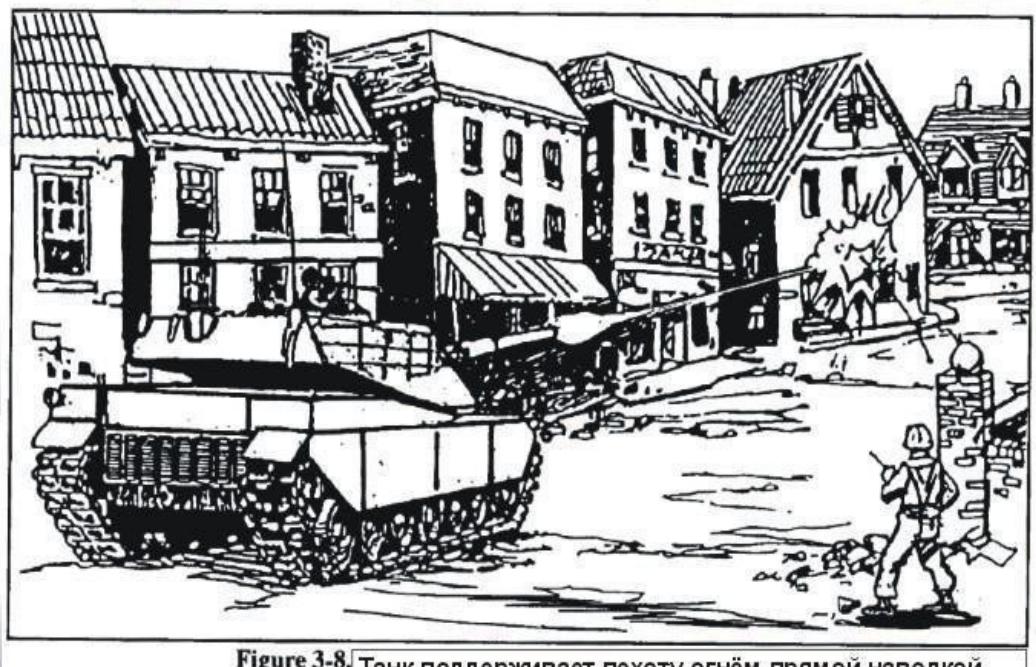


Figure 3-8. Танк поддерживает пехоту огнём прямой наводкой



Figure 3-9. Артиллерия ведёт огонь прямой наводкой

(D) Tanks, self-propelled artillery and BMPs are vulnerable in a built-up area where streets and alleys provide ready sectors of fire for the defenders. Motorized movement is very limited, following known routes - streets - and vulnerable to ambushes and close-range fire. With tanks, the main gun cannot be lowered enough to fire on cellars or be raised to

shoot at the upper floors of buildings at close range (Figure 3-10).

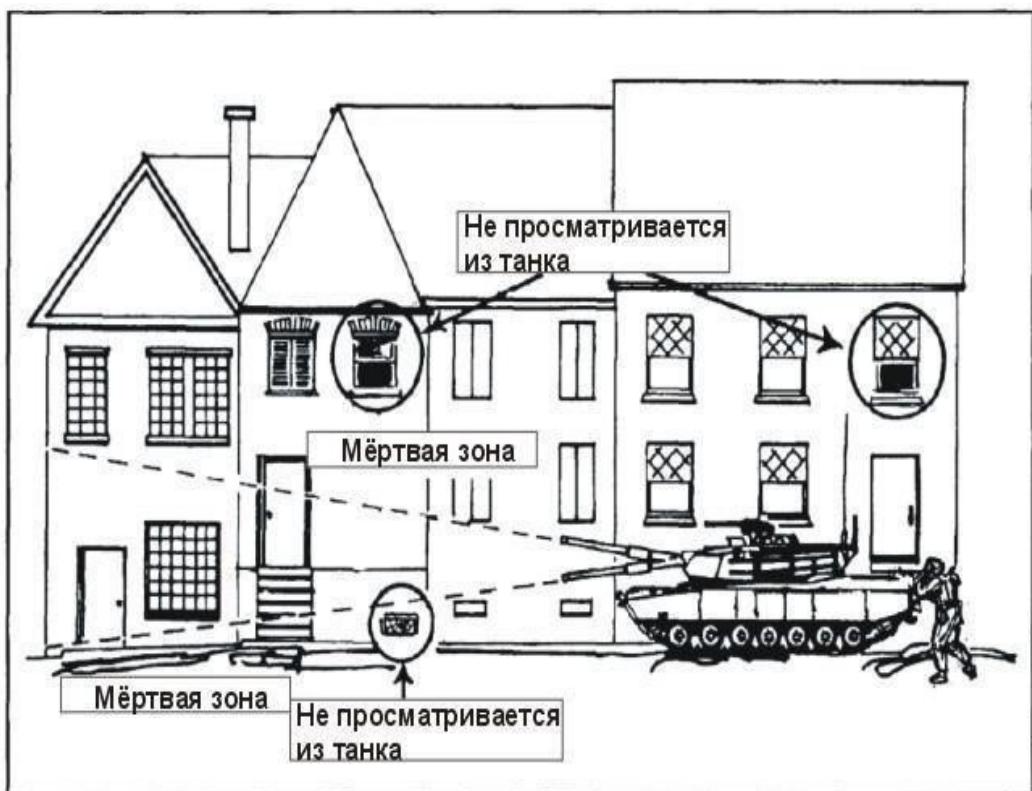


Figure 3-10. Мёртвые зоны танка

(E) When moving through narrow streets or wider streets with narrow passages through rubble, infantry should move in front of tanks, clearing buildings on each side. Movement of forces through an open area must be planned and linked to the terrain. Suppression of enemy positions and smoke to cover infantry movement must also be included in the plan. When necessary, tanks advance on positions defended by infantry to destroy suitable targets. When that area is cleared, the infantry moves forward again to clear the next area. Because of the limited movement of the tanks and the limited observation from the tanks, the infantry must clear the route in front of the tanks. Tanks and infantry must use a movement method with observation. Infantrymen may communicate with the tank crew using hand signals and radio. (F) For movement along wider streets, infantry platoons normally have a section of attached tanks with one tank on each side of the street. Tanks should not be used separately. Other tanks of the attached tank platoon should move behind the infantry and destroy targets in the upper floors of buildings. On

In wide boulevards, commanders may use a tank platoon protected by one or more platoons of infantry. The infantry can keep the leading tanks moving forward while the rear tanks observe and cover the movement of the forward units. (G) If a group of infantry must move down a street that is too narrow for this type of tank support, it uses tanks in column. The tanks move and fire to cover the approach of each successive tank while the infantry provides PTRC fire from buildings. (H) When possible, tanks may move inside buildings or behind walls to protect against enemy antitank weapons fire. Buildings must first be cleared by infantry. First floors should be checked to assure that they will withstand a tank or that there is no basement into which a tank could fall. When moving, all bridges and spans must be checked for mines, booby traps, and load capacity. A certain infantry unit must be assigned to protect certain tanks.

(I) Direct fire systems standard in infantry battalions (mainly PTRKs, recoilless weapons (in some groups) and RPGs) are initially used to capture a stronghold. If necessary, they move in to enemy armored vehicles within the settlement. The positioning of anti-tank weapons in buildings must take into account sufficient space for the reactive jet. Anti-tank weapons are not as effective at neutralizing targets behind walls as tank shots. They will only neutralize a target if it is located directly behind the point of impact. ATGMs have a major disadvantage due to their 65-meter firing range and the potential for their control wires **to break** if they encounter ground jamming. These factors limit the use of these weapon systems in close combat in populated areas.

(R) Snipers are a valuable asset during operations in the urbanized landscape. In situations where rules of engagement (ROE) authorize the use of destructive force, snipers can be used as part of the security element to provide accurate fire at long ranges. Depending on the commander's concept, snipers may be assigned to counter-sniper teams or they may be assigned priority targets. If ROE constraints exist, the sniper may be the 1 best asset of the battalion or company commander for the

prevent collateral damage. Snipers may also observe and cover assault operations and correct mounted artillery fire. Regardless of the mission, snipers must be equipped with effective observation devices and placed in a key area.

Offensive operations in populated areas have a slower tempo. The following issues should be considered when analyzing the time available to attack in the urban landscape.

- a. Due to the dense environment of the urban landscape, it takes longer to clear buildings in neighborhoods or buildings along advancement routes.
- b. Infantry units must be replaced more frequently because of the strain and extra physical effort involved in mopping up.
- c. More time should be devoted to full reconnaissance and coordination. This will save time in executing the commander's plan.

In populated areas, units fight separately and in isolation from each other. Planning is centralized, but execution is decentralized.

Soldiers and teams require tasking that is constrained in nature. They use detailed controls to facilitate decentralized execution. The increased difficulties of command, control, and communications require increased responsibility and initiative from junior leaders.

In populated areas, radio communications are less effective than field telephones and messengers. Groups often fight in the absence of constant communication with higher headquarters. The use of pyrotechnic signals is limited because they may not be visible due to buildings and smoke.

The use of voice commands is degraded by the high level of battle noise in and around buildings. Since companies or company teams can become isolated during an attack, the task force commander must attach some support elements to them to guarantee the success of his plan. Mechanized vehicles (tanks, self-propelled artillery, BMPs) are assigned to light teams, which must have their own logistical support. Tanks and BMPs can be used to clear or isolate fortified targets protected by buildings or rubble. Engineers can neutralize barriers that prevent an attack. All of these actions can be modified to

to be used by any type of infantry. The OG commander plans a planned attack by performing the following actions.

- a. Reconnaissance of the objective. The commander and his subordinate commanders conduct a full reconnaissance of the site to finalize the attack plan.
- b. Movement to the objective. The JG moves to the objective using covered and concealed routes to approach gaps or areas occupied by small forces or to flank and rear the enemy. Reconnaissance and search elements establish the location of enemy forces, their positions, and obstacles. Obstacles encountered by attacking forces are destroyed or bypassed. Enemy elements encountered along the route are destroyed by subordinate elements.
- c. Object Isolation. The JG commander positions direct fire support and canopy fire elements they can best support the attack. The **OPSEC** is used to deceive the enemy as to the time, location, and strength of the attack. The battalion support element provides support to the assault element. The OG commander uses direct and mounted fire support to suppress and destroy the enemy, cover the assault element and create rubble, isolate the enemy, block the approach of reinforcements, and direct counterattacks.
- d. Seizure of a supporting bridgehead. The assault element of the OG destroys, captures enemy forces, or forces them to withdraw as required by the commander's intent.
- e. Clearing a population center. Assault forces or other forces clear the population center using an appropriate methodology based on the commander's intent.

Many are built around key features like road junctions or bridges. A key feature can be a bridge over a river. In this case, the usual planned attack will not succeed because the enemy will have ample time to destroy the bridge. Instead, the commander should plan a rapid advance through the settlement, leaving the mopping-up task to the next group (Figure 3-11).

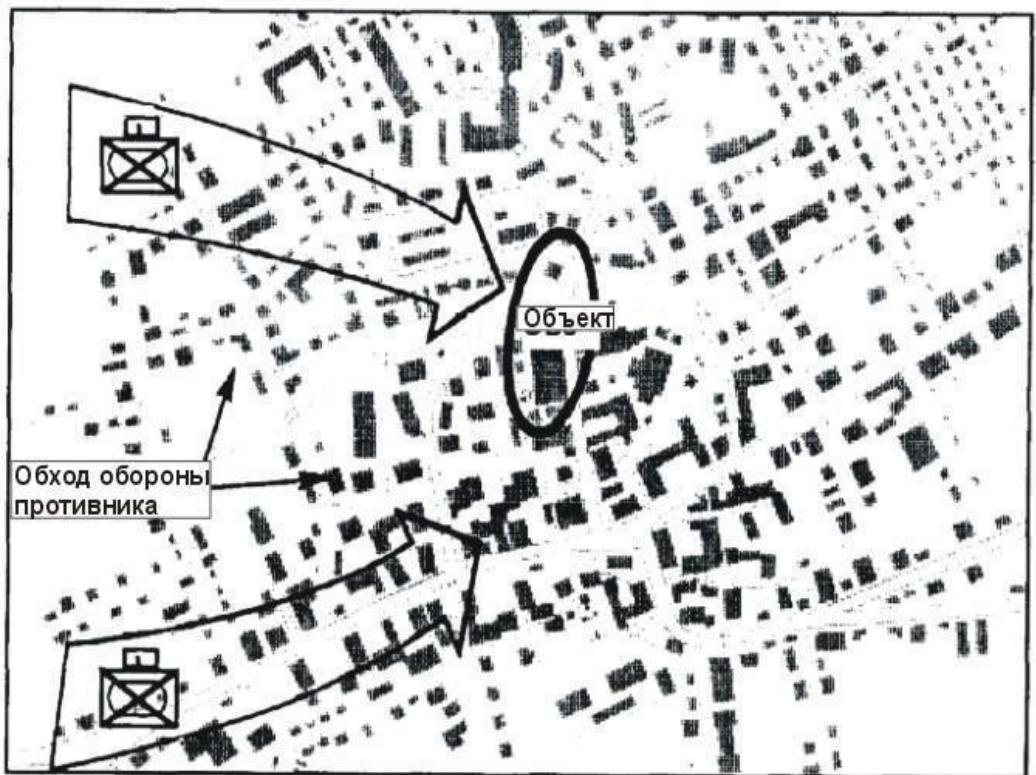


Figure 3-11. Захват ключевого объекта

- a. This type of operation has the highest chance of success when the enemy does not have time to prepare some defense. Because of the importance of the objective, the key is to move through the area quickly, before the enemy can react, and capture the objective while it is still intact.
- b. The OG must avoid contact with the enemy. If enemy resistance is encountered, it should be bypassed. Time-consuming engagements should be avoided so that the team can reach the bridge as quickly as possible.
- c. The commander organizes the movement of his OG along two axes for greater flexibility in reacting to enemy contact. The advance team on each axis conducts reconnaissance as it advances. Advance teams must locate enemy positions, constrain them with fire, and rapidly encircle them.
- d. Teams move toward a populated area while on armored vehicles. Upon reaching the edge of the population center, infantry remain on vehicles so as not to slow the advance until they encounter enemy resistance. Platoons are directed to take up blocking positions for the safe advance of the team.
- e. Once a facility is captured, the OG establishes a circular defense. Companies sweep the buildings and increase the size of the perimeter until it is

large enough to secure the bridge from enemy action. The assigned engineers examine the bridge and remove explosives (Figure 3-11).

The following is an example that describes the actions of a light infantry battalion conducting an infiltration with attached engineers. With some modifications, this method can also be used by a battalion of rushed mechanized infantry.

- a. The outskirts of the settlement may have weak defenses. Its defenders may have only a few anti-tank weapons positions, security elements on the main approaches, or positions blocking approaches to key installations in the settlement. Strongpoints and reserves are deeper in the town.
- b. A battalion may be able to capture part of a settlement by infiltrating platoons and companies between enemy positions in the suburbs.

By moving surreptitiously through secondary streets, using cover and concealment on the back sides of alleys and buildings, the battalion may be able to seize a key street or landscape feature to isolate enemy positions and assist subsequent groups to infiltrate into a populated area. Such infiltration must be accomplished in poor visibility and when there are no civilians in the area.

- c. A light infantry battalion is better organized to infiltrate companies with engineer platoons attached to each company. Each company should have an infiltration route based on the commander's assessment of the situation. Depending on the design of settlements and streets, the infiltration route can be 500 to 1,500 meters wide.
- d. Companies infiltrate on foot, stealthily, using available cover and concealment. Mortar and artillery fire may be used to deflect enemy attention and cover the sound of infiltrating troops.
- e. BMPs or ATGMs are positioned to cover the likely approaches of enemy armored vehicles. The battalion commander may position his antitank platoon (in light infantry) or company (in airborne or air assault forces) to cover likely approaches if no BMPs or tanks are available. The reconnaissance platoon and anti-tank company mainly cover the vulnerable flanks of the battalion. Anti-tank company

may also support with fire if the situation provides an adequate position.

f. At the same time as advancing toward a populated area, companies secure their own flanks. Security elements may move along the route to warn of a flank attack. Engineers assist in destroying or bypassing minefields or obstacles.

Enemy positions are avoided but reported.

g. Companies move until they reach their objectives. After reaching their objectives, they combine and reorganize to provide mutual support. Companies advance patrols along the front and flanks, which establish contact with neighboring companies. The company commander may establish an advance limit to reduce the likelihood of enemy contact or fire contact with friendly forces.

h. If the infiltrating force locates the enemy in an unprepared position and the enemy is about to withdraw, the rest of the battalion advances for the next phase of the operation. If the enemy does not withdraw, the battalion must clear the locality before the next phase of the operation (Figure 3-12).



Figure 3-12. Просачивание

An infantry battalion may have to clear buildings to secure a route through a city. How quickly the battalion can clear buildings depends on enemy resistance, size, and number of buildings. In a remote area, advance teams move from intersection to intersection. Other platoons secure the flanks by moving along parallel streets and conducting reconnaissance.

a. Depending on the required quickness and situation, infantry may move by vehicle or on foot. Platoons move along the widest streets, avoiding narrow streets. Each section (2-man) of the squad covers the front, controlling the opposite side of the street. Leading sections provide support to their winged sections. Combat vehicles providing observation and cover must be protected by infantry. The remainder of the infantry should remain on the vehicles to maximize quick action after the shock effect on the enemy from unexpected contact.

You must rush when the enemy situation changes or after reaching an objective.

b. When contact with the enemy is established, tank support is carried out as normally. Fire support

suppresses and isolates enemy positions while the infantry maneuvers and attacks.

c. Checkpoints can be used to control the speed of company advance and other actions. For example, at each control point, forward companies can re-establish contact with each other and reorganize to continue the mop-up (Figure 3-13).

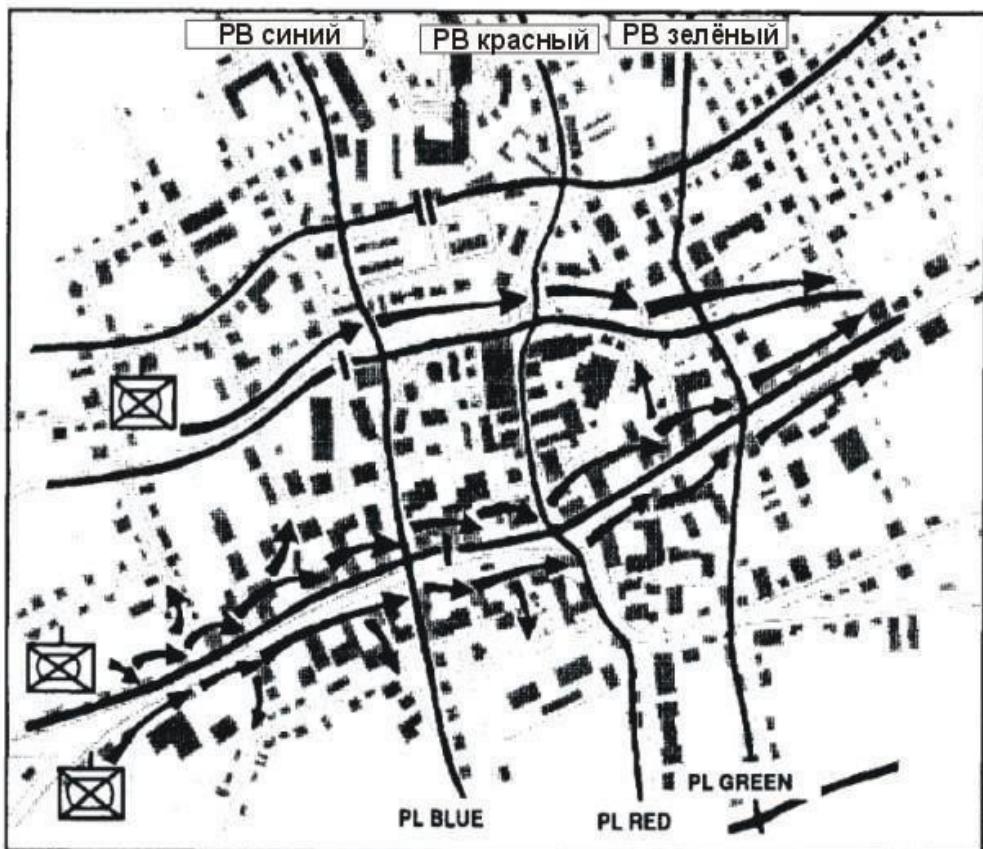


Figure 3-13. Зачистка вдоль маршрута

RV - control line *Section VII. ATTACKING A SETTLEMENT BY COMPANY COMMAND*

This section describes the techniques that can be used by a company. These can be independent operations, but are usually part of a battalion operation and are appropriate for any type of infantry.

3-19. ATTACK OF THE QUARTER

To attack a neighborhood, a company must be reinforced with tanks and engineers.

a. This operation is characterized by platoon attacks supported by direct fire and mounted fire. Success depends on isolating enemy positions (which will often be the platoon's objective), suppressing enemy fire, capturing a supporting bridgehead in the quarter, and clearing buildings in the quarter. (1) The operational organization of the company team changes because of the nature of the . For example, a non-mechanized infantry unit

company, fighting B on the outskirts of the city, might be organized as follows:

Two rifle platoons, reinforced by engineers - for the assault. One rifle platoon - reserve.

One tank platoon to support the assaulting rifle platoons.

(2) In an urban center or in the center of the periphery, the same company could be organized as follows:

Two rifle platoons, each with engineers and tanks under the operational control of the platoon commander, for the assault. (Engineers and tanks are placed under the commander's control because of the independent and isolated nature of combat expected in those areas.) One platoon is in reserve.

All available direct and canopy fire systems should be used to isolate targets - buildings. Direct fire along streets and canopy fire in the open area between buildings help in isolating targets.

b. Tanks, machine guns and other direct fire weapons fire at targets from closed positions. These weapon systems should not be fired from a single position for long periods of time. Gunners and operators must use a range of positions and move from one position to another to utilize the best sectors of fire and avoid becoming a target for the enemy. Tasks for direct fire support are assigned as follows:

Machine guns fire in the streets and into windows, doors, etc.

BMPs, tanks, PTRKs, and RPGs fire on enemy tanks and other armored vehicles.

Tanks shoot at targets protected by walls, make entrances to buildings and provide defense against enemy tanks.

Shooters shoot at their respective targets.

c. The company commander must use smoke to cover the platoons' assault. He covers their flanks with direct fire and the use of reserves, if necessary.

(1) Covered by smoke and supported by direct fire, the assault platoon attacks the first isolated building. The platoon must quickly approach the building while the enemy is stunned by supporting fire. The company commander must carefully coordinate the assault with fire support so that fire is transferred at the last possible moment.

- (2) Squads and platoons sweep each building as described in the appendix. After capturing a block, the company combines and reorganizes to repel enemy counterattacks or to continue the attack.
- (3) The mechanized infantry company team may be organized follows. Assault platoons should move on foot. BMPs and tanks may provide direct fire support.
- (4) The company commander can use the technique of numbering buildings in the area of attack. When assaulting a stronghold, its corners can be labeled to report detected enemy forces, simplify control and coordinate fire support (Figure 3-14).

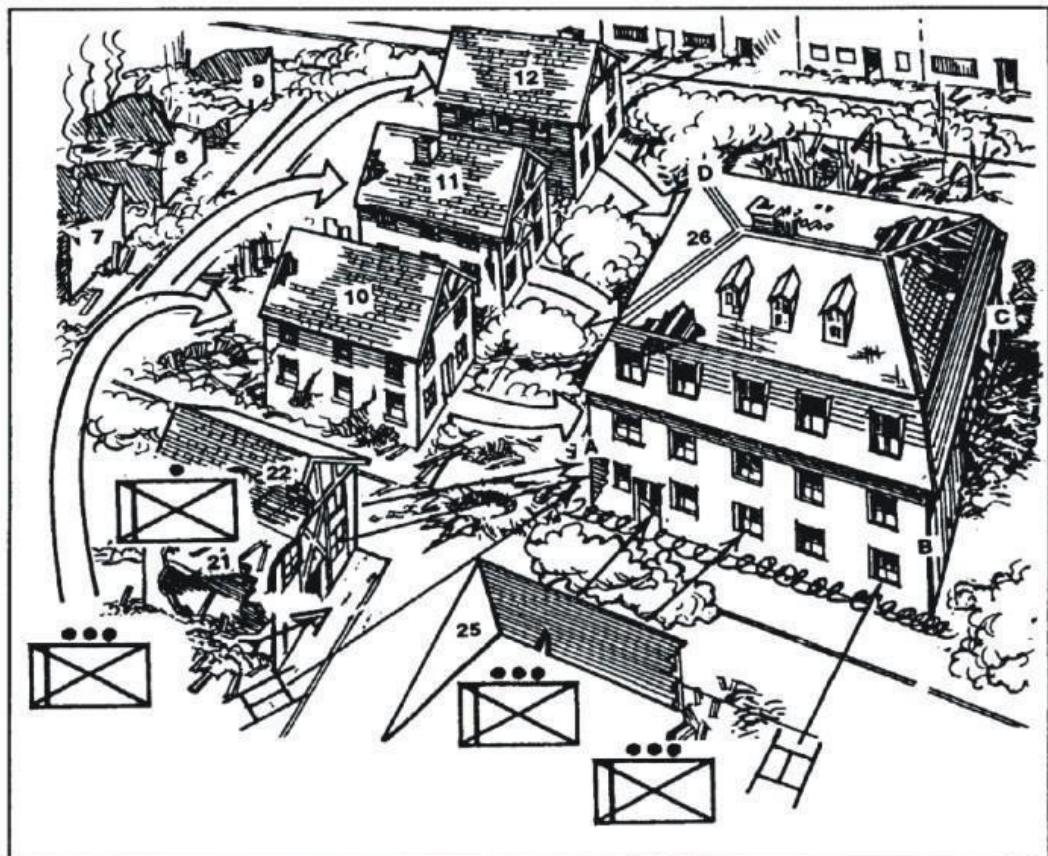


Figure 3-14. Рота атакует опорный пункт

The discussion below provides a technique for conducting a quick attack of an enemy outpost. The company commander quickly assesses the situation by factors and reacts accordingly to support the commander's intent.

- a. The company commander uses a form of fire and movement. His tanks, BMPs, MK 19 AGSs, or M2HB machine guns mounted on TOW APCs occupy fire support positions from which they can fire on the outpost, preventing enemy retreat and destroying any enemy reinforcements.
- b. After that, the rifle platoons move into the area. They do not attack head-on, but along covered routes, exploiting the weaknesses of the outpost. As the platoons approach the outpost, support fire is transferred and smoke is used to conceal their movement. When the platoons approach the outpost, they quickly sweep the buildings and consolidate. The company is then ready to continue operations (Figure 3-15).

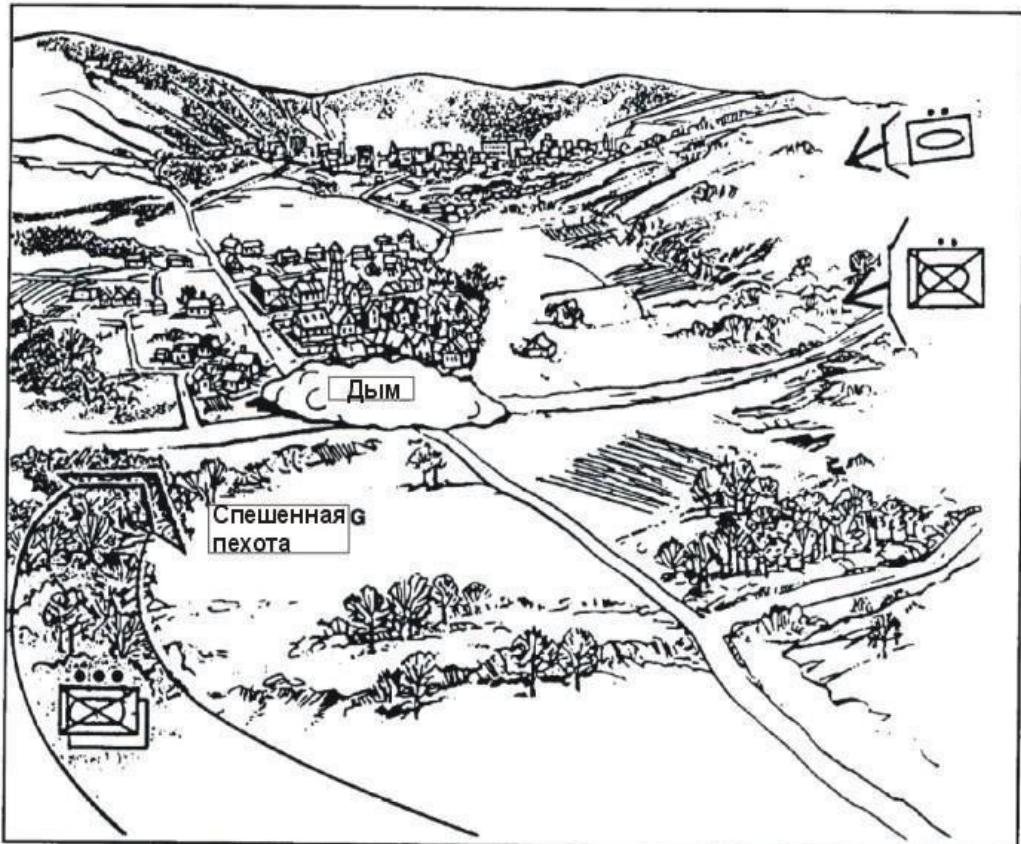


Figure 3-15. Быстрая атака форпоста

The company may have to seize the plaza to ensure that friendly forces can use it or prevent enemy forces from using it (Figure 3-16). This operation consists of seizing and clearing buildings from which the plaza can be controlled using direct fire weapons from covered positions. Routes to observation and cover positions for direct fire weapons will probably first have to be cleared of mines. Enemy approach routes to the flanks of positions will probably have to be mined to prevent enemy use of them.

- a. After gathering all available information about the landscape, the enemy, and the population, the commander plans the next steps:

Facility Isolation.

Capture and clearance of buildings around the square under cover of tanks, ATGMs and machine guns.

Unification and preparation for counterattack.

- b. Friendly troops should not enter the square until the buildings around it are under control. The square is a natural killing zone.
- c. The company should be organized as follows: Security Element (to isolate the plaza).

An assault element reinforced by engineers.

A support element (provided with direct fire to support the assault element) consisting of company BMPs, TOW APCs, MK 19 AGS or M2HB machine guns mounted on HMMWVs and attached tanks in firing positions.

Reserve.

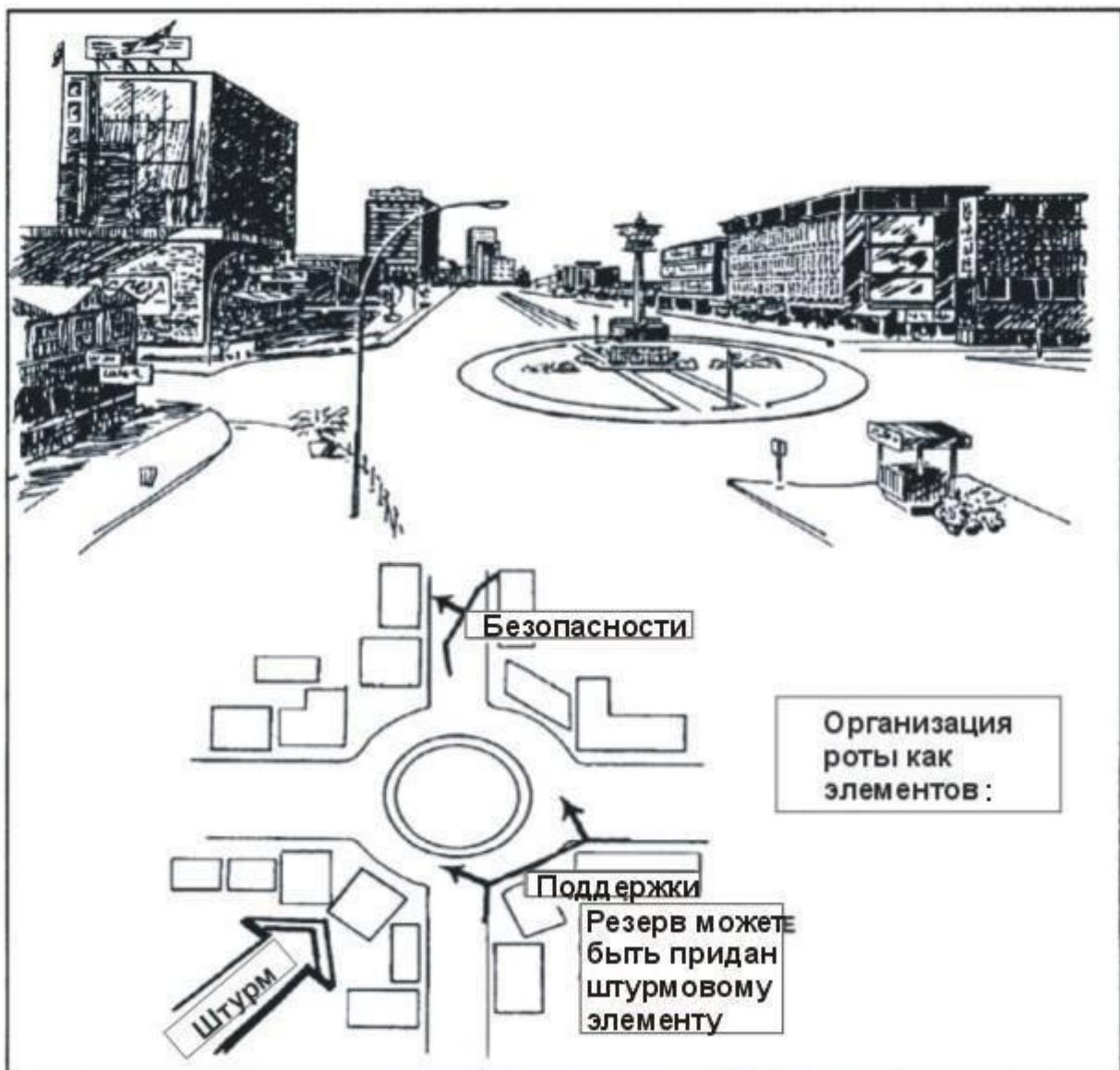


Figure 3-16. Захват площади

d. In the various phases of this operation, roles may change. For example, the assault element may need to clear buildings that cannot be covered by support element fire. The reserve may then be assigned to the assault element. It may also happen that one of the assault elements is in a better position to isolate a square. At this time the isolation element can become part of the assault element.

A key piece of terrain dominates the approaches or is so located that if it is controlled by friendly or enemy forces, it directly affects the entire operation. A bridge or

a span over a canal, a complex of buildings or, in some cases, a population of - examples of key terrain in the city. Therefore, capturing such a crossing point intact and protecting it for use is a likely task for an infantry company.

a. To accomplish this task, an infantry company must -

Clear buildings near the shore that provide a view of the bridge and good sectors of fire for support weapons.

Quickly suppress enemy fire on the opposite bank with direct fire.

Use smoke to limit enemy observation.

Storm the fortification at the bridge on the opposite bank (buildings that dominate the bridge).

Secure the perimeter around the bridge so that engineers can clear any obstructions and remove destruction on the bridge.

b. The first step in seizing the bridge should be to clear the buildings near the shore. The commander must find out which buildings dominate the approaches to the bridge. Buildings that allow him to use RPGs, ATGMs, machine guns, and riflemen are cleared under the cover of fire support that prevents enemy infantry from reinforcing from the opposite bank and prevents the enemy from conducting actions to destroy the bridge.

c. When suppressing enemy positions on the opposite bank, priority is given to positions from which the enemy can fire directly at the bridge. Tanks, BMPs, TOW APCs and machine guns mounted on HMMWVs of an anti-tank platoon of light infantry or airborne forces or an anti-tank company of air assault forces are effective in this role. TOW, Dragon and, in some cases, RPGs can be used against enemy tanks covering the bridge. The company FSO must plan artillery and mortar fire to suppress infantry and antitank weapons.

d. Assault platoon targets are buildings that dominate the approaches to the bridge. One or two platoons assault the bridge using all available cover and smoke. They are supported by the rest of the company and attached tanks. Once on the other side, they link up to transfer support fire and begin the sweep

buildings. When the first buildings are cleared, support fire is again transferred and the assault continues until all buildings in the target area are cleared.

e. During this time, engineers clear the bridge and its approaches of all mines, subversives, and obstacles. The company commander may expand the perimeter to prepare for enemy counterattacks. Once the bridge is cleared, tanks and other support vehicles move to the opposite bank (Figure 3-17).

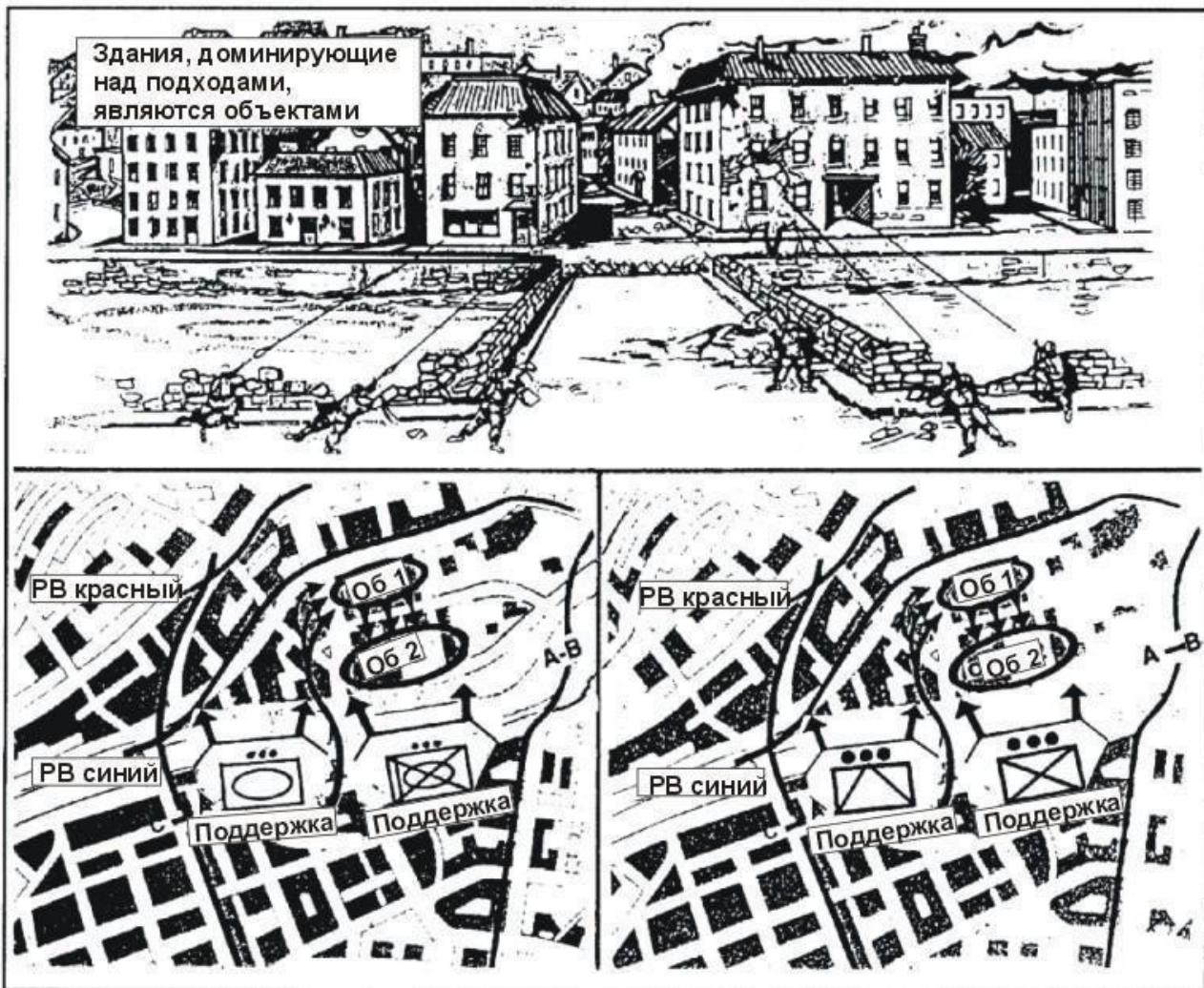


Figure 3-17. Захват моста

Chapter 7. DEVELOPMENT

In a rapid situation, the company may move to contact the enemy through a populated area along a highway. The company may have to reconnoiter such a route in preparation for an attack by the battalion task force. This task can be accomplished by any type of infantry company with an attached tank platoon, if available.

- a. This operation is characterized by alternating periods of rapid movement to reduce distance and much slower movement to ensure safety. The speed of movement is selected depending on the terrain and enemy situation.
- b. In open areas where rapid movement is possible, the tank section (2 tanks) should lead. In more enclosed terrain, the infantry should lead, while the tanks should lead

watch and cover. Another infantry platoon and another tank section should move along a parallel street. Artillery fire should be planned along the route. Engineers accompany the lead platoon on the main route to assist in clearing obstacles and mines.

c. The team must capture key points on the highway (intersections, bridges, spans, etc.) with a combination of actions:

Between key points, when enemy contact is unlikely, the team moves with infantry in vehicles. At key points or when enemy contact is likely, the team moves by dismounting to clear enemy positions or capture a key point. Tanks and other combat vehicles support the rushed troops.

d. In the periphery or lane areas, this advance should be conducted along a single axis with the lead team in front and security elements checking alleys as they are reached. In the urban core, this operation is conducted in a coordinated movement along two or three axes for greater flank security.

e. Enemy positions may be captured directly by the command or, if there is a great need for speed, bypassed and left for the following groups, but must be reported to the commanding officer.

f. The subunits of the team must coordinate their actions. The company commander reports all information gathered to the battalion task force commander (Figure 3-18).

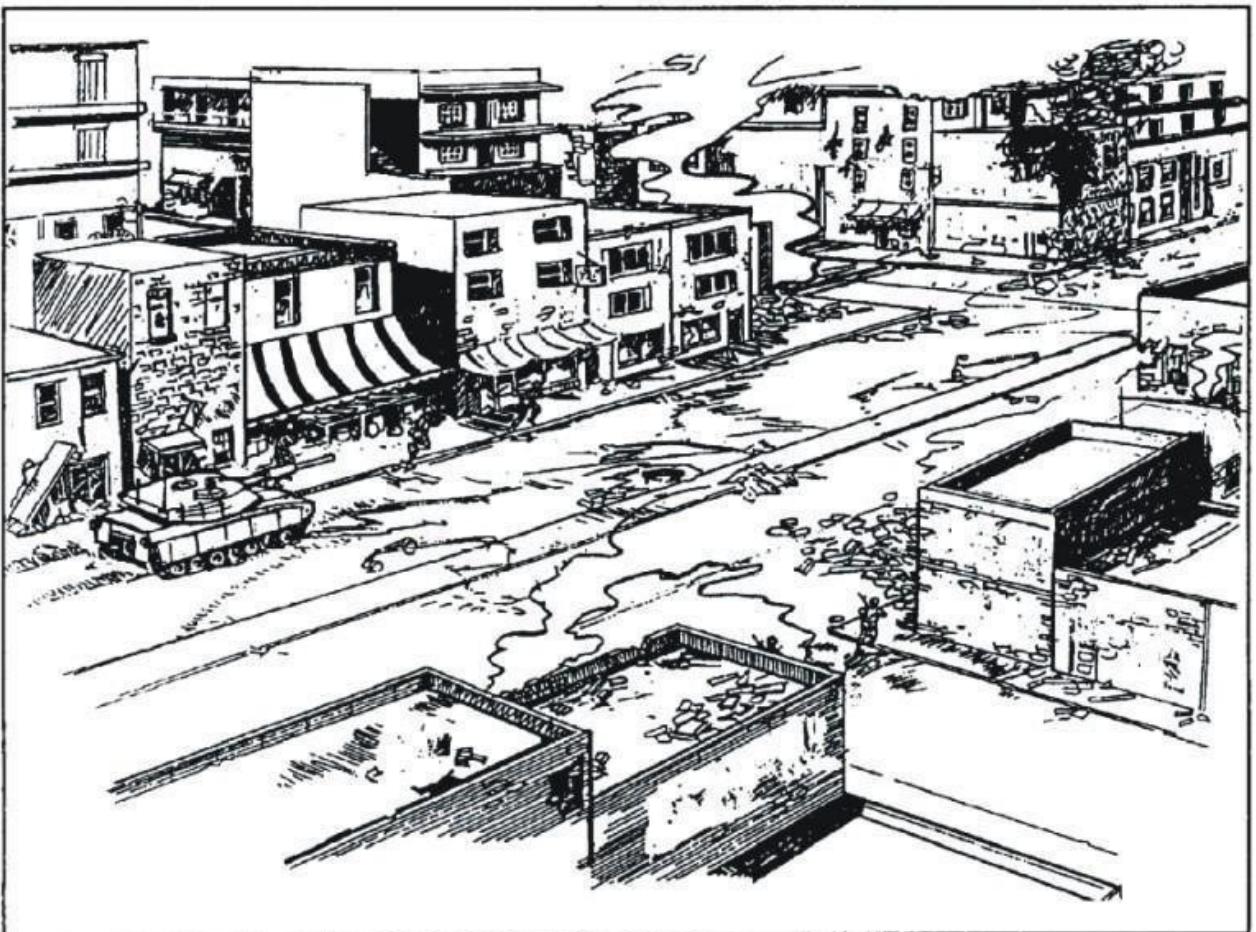


Figure 3-18. РАЗВЕДКА МАРШРУТА ДЛЯ ДВИЖЕНИЯ ВДОЛЬ ШОССЕ ЧЕРЕЗ ГОРОД (КОММЕРЧЕСКИЙ РАЙОН).

Platoons rarely perform independent operations in combat in a built-up area, but because of the type of combat it is expected that they may become isolated and alone. This section discusses techniques that can be used by a platoon under these conditions. These operations are conducted as part of a company operation.

The most common objective for a platoon offensive in a populated area is to attack a building. The platoon must destroy the defenders and capture the building. The attack involves isolating the building to prevent the enemy from withdrawing or reinforcing it. These actions are normally coordinated at the company level; Suppressing the defenders with 25mm BMP cannon, tanks, machine guns, and mortar fire;

Entering a building at a protected point or through an opening punctured by tank fire;

Building sweep. In a sweep, troops usually reach the top floor quickly and sweep from top to bottom. Careful coordination between assault and platoon support elements is required and is accomplished through the use of radios, telephones, hand signals, or pyrotechnics.

(1) if the platoon attacks a building independently, it must be divided into an assault element, a support element, and a security element to cover the flanks and rear. In addition to its own support element, the platoon may be supported by BMPs, tanks, and other company elements. (2) if one platoon supported by the rest of the company attacks, security can be provided by other rifle platoons. The assault has three steps:

STEP 1: Insulate the building.

STEP 2: enter the building (seize a). STEP 3:
systematic sweep of the building.

(3) the sweep is accomplished by firing squads that pass sequentially through each other (checkmating) as rooms and floors are captured. Platoons clearing buildings must be reinforced by engineers to assist in subversion (Figure 3-19).

When moving in populated areas, the platoon follows the same movement principles as in other areas. However, some movement techniques must be modified.

a. Platoon members must be prepared to return fire immediately. They must also be on the alert, surveying their surroundings for any signs of the enemy and quickly reporting changes in the situation.

b. The speed of movement depends on the type of operation, the terrain, and the degree of enemy resistance. In remote or lightly defended areas, the mechanized infantry platoon moves along the street in vehicles, but sends hasty groups forward to reconnoiter key points (intersections, bridges). In the center of a populated area or in heavy combat situations, the platoon moves on foot with two lead squads, one on each side of the road, who use all available cover. They move through buildings if possible, avoiding appearing on the street.

The offices provide mutual support.



Figure 3-19. Атака здания

- c. Enemy action against the platoon may be an ambush in the street using fire along the street, sniper fire from rooftops, artillery or mortar fire.
- d. To defend against these hazards, the platoon should move through buildings and along walls, using tanks for fire support and observers on rooftops or top ladders to observe and search for defenders in all three dimensions (rooftops, buildings, streets).
- e. The platoon should move in two elements: a maneuver group (one squad in narrow streets, two squads in wide streets) that moves forward, surveying dangerous spaces and closing with the enemy; and a cover element (the rest of the platoon and its support weapons) that moves behind the maneuver group, covering the flanks and rear, and providing fire support.

These two elements, or parts of them, can swap roles (Figure 3-20).



Figure 3-20. Движение по улице

The platoon may be tasked to counterattack with one of two objectives: to regain a lost defensive position or key point by destroying the enemy or forcing him to retreat; or to halt an enemy attack by striking his flank, forcing him to halt and assume a quick defense.

a. The platoon counterattack is planned at company level to meet every likely enemy penetration. It must be well coordinated and executed. The counterattack is directed as far as possible to the enemy flank and supported by direct and mounted fire.

b. In remote areas where the terrain is relatively open, a platoon of mechanized infantry accompanied by tanks can approach a counterattack objective, positioned on armored vehicles for greater speed. The tanks destroy enemy tanks and heavy weapons while the infantry rush in and mop up the objective. In central and densely built-up areas, tanks advance in a predetermined pattern, point to point, providing close support to the rushing infantry. Counterattacks require the following:

Analyze likely directions of enemy approach.

Reconnaissance of each counterattack direction and routes to each proposed observation position, and planning and practicing movement on diagrams.

Locating and setting up obstacles and fighting positions to force the enemy to move along established routes or to block them.

Gaps in or routes through these obstacles in a counterattack must be large enough not to reduce the tempo of the counterattack. Quick and aggressive execution (commanders must lead by example).

Flexibility to respond to unforeseen circumstances.
Analyzing Analyze likely counter-attack directions of the enemy. Plan fire support for counterattack and possible counter-attack.

Chapter 8. Defensive operations

Of the two types of defense, area defense and mobile defense, area defense is the most commonly used because most of the reasons for defending a city come down to the held landscape. The mobile defense is more focused on the enemy, and the commander may use this type of defense based on his assessment of the situation. In a populated area, the defender must take advantage of cover and concealment. He must also consider the limitations of the attacker's ability to maneuver and observe. By exploiting the terrain and fighting well-prepared positions with mutual support, the defender can inflict heavy casualties and delay, block, or constrain much larger attacker forces.

The commander must decide whether the defense of the population center is necessary for the successful accomplishment of his mission. Before making this decision, the commander should consider the points discussed here.

The commander should consider the following reasons for the defense of the built-up area.

- a. Some population centers contain strategic industrial, transportation, or economic complexes that must be defended. Capitals and cultural centers may be defended for psychological, national, or moral reasons, even if they do not provide a tactical advantage to the defender. Because of the large size of these areas, substantial combat power is required to defend them. Thus, the decision to defend these complexes rests with the political authorities or theater commander.
- b. The defender's need to move and concentrate

combat power, to ensure reliable supply across a wide battlefield, forces him to preserve major transportation communications. Since most transportation lines extend across large areas, the commander must defend the entire population center to control these lines.

- c. The worldwide increase in population centers has made it impossible for combat forces to avoid towns and villages.

Most approaches to cities are dotted with small villages several kilometers apart that must be controlled by the defending forces. These areas can be used as fighting positions or as strongholds. Blocked streets covered by mortar and artillery fire can force the attacker's armored vehicles to follow established routes - streets to mined areas or areas covered by antitank fire. If the attacker tries to bypass a populated area, he may encounter massive antitank weapons fire from the populated area and from positions around it. In clearing such an area, the must sacrifice speed, tempo, and resources. A town or village can easily become a major obstacle for the attacker.

- d. Forces can be concentrated in critical areas. Because of the tactical advantage available to the defender, a well-trained force defending a populated area can inflict heavy casualties on a numerically superior enemy. The defender can retain much of the combat power of his force for use in the open landscape. Defenders remaining in population centers serve as reserves and replacements.

- e. Forces can be well concealed in populated areas. Aerial photography and detection equipment cannot detect forces deployed in urban areas. CPs, reserves, logistics complexes, and combat forces deliberately located in populated areas are difficult to detect. The commander should consider the following reasons for not defending populated areas.

 - a. The location of the population center precludes its inclusion in a complete defense plan. If the population center is located too far ahead or behind in the group's defense sector, isolated, or

is not located on expected enemy approach routes, the commander may decide not to defend it.

b. The nearby landscape allows the enemy to bypass via covered or concealed routes. Some settlements, mostly small ones, are located off the main road and off highway systems. A population center that can be easily bypassed will usually be bypassed.

c. Buildings within a settlement do not always adequately protect the defenders. Vast areas of lightly constructed or flammable buildings do not provide adequate protection for the defender. Settlements near flammable or explosive industrial areas, such as cleaning plants or chemical plants, cannot be defended.

d. The dominant terrain is close to the population center. If the population center is likely to be controlled by an enemy occupying a nearby landscape, the commander should defend that landscape rather than the population center itself. This applies mainly to small settlements like villages.

e. The best sectors of fire are outside the population center. The commander may place all or part of his forces long-range positions that are outside the population center. This method is used primarily by armored forces defending sectors with many small population centers.

f. The settlement is culturally, religiously or historically significant. An area may be declared a
-An "open city" under international law and demilitarized. The attacking force must then assume civilian administration and treat civilians as internees in the occupied country. The defender must evacuate immediately and may not arm the civilian population. A city may be declared open only before an attack. The presence of large numbers of internees, sick or wounded may also be a problem for the commander and the reason for his decision not to defend a settlement.

The defense of a settlement should be organized around a key piece of terrain, key buildings, or a key area that

preserve the integrity of the defense and the ease of movement of the defender. The defender must organize and plan his defense by considering obstacles, approaches, key terrain, observation and sectors of fire, cover and concealment, fire hazards, and communications limitations.

The city itself is an obstacle because it forces the attacker to move along routes - streets - and prevents the attack. The approaches must be blocked by obstacles and covered by fire.

Barriers and barriers shall be installed in three belts.

a. The first belt of barriers is at the closest buildings parallel to the main defense line (MDL). This belt consists of wire and improvised barriers (including barriers in buildings, underground passageways and open areas, hazardous spaces and dead spaces). These barriers and obstacles must be covered by mines-traps and long-range fire. This belt impedes enemy movement, breaks and disorganizes the attackers' combat orders, and inflicts casualties.

b. The second barrier belt is placed between the first belt and the GPO in the building at a distance greater than the throwing range of a hand grenade from the defense position. It impedes enemy movement, directs the enemy into the best sectors of fire, breaks the attackers' fighting order, and inflicts casualties. This belt is not supposed to stop enemy soldiers for good. It is not intended to be an impenetrable wall and to restrict observation and sectors of fire. This belt consists mainly of wire fences, improvised barriers, road funnels, and minefields. It should be equipped with mines - traps (including Claymor MON on stretching ropes). A triple wire spiral is placed along the machine gun firing position (as marked earlier with engineer tape) to slow the enemy in front of the position and to utilize machine gun fire maximum effectiveness.

c. The third barrier belt is the defense position belt. It consists of wire barriers placed around, through, and within defended buildings and near minefields (including underground systems). It prevents and makes it difficult for the enemy to seize a supporting bridgehead in the defensive area. It must be equipped with mines - traps and Claymor MONs, driven by

into action by stretching and commands. Mines - Traps and Claymor should be placed where they cannot cause losses to their forces.

d. All approaches (surface and underground) should be blocked. Teams should use improvised means such as vehicles, wires, etc., to create barriers (Figure 4-1) or plant anti-personnel and anti-tank mines. (Figure 4-1) or plant anti-personnel and anti-



Figure 4-1. ПРИМЕРЫ ЗАГРАЖДЕНИЙ

tank mines.

The defender must consider not only the normal routes in and around the city, but also those routes within population centers that pass above ground level and underground. The defender usually has the advantage. He knows the city and can move quickly from position to position through buildings and underground passages. A key piece of terrain is a place whose capture, hold, or control provides advantages to enemy or to one's own forces. Key examples of key terrain include canal and river bridges, building complexes, public service structures, or parks. Populated areas are unusual in that the population itself can be considered key terrain. Identification of key terrain allows the defender to select his defense positions and assists in identifying enemy objectives. The defender must position firing points so as to obtain maximum effect and mutual support by . He must consider the maximum and effective range of fire. Artillery

adjusters should be positioned well above street level to correct fire on the enemy at maximum range. Artillery fire and firing zones should be prepared on the most likely approaches to be able to move them quickly to the threatening direction.

The defender must prepare positions using protective cover of walls and slabs. Soldiers must continually improve positions using improvised materials. When the defender must move, he may use:

Prepared breaches in buildings.

Movement through explored and marked underground systems.

Trenches and sewers.

Smoke and darkness for crossing open spaces.

To accomplish his objectives, the attacker must advance by crossing streets and open areas between buildings where he is vulnerable to fire from concealed positions.

The defender's detailed knowledge of the landscape allows him to avoid areas that are fire prone. All cities are vulnerable to fire, especially those with many wooden buildings.

The defender may deliberately create fires to: Destroy and disorganize attackers.

Forcing the attacker to move through routes to more favorable areas of destruction.

Limitations of the attacker's observation.

Wire communication is the primary means for controlling the defense of a city, meeting safety requirements. However, wires can be severed by the enemy. Radio communications in populated areas are usually degraded by buildings and a high concentration of power lines. A new family of radios can solve this problem, but all groups within a population center cannot have these radios. Therefore, radio is an alternative means of communication. Messengers and other means of communication can be used. Visible signals can also be used, but they are often ineffective because of buildings, walls, etc. Signals must be stipulated, widely distributed, and understood by all groups and attached forces. The increased noise of urban combat makes it difficult to use audible signals effectively.

The procedures and principles for planning and organizing the defense of a settlement are the same as for other defensive operations. In developing a defense plan, the defender considers factors from the

emphasis on fire support, preparation time, work priorities, and control measures. Planning for the defense of the city must be detailed and centralized. The commander must receive, analyze, and understand the task before he begins planning. He may receive the task as a private order or as a formal combat order and must analyze all stated and implied tasks.

The commander must also analyze the type of enemy he may encounter. If the attacking force consists primarily of hasty infantry, the greatest danger to the defender is that the enemy will seize a supporting bridgehead. If the attacker's forces are primarily tanks or motorized infantry, the greatest danger is that the enemy will destroy the defender's position with massive direct fire. Information gathered for defensive operations is not limited to studying the enemy. Commanders must emphasize the acquisition and use of all intelligence. Elements of intelligence specific to the battle in a populated area are discussed in Chapter 2. They include:

Streets, water supply and collector schemes. Key installations and facilities.

Civilians.

Civilian police and paramilitary forces. Sources of food.

Communications и their plans.

Power plants.

The landscape in populated areas is three-dimensional: ground level (streets and parks), above ground (buildings), and below ground (subways and sewers). Analysis of all man-made and natural features of the landscape is especially important when planning defense in a built-up landscape. The commander's defense plan is influenced by the type of locality in which he will operate (see Section 4.2.2.1).

Chapter 1.)

a. Villages.

(1) Villages are often located in narrow valley locations on the only road through the landscape. If the buildings in such a village are well constructed and provide good protection against direct and mounted fire, strong defenses can be established by placing a company in the village and other battalion elements in close and dominant terrain.

(2) If the landscape allows easy bypassing of a village and there are no other villages in the defended landscape that provide mutual support, it may not be advisable to defend such a village because friendly forces can be easily bypassed and cut off (Figure 4-2).

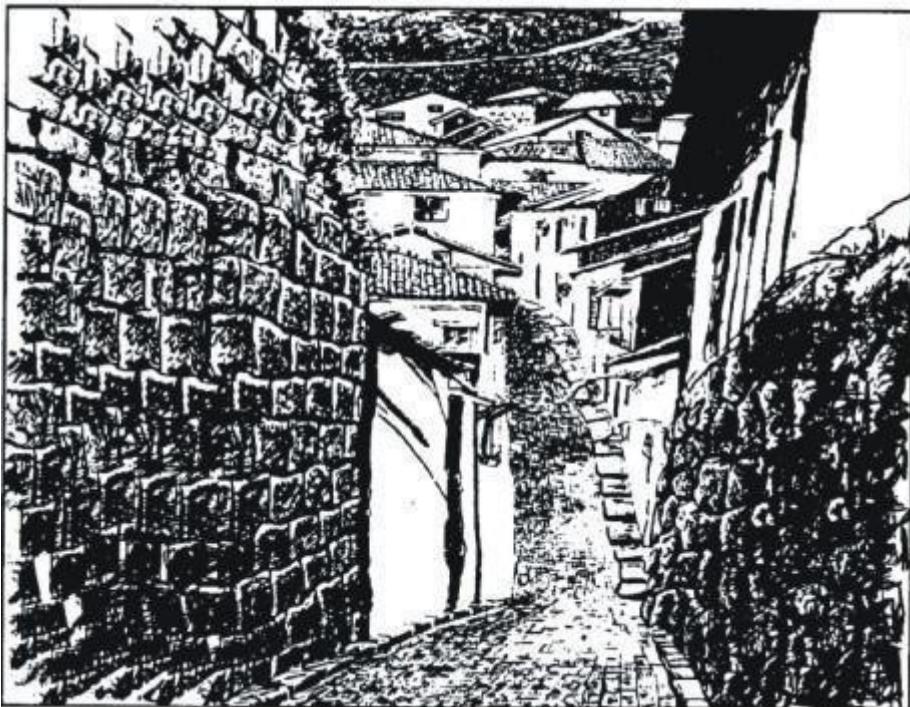


Figure 4-2. ДЕРЕВНЯ

(3) Villages on the approaches to large settlements or cities may be used by commanders to add depth to defenses or to guarantee flank security. These villages are often characterized by stone, brick, or concrete buildings. Company fighting positions may be located in these small villages to block approaches to the main line of defense. b.

Band Areas.

(1) strip areas consist of buildings, warehouses and factories and are located along a road or alley between townships and villages. They give the defender the same advantages as villages.

(2) If visibility is good and sufficient effective sectors of fire are available, the team acting as a security force will occupy only a few strong positions within the strip. This will deceive the enemy into believing that the lane area is an extensive defensive strip when exposed to long-range fire from these positions. Strip areas often provide covered escape routes to the flanks that should be exploited by the defender, as only attacking forces will be

deployed and before the defender is under concentrated fire (Figure 4-3).

c.



Figure 4-3 | ОБЛАСТЬ ПОЛОСЫ|

Villages and cities.

(1) Small forces may have a combat power advantage in the defense of small towns or cities that become bottlenecks if the defender employs tanks, BMPs, TOW and Dragon APCs from positions dominating critical approaches. The enemy's ability to bypass a settlement or town must be eliminated by the defending forces by controlling key terrain and coordinating with adjacent forces. Reserves should be placed where they can rapidly reinforce critical areas. Fences and minefields help slow the attacker and guide him along established routes.

(2) Locating positions in townships and cities that provide good sectors of fire and cover is often difficult. The leading edge of a settlement usually offers the best sectors of fire, but can easily become a target for enemy observation and support fire. These areas often contain residential buildings of light material. Factories, civilian buildings, and other sturdy buildings that provide adequate cover and are more suitable for

defenses, are more often located deeper in the settlement and have limited sectors of fire.

(3) Since the forward edge of the settlement is the defender's obvious position, it should be avoided. However, the defender may place his position there if the terrain limits the enemy's ability to fire on the position or if there are capital buildings that will provide adequate protection for the teams.

(4) The force may initially be assigned a fighting position on the forward edge of the settlement. Their task is to provide early warning of the enemy advance, fire at long range, and mislead the enemy as to the true position of the defenses. These forces must withdraw in time avoid massive enemy fire. If observation from the forward edge is limited, forces should be positioned in more favorable terrain in front of or on the flanks of the settlement to have better sectors of observation and to be able to engage the enemy at long range.

(5) To prevent an airborne assault or airborne landing within a city or town, the commander must cover likely landing zones (LZs) and landing zones (LZs) such as parks, stadiums, large rooftops, or airfields with barricades or fire (Figure 4-4).



Figure 4-4. СЕЛА И ГОРОДА

d. Large population centers. (1) In large population centers, the commander must take into account that the landscape is restrictive because of the large buildings that are normally located

close . This requires higher troop densities and smaller defense sectors than in open terrain. The length of a defense front line in a city is taken to be one-third the length of the same front line in open areas. An infantry company that might occupy 1,500 to 2,000 meters in open terrain usually occupies 300 to 800 meters in populated areas. Building density, ruins, and street types dictate the size of a group's front line (Table 4-1).

ГРУППА	ФРОНТ	ГЛУБИНА
Батальон или ОГ батальона	От 4 до 8 кварталов	От 3 до 6 кварталов
Рота или ротная команда	От 2 до 4 кварталов	От 2 до 3 кварталов
Взвод	От 1 до 2 кварталов	1 квартал
ПРИМЕЧАНИЕ : Средняя длина городского квартала 175 метров. Минимальные размеры фронта и глубины применяются в плотно застроенных областях, в квартальных блоках и в высотных областях.		

Table 4-1. Приблизительные размеры фронта и глубины в крупных застроенных областях

(2) In a large population center, the battalion is assigned a defense sector in which a series of defensive positions are normally established. Unlike villages or townships, the natural landscape near a population center is not usually available for integration into the commander's plan. Although mutual support between positions must be maintained, the built-up landscape often allows the enemy to pass between positions using infiltration routes. Therefore, the defender must determine the following:

Positions that would give him the opportunity to inflict a surprise fire defeat on an infiltrating enemy.

Covered and concealed routes for the movement of their elements between positions (subways and collectors).

Buildings that dominate large areas.

Areas such as parks, boulevards, rivers, highways and railroads where anti-tank weapons have adequate sectors of fire. Fire positions for mortars.

Locations of command posts that provide cover, concealment, ease of command and control. Protected areas for supply.

(3) Buildings that are important to the overall defense plan are selected for troop positions. Mutual support between these positions is necessary to prevent attackers from maneuvering and covering defensive positions. Buildings are selected for defensive positions if they:

They offer a good defense.

They have reinforced floors to protect the building from collapse under the weight of debris.

Have thick walls.

Made of non-flammable materials (avoid wooden buildings).

Located at strategic locations (corner and tall buildings). Adjacent to streets, alleys, open spaces and parks. (These buildings usually provide best sectors of fire и easy interaction with positions in other buildings). 4-13.

The use of troops in populated areas depends on many factors and tasks.

a. Use of squads. Squads are normally used in rows so that they can all fire in the direction of the expected attack. In a populated area, squads may be separated by rooms in a building or deployed in different buildings. Squad positions should have mutual support and cross sectors of fire, even if the positions are separated by buildings or walls (Figure 4-4).

5).

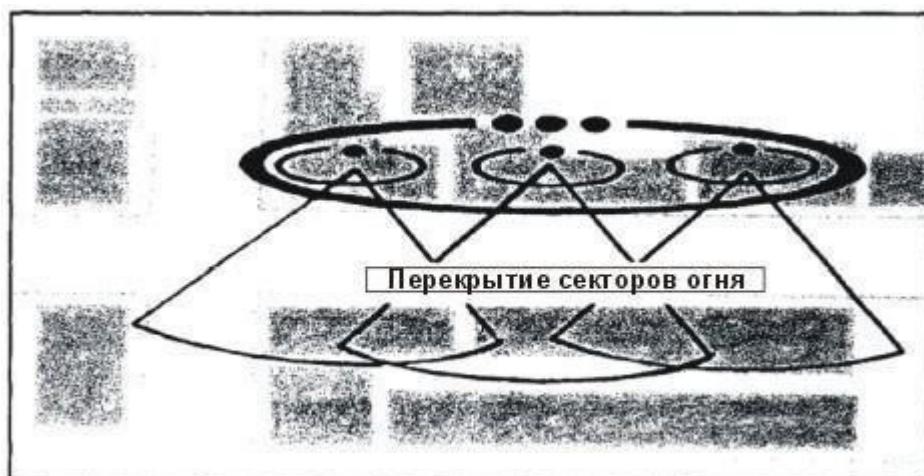


Figure 4-5. СЕКТОРЫ ОГНЯ

b. Use of platoons. Once the commander has decided where his defense strip will be, he should select platoon platoons

combat positions or sectors that block or limit the enemy's ability to maneuver and control key areas. The front line for a platoon is one to two city blocks. Along with primary and secondary positions, the platoon commander normally selects one alternate position to reorient his defenses to repel enemy attacks from another direction.

c. Company Utilization. Battalion commanders employ their companies in combat positions or sectors. The front line of defense for a company or company command in a locality is usually two to four blocks (300 to 800 meters). Depending on the type of locality, companies may be used at the front of the flanks of the defended area. This will force the enemy to deploy his forces early, without decisive fire cover, since this placement of companies will mislead the enemy as to the true location of the main defense. Other companies can then be used in a series of strongpoints in the center of the city or town. In all cases, mutual support between positions is essential. Companies must also have designated additional and alternate positions.

d. Use of reserve. The commander's defense plan should always provide for the use of the reserve. The reserve must be prepared to conduct counterattacks to recover key positions, block enemy infiltration, secure flanks, or assist by fire in the withdrawal and retreat of exposed forces. For combat in a populated area, the reserve: Usually consists of infantry.

Must be as mobile as possible.

May consist of a platoon or squad at the company level or a single platoon at the battalion level.

Can be supported by tanks.

e. Use of tanks and BMPs. The commander must use tanks and BMPs to take advantage of their long-range weapons and mobility. Populated areas limit the mobility of tanks and BMPs and make them vulnerable to infantry anti-tank weapons. (1) When tanks and BMPs are used in city defense, infantry will

should be located so as to ensure the safety of armored vehicles from close-range anti-tank fire and to detect targets for tanks and BMPs. Tanks and BMPs should be assigned primary, supplementary and reserve positions, and primary and supplementary sectors of fire. BMPs and anti-tank weapons should supplement tank fire.

(2) Tanks and BMPs should be positioned on probable approaches and ready to take advantage of their long-range fire. They may be:

Installed on the edge of town in positions with mutual support.

Installed on key terrain on the flanks of settlements and villages. They are used to cover barricades and barricades with fire.

Part of the reserve.

(3) Tanks and BMPs are normally used as part of a platoon. However, sections, single tanks and BMPs may be used with infantry platoons or squads. Infantry provide tanks and BMPs with close-in defense. Tanks and BMPs provide the commander with a mobile force capable of reacting quickly to enemy threats on various approaches.

f. Use of fire support. Fire planning must be carefully considered because of the proximity of buildings to targets, minimum range limitations, and redeployment requirements. Mortar and artillery fire is planned in front of and immediately around the defensive position for close support.

(1) Artillery fire support can be used in a mounted corrected fire role.

Artillery fire shall be used for:

Suppressing and blinding enemy elements.

Disorganizing or destroying assaulting forces.

Providing counter-battery fire.

Supporting counterattacks.

Providing direct when necessary.

(2) Battalion and company mortars are used for strikes against:
Enemy observation positions.

Enemy infantry before a is captured. Targets on rooftops.

Enemy reinforcements are within range.

(3) Last defense fire is planned to stop assaults on defensive positions by rushing infantry. Fire within the city is planned along likely routes of advance to destroy the enemy if he attempts to deepen the penetration.

(4) At the battalion level, the commander must prioritize fires based on the approaches and threats that pose the greatest threat to the defense. For example, during an attacker's initial advance, tanks, BMPs, and observation elements are the greatest threat to the defense. APCs should concentrate fire first on tanks, then on BMPs. Artillery and mortars must suppress and destroy APCs, observation posts, and \ or enemy elements. If enemy forces have captured a supporting bridgehead, priority shifts to destroying those forces.

(5) As the enemy advances, fire power increases to separate the enemy infantry from the accompanying tanks and armored vehicles. During this phase, artillery concentrates on attacking infantry, counterbattery fire, and the destruction of reinforcements approaching the city.

(6) When conducting a counterattack, fire support priority is given to the forces conducting the counterattack. When artillery is performing firing tasks as mentioned above, it must remain mobile and be prepared to move to the **planned** position to avoid enemy counterbattery fire.

(7) The battalion mortar platoon may be initially positioned forward to support the reconnaissance platoon. After the reconnaissance platoon has withdrawn, the mortar platoon is positioned from where it can support the entire battalion.

(8) At company and platoon level, the fire system includes fire from staff and attached weapons as well as support weapons. The company commander also plans his own mortar and artillery fire in front of and immediately around his fighting positions for close support.

(9) Based on the location of the platoon positions relative to the most likely directions of advance, the company commander must assign concentrated fire zones to the platoon leaders. Each platoon commander then assigns sectors of fire and concentrated fire zones to his machine guns. These positions must be selected to provide crossfire and mutual support between adjacent groups. Zones of concentrated fire will be fired upon established signals from platoon forward observers. Proposed concentrated fire zones must be clearly marked to determine the extent of available overhead fire and to establish the dead space that can be covered:

Sniper fire.

Grenade
launchers.

Mines and booby traps.

Mounted fire.

(10) Air defense systems available to the commander, such as Stinger MANPADS and Vulcan SAMs, are typically used to provide comprehensive air defense. The lack of good firing positions for long-range air defense missile systems in built-up areas may limit the number of systems deployed. In defense, these weapon systems will probably have to be airlifted into position. Rooftops and garage parking lots are good firing positions they usually offer the best line of sight. The Stinger and Vulcan can be assigned the task of defending specific positions or the task of general battalion support.

g. Use of Engineers. Engineers are used under battalion command or attached to companies and platoons. Typically, one engineer platoon or company supports a battalion task force or battalion. Commanders must consider engineering activities that extend survivability, mobility, and countermobility. Tasks that engineers can perform in the defense of a populated area include:

Arrangement of barricades and

destruction. Clearing fire sectors.

Installing min.

Preparation of routes in the rear. Preparation of combat positions.

h. Use of an antitank company. The antitank company normally supports the battalion security force by providing long-range antitank fire in front of the main defense position. Separate antitank sections may be attached to companies to cover likely tank-prone areas. Once the security forces withdraw, the antitank company is normally used in a battalion GS. If enemy forces do not have armored vehicles or if terrain prevents the use of TOW APCs, antitank platoons and companies in light airborne and air assault groups may use MK 19 AGSs and .50 caliber machine guns to support the defending groups.

i. Utilization of the reconnaissance platoon. Depending on the situation and the terrain, the battalion reconnaissance platoon may provide information to the security force in front of a populated area to provide the commander with early warning of enemy activity. After the security forces withdraw, the reconnaissance platoon may be tasked with securing the flanks or rear, occupying a defense sector (or fighting position), or remaining in reserve.

j. Use of Ground Surveillance Radar (GSR). LOS is best used on the outskirts of populated areas because of line-of-sight problems within a built-up area. In conditions of limited visibility, if suitable directions exist, the radar can be deployed to monitor a sector. Due to the short distances and of sectors in populated areas, the LRS may be vulnerable to detection and direct fire. Direction finding critical in this environment.

4-14. Time

The commander must organize and prioritize work according to time availability. Many tasks can be accomplished simultaneously, but priorities for preparation must be prioritized according to the commander's order. An example of prioritizing the sequence of work in defensive operations:

a. Establish security. The team must quickly establish comprehensive security by placing forces on the

likely approaches. Security force positions should have a minimum of one soldier to provide security during all preparations. The intelligence and counterintelligence plan should be given special attention.

b. Designate sectors of responsibility. Boundaries define sectors of responsibility. They include areas where groups can fight and maneuver without interference or coordination with other groups. Responsibility for major approaches should never be divided. In areas where observation and movement are less restricted, boundaries should be established along alleys or streets so as to include both sides of the street in a single sector. Where buildings present a continuous frontage along streets, boundaries will probably need to be drawn along one side of the street (Figure 4-6).

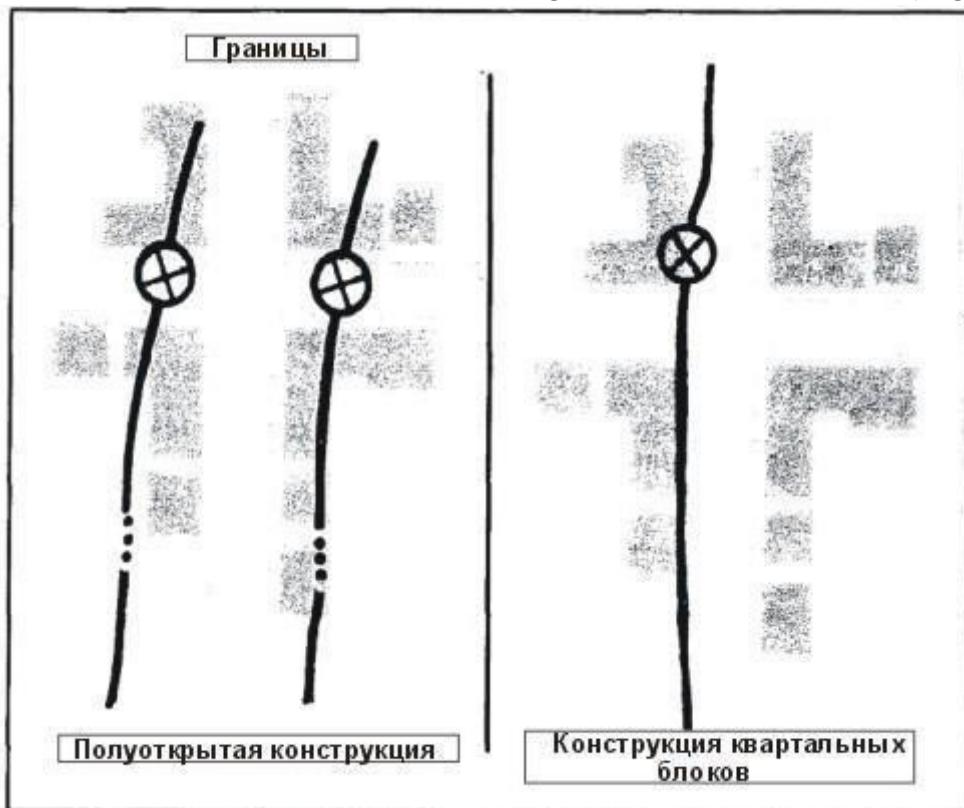


Figure 4-6. Границы в застроенных областях

c. Clear sectors of fire. In populated areas, commanders may need to destroy some buildings to provide greater protection and sectors of fire. If the ceiling of a lower floor can support the weight of the rubble, destroying the higher floors of a building before the battle begins may provide better protection against mounted fire. Destroying the entire building can

increase sectors of fire and obstruct enemy movement. Defenders must be careful when creating ruins. Too many ruined buildings may indicate the exact location of the defender's positions (in more or less intact buildings) and also deprive the defender of cover from direct fire in sufficient numbers.

d. buildings may also become obstacles on planned escape or counterattack routes.

e. Select and prepare initial combat positions. The commander should select positions in depth. The team should begin preparing positions as soon as they arrive. Enemy infiltration or movement sometimes occurs between and behind friendly positions. Therefore, each position must be organized for a circular defense. The defender must also:

(1) Minimally alter the appearance of the buildings in which the positions are located.

(2) Block windows and other openings to prevent the enemy from observing and throwing hand grenades. This must be done in such a way that the enemy cannot determine where the defenders are.

(3) Remove combustible material to reduce the fire hazard. Fire is dangerous to the defender and creates smoke that can conceal attackers. For these reasons, the defender should remove all combustible material and stockpile firefighting equipment (water, sand, etc.). The fire hazard also affects the type of ammunition used in the defense. Tracer or incendiary ammunition should not be used intensively if there is a fire hazard. (4) Turn off electricity and gas. Both propane and natural gas are explosives. Natural gas is poisonous and is not filtered by gas masks. Propane gas, while not poisonous, is heavier than air. If it leaks into a room, it displaces oxygen and causes asphyxiation. Gas lines and

electricity should be shut off at the respective stations that serve the city.

(5) Arrange positions in a non-template fashion. The group should avoid obvious firing positions like church spires, etc.

(6) Disguise positions.

(7) Reinforce positions with available materials, like furniture, etc.

(8) Block stairs and doors with wire or other material to prevent enemy movement. Create openings between floors and rooms to be able to move stealthily within the building.

(9) Prepare fire cards, fire systems and sector sketches.

(10) Establish machine gun positions in cellars. When not in use, the cellar should be blocked off to prevent enemy entry.

(11) Establish a supplemental supply of Class V and medical supplies.

e. Establish communications. Commanders should consider the impact of population centers on communications during the time allocation for establishing communications. Visibility limitations affect both visual and radio communications. Wire communications laid at street level are easily damaged by debris and vehicles. Also, the noise of battle in a populated area is much louder than in other areas, making audio messages inaudible. Therefore, the time required to install an effective communications system can be longer than in a typical landscape.

Commanders should consider the following methods when planning communications:

(1) If possible, run wire through buildings for maximum protection.

(2) Utilization of existing telephone systems. Telephone lines are not always sufficiently protected even most telephone cables are

are located underground. (3) Installation of radios and relay equipment on the second or third floor of a building.

(4) The use of messengers at all levels, as they are the most secure means of communication.

f. Establish barriers and mines. While conserving time and resources in preparing defenses, commanders should emphasize the use of all available materials (vehicles, driftwood, rubble) to create barriers. Improvised equipment and materials should be searched for and used in the creation of barriers. This equipment can be used with engineering equipment or in place of damaged equipment. Coordination with appropriate civilian officials must be made before civilian equipment is used. Engineers should supervise and assist in the construction of barrages and the installation of mines. The principles of using mines and barrages do not change in the defense of a populated area; however, the methods do change. For example, hiding mines in streets is difficult because of concrete and asphalt. Barrages must be attached to ruins and buildings to increase their effectiveness. FASCAM artillery cluster mine munitions may be effective on the outskirts of a city or in parks; however, in the urban core, they may be too restrictive for friendly forces to maneuver.

g. Improve fighting positions. When time permits, all positions, including extra and reserve positions, should be reinforced with sandbags and provide cover from mounted fire. Timely and accurate support by attached engineers assists in this effort (see Attachment

E).

h. Establish and mark routes between positions. Reconnaissance by all elements should assist in selecting routes between positions for use by the defender. Movement is essential when fighting in a populated area. Quickly selecting and marking routes adds to the defender's advantage.

In any defensive combat situation, the commander must be forward so that he can control the action. In a built environment, this is even more important because of obstacles, poor visibility, communication difficulties, and the intensity of combat.

Graphic control measures, common in other tactical environments, are also used in population center combat. Streets are ideal for control boundaries. These and other control measures ensure that the entire chain of command is coordinated.

Command post facilities must be located underground. Their vulnerability requires comprehensive security. Since each asset will probably have to provide its security, they should be located near the reserve for additional security. When command post assets are near another group, they may not need to provide their own security. Simplified command post organization for ease of movement is also required. Since debris often impedes vehicle movement, battalion and company headquarters must be prepared to use backpack radios and other necessary equipment for operations.

The battlefield is divided into three operational areas - deep, close, and rear. At the battalion level, operations are conducted in the close operational area. The defense is organized into three areas - the security forces area, the main battlefield, and the rear area. A battalion defending in a populated area may have tasks in any of these areas. Depending on the tasks of the brigade or

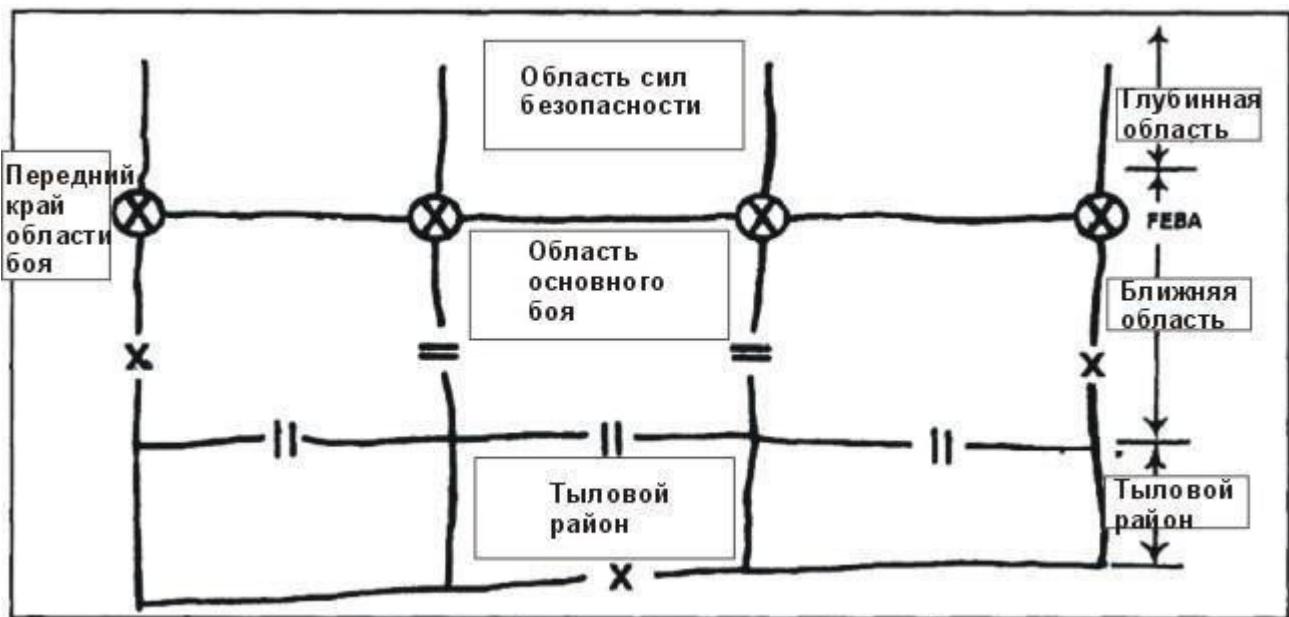


Figure 4-7. Организация поля боя

division (Figure 4-7).

- Security Operations. The defensive battle begins with security operations conducted by general forces in front of the main defense lane. Security operations include deception operations, defense operations, and, when reinforced with additional fire support and assets

mat. - maintenance, combat support operations, and combat cover operations. The commander decides which operation is the base operation based on factors. Designated forces use all available combat power to destroy the enemy and slow his momentum. Artillery, close air support, and attack helicopters are used to defeat the enemy during the initial period of combat.

(1) security operations objectives:

Warning defenses o the force, location и
o the main direction of the enemy's main
and supporting attacks.

Detention of the enemy's first echelon units. Inflicting the first defeat on the enemy forces.

Misleading the enemy as to the true location of the
of the main line of defense. (2) the withdrawal of security forces must not
result in a release of pressure on the enemy. The environment of a populated
area may complicate the transfer of combat from the security forces to the
main defense force.

However, this transition must be executed smoothly to prevent the opponent from developing momentum.

b. Main Battlefield (MB). The decisive battle is fought on the GPB. Depending on the enemy, the battalion commander may deploy companies on the city front or in combat positions in depth. In either case, the defense is made stronger by including forces that defend the near landscape on the flanks in the defense pattern. The battalion commander normally uses security forces along the front to provide early detection of the enemy and to prevent his reconnaissance from establishing the location of the battalion defense (counterintelligence) (Figure 4-8).

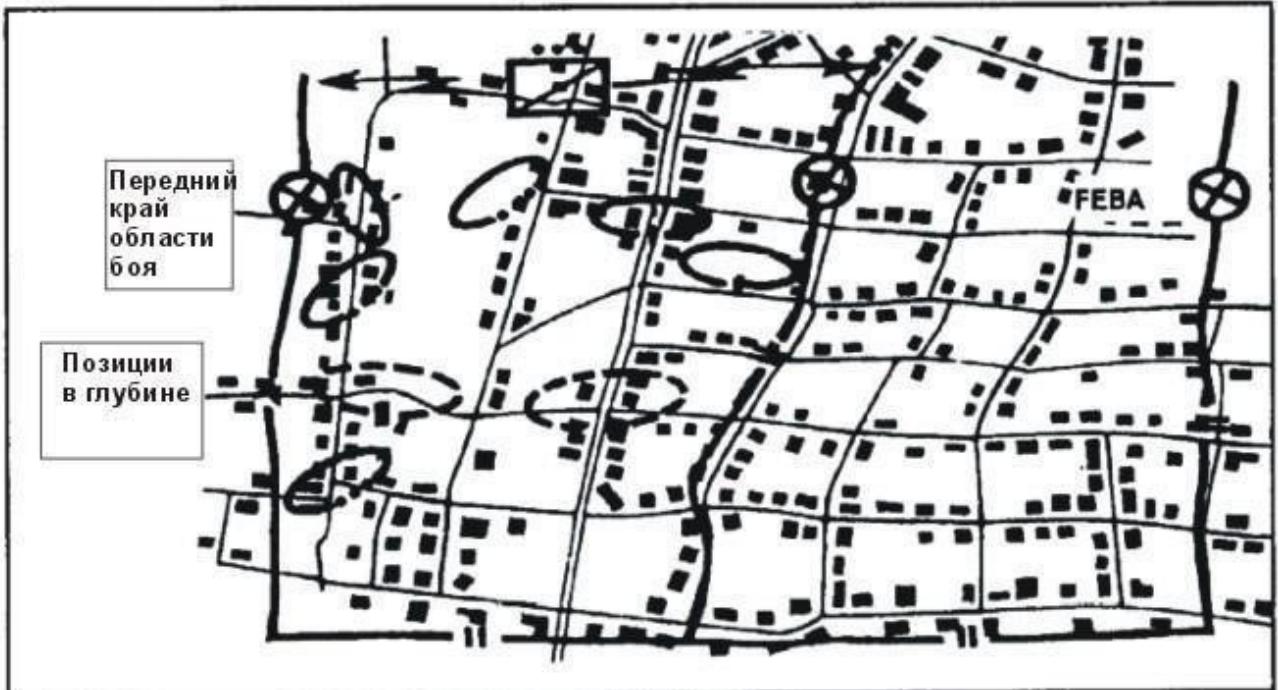


Figure 4-8. ОСНОВНОЕ ПОЛЕ БОЯ

- (1) the size and location of fighting positions within a battalion's area of operations depends primarily on the type of enemy and the ability to move between positions to block threatening areas. It may be desirable to place small anti-tank elements, protected by infantry, on the forward edge while the main defense is deployed in depth.
- (2) forces assigned to combat positions on the front lines of a city or town must:

Provide long-range enemy detection.

To inflict maximum defeat on the enemy at long range. To mislead the enemy as to the true position of the defense.

- (3) when enemy forces launch an attack and maneuver to seize initial objectives, the defender must use all available fire to destroy and suppress enemy direct fire weapons that support the attack. Tanks and BMPs must be destroyed as soon as they are within range of the anti-tank weapons.
- (4) as the enemy attack develops, the actions of small unit commanders take on special importance. Commanders of squads and platoons often

are the only commanders in independent combat. Therefore, it is important that all commanders understand their commander's concept. c. Rear area. The rear area is located behind the GPB. It is the area from which supply and service support is provided to forward units. At the battalion level, logistics area assets are at the GPB. They are not organized as combat elements, but are critical to the entire defense. The defense of these elements is vital.

Reserves should be prepared consisting of small infantry groups supported by BMPs and \ or tanks (if available) for counterattacks to restore key positions, block enemy penetration, protect the flanks, cover by fire the break in contact with the enemy and the withdrawal of units from shelled positions. When reserves are assigned the task of reinforcing a group for a counterattack, they may be attached to the group in whose sector the counterattack is planned. Otherwise, the counterattack becomes the main effort. This simplifies coordination, especially if the counterattack passes through the positions of the defending groups.

Task Force (TF) and OM commanders can expect the attacker to exploit limited visibility conditions to conduct operations to maintain previous momentum or gain momentum.

a. Commanders should use the following measures to defend against night attacks.

(1) Defense and heavy weapons positions should be moved just before darkness falls to mislead the enemy as to their exact location. (A squad or fire team may move an adjacent building and cover the same approach.) (2) Unoccupied areas between groups that are covered by observation and fire during the day will probably have to be occupied or patrolled at night.

(3) Radar, sensors and night vision devices should be installed on streets and open spaces.

(4) Signal mines, noise devices, tactical wire fences, and observation posts (OPs) for early warning should be installed on secondary approaches. (5) To prevent infiltration

NPs, planned mounted fire, patrols, and counter-attack devices must be used.

(6) Artificial lighting should be planned, including street lights, stadium lights, etc.

(7) Mounted fire, rocket-propelled grenades, and hand grenades must be used when the enemy is conducting combat reconnaissance of defense positions to avoid exposing them.

b. When the enemy launches a night assault, a planned signal must be given for an artillery strike on the planned zones. Heavy weapons, tanks, and riflemen fire within their assigned sectors. As soon as the enemy approaches the positions, grenades and guided mines must be used.

c. Defenses should move to day positions in front of the BMNT.

During attacks in fog, rain, or blizzard conditions, many of the techniques described for night defense apply. Commanders in these situations must rely on NPs and patrols. *Section V*.

A battalion-level plan for the defense of a locality depends on the size and location of the area. Many factors must be considered before adopting such a plan.

The battalion OG is assigned a defense sector that may include a village as a stronghold. This use of built-up areas is most common when the village is located on the main highway in the area or when it is between two obstacles that are difficult to reach. Including such an area in its defense, the battalion OG must occupy heights on both sides of the village to prevent the enemy from occupying them and shelling the village.

a. Most OG tanks and BMPs should be used where maneuver space is greatest (on key terrain on the flanks of the village). Anti-tank vehicles (BMPs and \ or self-propelled ATGMs) should also be used here. When the security forces withdraw and companies and teams or teams take over the fight, BMPs and ATGMs can take over the task of supporting positions in depth with fire.

b. Although the battalion's OG positioning should be such as to prevent large enemy forces from threatening the rear area and flanks of the village, the danger of infiltrating small

of enemy units requires the village to be prepared for a circular defense.

c. Engineers are required to maintain team mobility and should remain with the company or company team in the settlement to provide continuous engineering support if the company or company team becomes isolated. Engineering support for the rest of the OG must be managed centrally by the OG commander. Engineering force assets may be in the DS of other companies or company commands. Priority of material consumption for obstacles, demolitions, and mines should be given to the company or company team in the village.

d. The OG commander must use key terrain on the flanks of the village to maneuver to prevent isolation of the village defenses. A stronghold in the village must be provided by a firm position from which the enemy can be stopped and from which a counterattack can be launched (Figure 4-9).

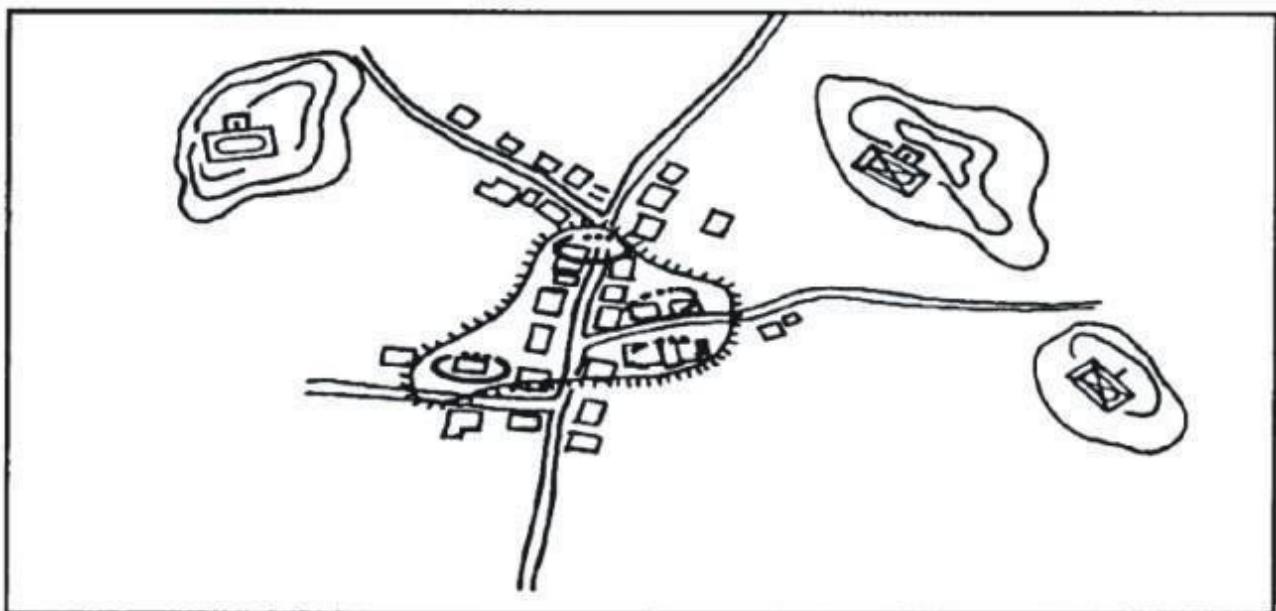


Figure 4-9. БАТАЛЬОН В ОБОРОНЕ ДЕРЕВНИ

In addition to village defense, the battalion OG may be assigned the task of defending a sector in a city (Figure 4-10). The battalion must take advantage of the outermost buildings to provide long-range enemy detection and apprehension, and of the stronger buildings in depth to provide a solid defense. This defense should cover an area of approximately 4 to 12 square blocks.

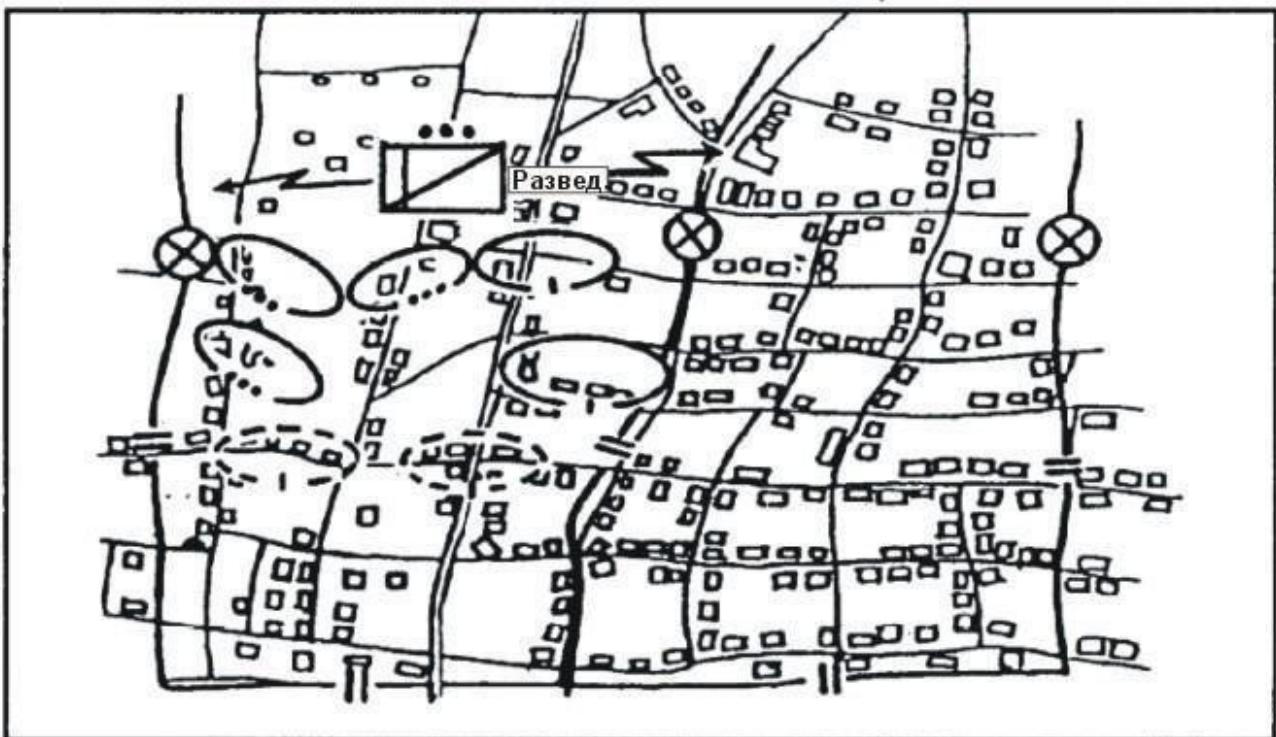


Figure 4-10. ОБОРОНА В СЕКТОРЕ ЗАСТРОЕННОЙ ОБЛАСТИ

- a. The deployment of the battalion CG begins with a reconnaissance of the locality by a reconnaissance platoon to gather information about the area and the enemy location. At the edge of the area, where the sectors of fire are largest, the battalion AG should deploy BMPs, ATGMs, and other anti-tank weapon systems to provide long-range anti-tank defense.
- b. The front edge of the battle area should include the largest buildings in the sector. Along the front of the front edge of the battalion's battle area, the battalion should deploy a security force, which may consist of a reinforced company. The security force should force the enemy to deploy into combat formation, but the security force should avoid engaging in serious combat. This can be accomplished by maximizing the use of ambushes and obstacles, covered and concealed routes through buildings to break contact with the enemy. Security forces inflict casualties and delay the enemy, but avoid serious combat because buildings outside the forward edge of the battle area are not suitable for a solid defense. As the fighting approaches the edge of the battle area, the security force establishes the direction of the enemy's main attack. After reaching the battle area leading edge,

security forces can be used as a reserve and reinforce other elements of the battalion or can conduct a counterattack.

c. The defense along the forward edge of the battle area consists of a series of positions similar to those described in the company defense of a village. Features of key terrain, such as capital buildings, road junctions, and good firing positions should be the focus of the stronghold defense. Based on the factors, defenses in a sector may consist of strongholds or fighting positions. Strongpoints located on or covering a decisive landscape are extremely effective in defense. Buildings must be prepared for defense as described in Appendix D.

d. BMPs should be used to destroy BMPs, APCs and BRDMs; cover barriers with fire; and participate in counterattacks together with tanks. They can also be used to transport killed and wounded and for supply.

e. Battalion assigned tanks should be used to destroy enemy tanks, cover obstacles with fire and for counterattacks. They are to be used in platoon form where possible, but in densely built-up areas they may also be used in sections.

f. Artillery and mortar fire should be used to suppress and blind enemy observation elements, destroy enemy infantry on approaches, conduct counter-battery fire and support counterattacks using mounted and direct fire.

g. Engineers should be attached to the delaying force to assist in laying mines and obstacles, clearing firing sectors, and preparing routes to the rear. These routes should also have barricades. Engineers should support forces in strongholds to help prepare fighting positions.

The objective of the detention is to slow the enemy, inflict casualties, and stop him (if possible) without exposing him to effective enemy fire or being constrained in maneuver. The detention may be oriented toward the enemy or toward landscape features such as key buildings or industrial complexes.

a. Detention in a populated area consists of a sequence of ambushes and fighting positions (Figure 4-11).

(1) Ambushes are planned with covered barrages, must be carefully coordinated, and must provide for a decentralized execution. Battalion OG deployments for ambushes are conducted at important street intersections. Ambushes may be combined with enemy flank attacks with limited targets. Ambushes are usually effective at the edge of open spaces, parks, wide streets, and so on. They should be carried out by tanks and BMPs together with hasty infantry.

(2) Combat positions should be located where heavy weapons such as tanks, BMPs, ATGMs, anti-tank weapons and machine guns will have the best sectors of fire. These locations are usually at major street intersections, in parks and on the edge of open residential areas. Combat positions should be carefully prepared, fortified with obstacles and ruined buildings, and supported by artillery and mortars. They must inflict maximum casualties on the enemy and force him to deploy for a planned attack.

b. Primary and secondary positions should be prepared for tanks, BMPs and anti-tank weapons to reduce their vulnerability. Coordination between withdrawing ambushes should be continuous until they have established themselves in new fighting positions.

c. The battalion CG is most effective when deployed in two delaying echelons in combat positions with ambushes between them. When the enemy threatens to seize a fighting position, the company breaks contact with it and withdraws back to the next fighting position. As soon as the withdrawing company passes the rear company, it takes another fighting position. Smoke and destruction are used to facilitate breaking contact with the enemy. Security elements on the flanks can be used to prevent the enemy from engaging the holding force. A small reserve can be used to respond to unexpected enemy action and to conduct sustained attacks on the enemy's flanks.

D. Engineer leadership should be centralized to ensure that combat positions are prepared. The preparation itself should be decentralized to support the ambush force.

e. The width of the OH zone depends on the type of buildings, obstacles along streets, and the time for which the enemy must be delayed.



Figure 4-11. БАТАЛЬОН В ЗАДЕРЖАНИИ

A company defense plan in a populated area depends on the size and location of the area. Many factors must be considered before adopting such a plan.

Once the company commander completes his reconnaissance of the village, he organizes a reconnaissance of the surrounding landscape and, based on the information gathered, develops his defense plan (Figure 4-12). One of his first decisions is to defend the village by positioning the infantry at the village's front edge or farther back in the village.

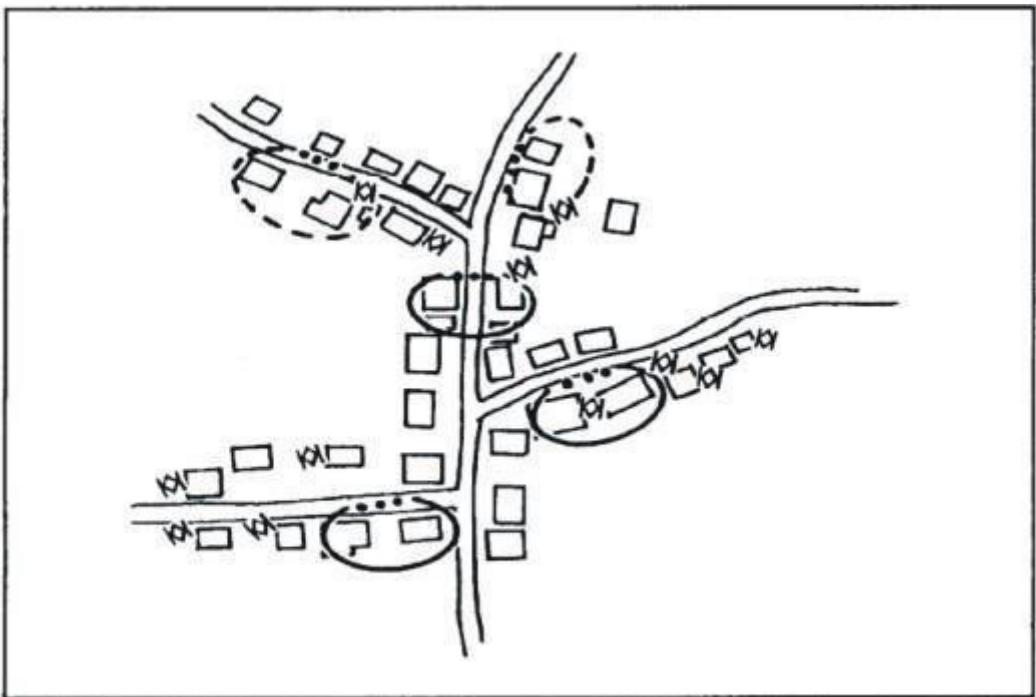


Figure 4-12. РОТА В ОБОРОНЕ ДЕРЕВНИ

- a. Several factors influence the commander's decision. First, he must determine the enemy against whom he will have to defend. If the threat is primarily hasty infantry, the greatest danger is that enemy infantry will seize a stronghold in the village. If the threat is armored or motorized infantry, the greatest danger is that the defensive position will be subjected to massive direct . The company commander must also consider the terrain in front of and on the flanks of the village from which the enemy can direct fire at his positions.
- b. Platoons are given a small group of buildings to prepare their defenses, assigning the platoon leader to organize squad positions with mutual support. This increases the area the platoon can control and reduces the enemy's ability to isolate or bypass the platoon's position. The platoon is responsible for the road through the village. The rest of the company is positioned to provide comprehensive security and echeloned defense.
- c. The position for company mortars should be selected with consideration given to their protection from direct fire and the free space available along the firing trajectory. Company BMPs or APCs are placed in positions at the rear of buildings and in courtyards, where their weapons can provide an additional

rear and flank security. Combat vehicles are assigned primary, secondary and reserve positions as well as primary and secondary sectors of fire. Vehicles should be positioned in natural shelters behind rubble, behind walls or inside buildings for movement into and out of the area. Platoon BMPs or APCs should be operated by the platoon commander for refueling, BC replenishment, evacuation, and rapid redeployment during combat.

d. The company commander is located in a forward area from which he can direct the disposition of his incoming forces. The location is chosen near a highway to facilitate evacuation and maintenance operations. Company NPs are established where the best observation sectors are available.

e. The company commander must decide which buildings are to be destroyed. To engage the enemy, he must have good sectors of fire, but too many destroyed buildings can give the enemy the exact location of the defending forces and deny those forces cover from direct fire. Company ATGMs are placed on heights in and around the settlement to take advantage of good sectors of fire on the front and flanks.

f. If an OG tank platoon is available, the company commander can position tanks along the leading edge where their rapid fire will supplement TOW and Dragon APC fire. The tank platoon commander must select accurate firing positions and assign sectors of fire. If the tanks detect enemy infantry up close, they move to additional positions with infantry protection. These additional positions allow them to fire the front as well as the flanks with minimal movement. Once the tanks have retreated from the front edge of the settlement, they can provide a mobile reserve for the team.

g. Areas of concentrated fire are planned to destroy the greatest threat to the platoon - enemy infantry. If an artillery strike is necessary in a populated area, mortars are more effective than artillery because of the steeper angle of impact of their ammunition, allowing them to be used for street strikes.

h. Obstacles, mainly vehicle obstacles, are easily created in a populated area. The company commander must stop enemy vehicles without

limiting the movement of its own traffic in the village. It therefore needs to create funnels in key streets. Mines are placed on the outskirts of the village and along routes that will not be used by the company.

i. Engineer support uses C4 and other explosives to make loopholes, manholes, and barriers collapse. Based on their work priorities, the company commander assigns the engineer squad leader to help each platoon of infantry prepare the village for defense and set up the barrier system. The squad leader's job is to tell the infantrymen exactly where to set up the means of destruction and the number of them necessary for the desired effect. He also assists in locating and registering the minefield and in preparing combat positions.

j. Ammunition consumption is usually high when fighting in a built-up area. To avoid traveling to the outskirts of the village to resupply ammunition during combat, the commander makes arrangements to bring in as much ammunition as possible and stockpile it at each platoon and squad position. He also assigns platoons to prepare firefighting equipment, drinking water, food, and medical supplies at each squad position. Other factors the company commander must consider:

Supplies.

Medical evacuation.

Communications.

Firefighting.

Alarm action plan. Safety.

Limited visibility. Civil control.

k. To ensure adequate communications, the company will lay a wire network and develop a plan for pyrotechnic signals. A backup wire must be laid in case the main wire is cut by vehicles, fire, or the enemy. The commander also plans for the use of messengers throughout the village.

A company in a populated area will probably have to defend a city block in the center of the periphery or in a residential area. The company conducts this operation in accordance with the battalion defense scheme. The operation must be coordinated with security forces performing detention tasks in front of the front of the company's position. The defense must take advantage of the protection of buildings that dominate the roads. A well-organized company defense:

Stops enemy attacks on roads using roadblocks and fire. Destroy the enemy by ambush and direct fire from prepared positions.

Pushes the enemy out of the supporting bridgehead he has occupied, or remains in place for the battalion's counterattacks.

b. A company operation is more effective if the company has time to scout the landscape and prepare areas of fire and obstacles. Vehicles not used for defense should be grouped in battalion. NPs should be supplemented by patrols, mainly at night, and communication with the NP should be by wire. The company should be organized to provide several NPs, a defense and a reserve with the task of counterattacking.

c. Defense forces should ambush approaches, cover barriers with fire, and prepare strong defenses inside buildings (Appendix D). The tasks of the reserve may include:

Strengthening defenses with fire.

Reacting to a threat to the flanks.

Counterattack to squeeze the enemy out of the .

d. Engineers must be under company control. They create obstacles, prepare routes, and assist in preparing defense positions. A company or section of tanks attached to a company must provide heavy support with direct fire, destroying enemy tanks and supporting the counterattack.

A company detention operation may be part of a battalion defense (Figure 4-13). These operations are designed to destroy enemy reconnaissance elements in front of the settlement's outskirts, prevent them from entering the settlement, and establish and maintain contact with the enemy to determine the strength and direction of his main attack.

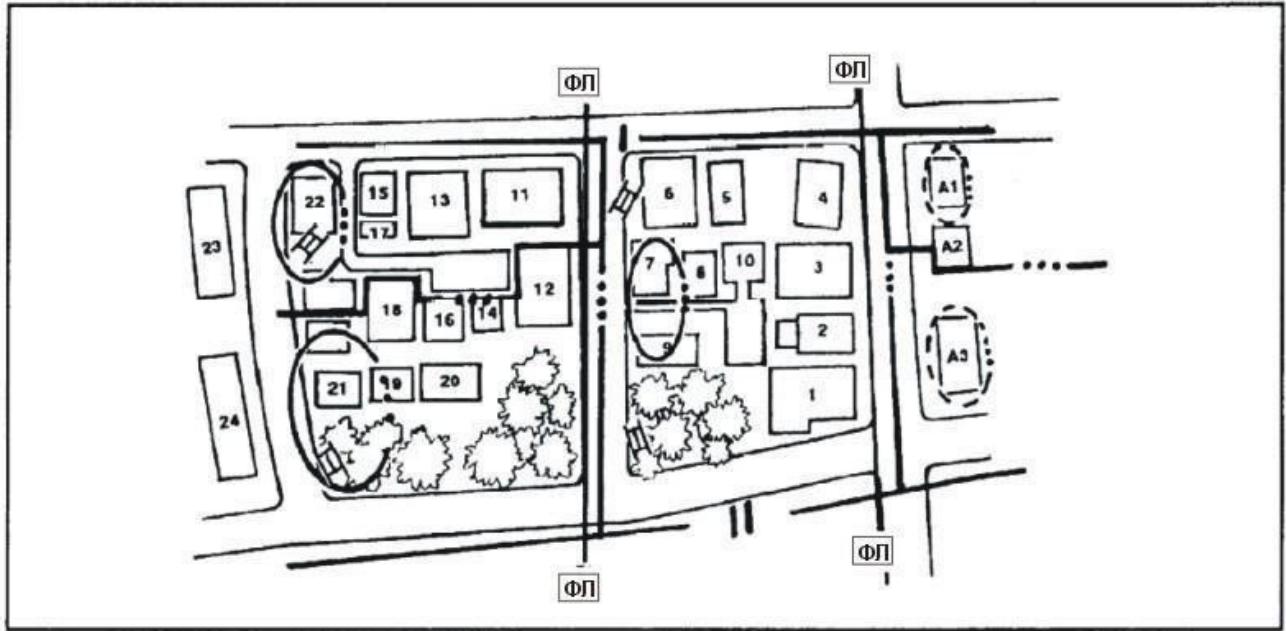


Figure 4-13. РОТА В ЗАДЕРЖАНИИ

FP - control boundary

- a. The company sector must be equipped with barricades to maximize the effect of apprehension. Engineers prepare obstacles on the main routes, but some routes known to friendly forces (covered and concealed) are left unobstructed for reinforcements, redeployment, and supply. These routes are destroyed when they are no longer needed.
- b. Anti-tank weapons are located on the outskirts of the settlement to destroy the enemy at long range. They must be located in covered positions or in prepared shelters. They fire on targets that appear and then withdraw or follow to the additional position. Platoons should be assigned sectors 500 to 700 meters wide (one to two blocks). They should be equipped with sensors or ground target reconnaissance radar, which may be located in the suburbs or at altitude. Platoon detention is accomplished by the use of patrols, NPs, ambushes, and all types of barricades. Each action ends with breaking contact with the enemy and withdrawal. During the day the defense is dispersed; at night it is concentrated. Coordination is very important.
- c. Tanks supporting a platoon destroy enemy tanks, provide destructive fire, help platoons break contact with the enemy, and cover obstacles with fire.
- d. BMPs support the platoon in the same manner as tanks, destroying tanks, APCs, BMPs and BRDMs.

A company or company team may be tasked with defending a key area in a populated area to prevent enemy capture (Figure 4-14).

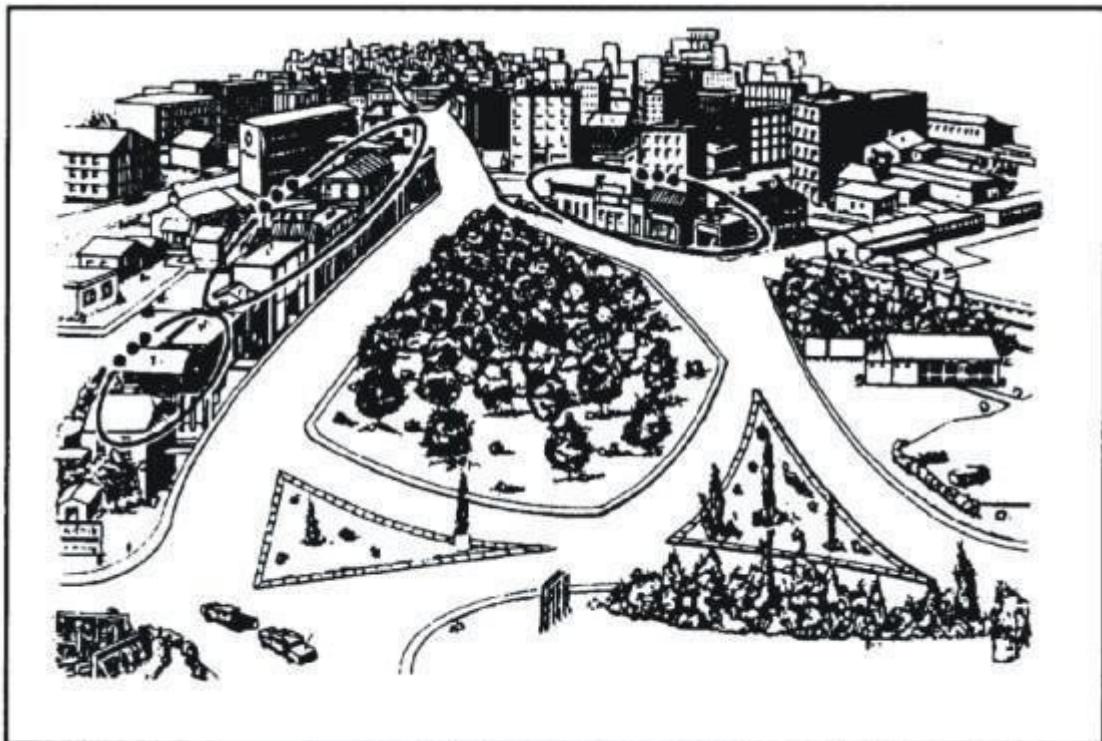


Figure 4-14. ОБОРОНА ПЛОЩАДИ

- a. The company commander to whom this task is assigned must analyze the enemy approaches and the buildings that dominate those approaches. He must prepare all possible firepower on the square itself and on the approaches to it. He must also plan a circular defense of the buildings that dominate the square to prevent encirclement. The commander should prepare as many covered and concealed routes between these buildings as possible. This makes it easier to concentrate or transfer fire and execute counterattacks.
- b. Barricades can also limit enemy use of the space. The planning of barrages in this case must take into account friendly forces' use of the area, if any. TOW and Dragon APCs can fire across the square if the sectors of fire provide sufficient range. Tanks must destroy enemy tanks and support counterattacks with heavy direct fire. BMPs must destroy APCs, BMPs, BRDMs and provide direct fire to cover obstacles.

A platoon's plan of defense in a populated area depends on factors (rules of engagement).

One common task that will be given to a platoon in a defense is the defense of a strongpoint in a building, part of a building, or a group of small buildings (Figure 4-15). Platoon defense is usually included in a company task (plaza defense, etc.). The platoon must thwart enemy attempts to seize a supporting beachhead in buildings. This is accomplished by making the best use of its weapons and supporting fire, by organizing a circular defense, by its own counterattacks, or by company counterattacks to drive the enemy from the supporting bridgehead. The platoon leader analyzes his defensive sector to recommend to the company commander the best use of obstacles and fire

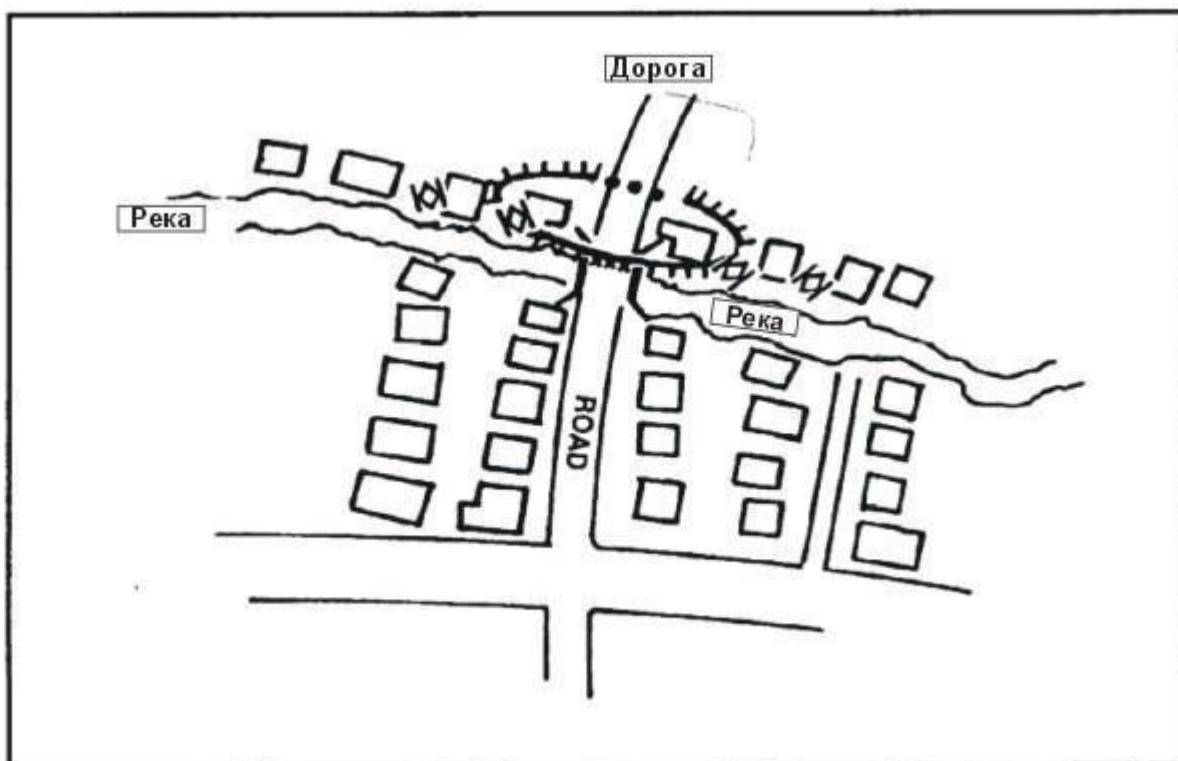


Figure 4-15. ОБОРОНА ОПОРНОГО ПУНКТА

support.

a. The platoon should be organized in a series of firing positions covering approaches and obstacles and providing mutual support. Snipers may be positioned on the upper floors of buildings. Unoccupied elements should be prepared to counterattack, fight fires, or reinforce other elements of the platoon.

b. Depending on the mission, the platoon should stockpile the following: Tools (crowbars, shovels, sledgehammers, etc.).

Material for barriers (barbed wire, sandbags). Ammunition (especially grenades).

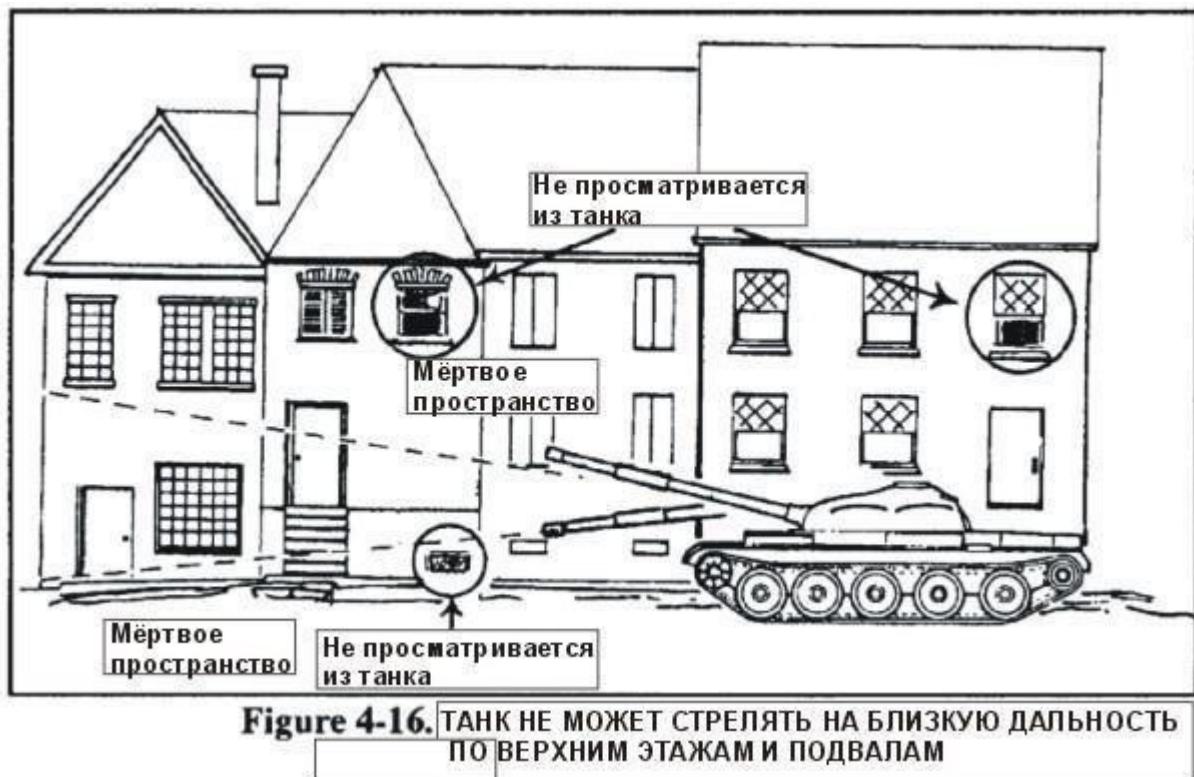
- Food and water.
- Medicines.
- Fire Fighting Equipment.

The landscape of populated areas is well suited for infantry defense against mechanized infantry and armored troops. Mechanized infantry and armored forces avoid populated areas, but may be forced to pass through them. Well-trained infantry can inflict heavy casualties on such forces.

- a. Settlements have some features that endorse infantry anti-tank operations.
 - (1) Ruins in the streets can be used to block enemy vehicles, lay mines, cover and concealment.
 - (2) Streets limit armor maneuver, sectors of fire, and communications, reducing the enemy's ability to maneuver and use reinforcements.
 - (3) Buildings provide cover and concealment for infantry protection.
 - (4) Rooftops, alleys and upper floors provide good firing positions.
 - (5) Collectors, drainage, and subway systems provide subway routes for infantry forces.
- B. Anti-tank operations in populated areas include the following planning steps:
- STEP 1: Select a good target area. Enemy tanks should come under fire where their ability to support each other is most limited. The best way for infantrymen to attack tanks is to attack them one at a time, so as to destroy one tank without being observed or fired upon by another. Positions are usually located on narrow streets, road corners, T-junctions, bridges, tunnels, overpasses, and destroyed areas. In less obvious locations, explosives or mines may also be used to create barriers.

STEP 2: Select good positions. The best positions are located where the weaknesses of the tank are maximized, and the infantry enjoys

maximum protection. The ability of the tank crew to see and fire is limited, mainly to the rear and flanks if the tank crew is operating with hatches closed. Figure 4-16 shows the dead spaces of weapons and target visibility from the tank at ground level. The same dead space exists against targets located above. STEP 3: Assign landmarks, and select the method of fire. After selecting the



positions, designate landmarks to ensure that the fire will cover and control the areas. Landmarks must be clearly visible through the gunners' sights and must be resistant to destruction by vehicles (e.g., large buildings or bridge supports, but not trees or vehicles). The antitank commander must determine which method of fire should be used-frontal, crossfire, or depth fire. Frontal fire is the least appropriate because it exposes the gunner to the greatest probability of detection and forces fire on those areas of the armored vehicle where the armor is thickest. (more information on methods of firing on various targets, see FM 7- 91 and \ or FM 23-1.)

- (A) The best places to fire at tanks are to their flank and rear at ground level, or from above if the gunner is in position in the upper floors of a building (see Appendix H for minimum ranges). The anti-tank defenses may be arranged as shown in Figure 4-17.

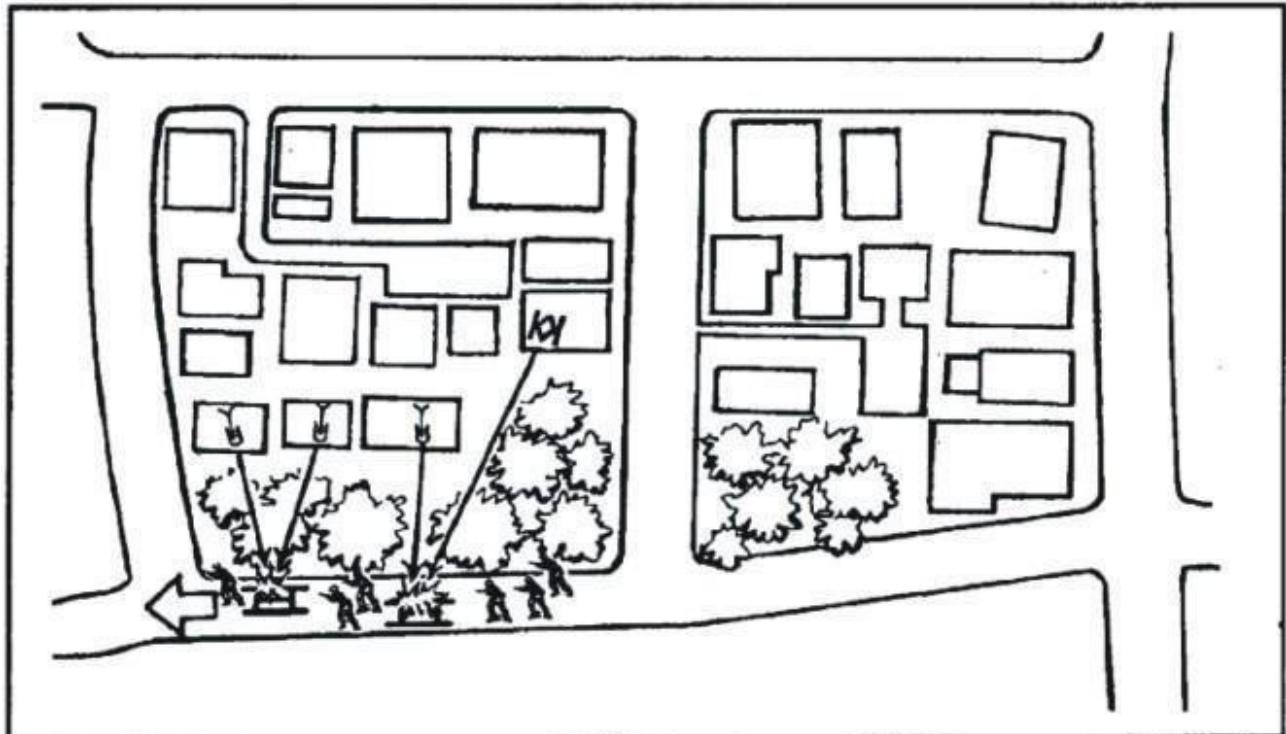


Figure 4-17. ПРОТИВОТАНКОВАЯ ОБОРОНА ВЗВОДА

- (B) The best place to shoot at a tank from the flank is over the second roller.
- (C) To fire safely from the overhead position, the infantryman must allow the tank to approach at a range that does not exceed three heights from the ground to the weapon position.

(D) When firing at long range, there is a risk of return fire, as the position will not be in the upper dead space of the tank. However, firing from above to the rear or flank of the tank is more effective. Additional and alternate positions should be selected to provide all-round safety and increase flexibility.

STEP 4: Coordinate fire on targets. Tanks are most vulnerable when their crews are unable to observe by peering out of their hatches. The first task in destroying tanks is to force their crews inside using all available direct and mounted fire. Proper use of fire control measures reduces the likelihood of casualties from friendly fire. The next challenge is to coordinate anti-tank weapons fire to simultaneously destroy all targets in the engagement area.

- c. Armored vehicles in a built-up area are often accompanied by infantry. Anti-tank weapons must be supported by effective and comprehensive antipersonnel defenses (Figure 4-18).

d. On a planned signal (e.g. mine explosion), all targets are destroyed simultaneously. If targets cannot be destroyed simultaneously, they are destroyed in order, starting with the most dangerous ones. Although tanks pose the greatest threat, BMPs are also dangerous because their infantry can rush in and destroy antitank assets. If friendly antitank forces are not protected by sufficient infantry, priority of destruction may be given to enemy BMPs. Ruins and mines must be used to reduce target mobility and increase the number of targets hit.

A rifle company may use an attached tank platoon to ambush a populated area

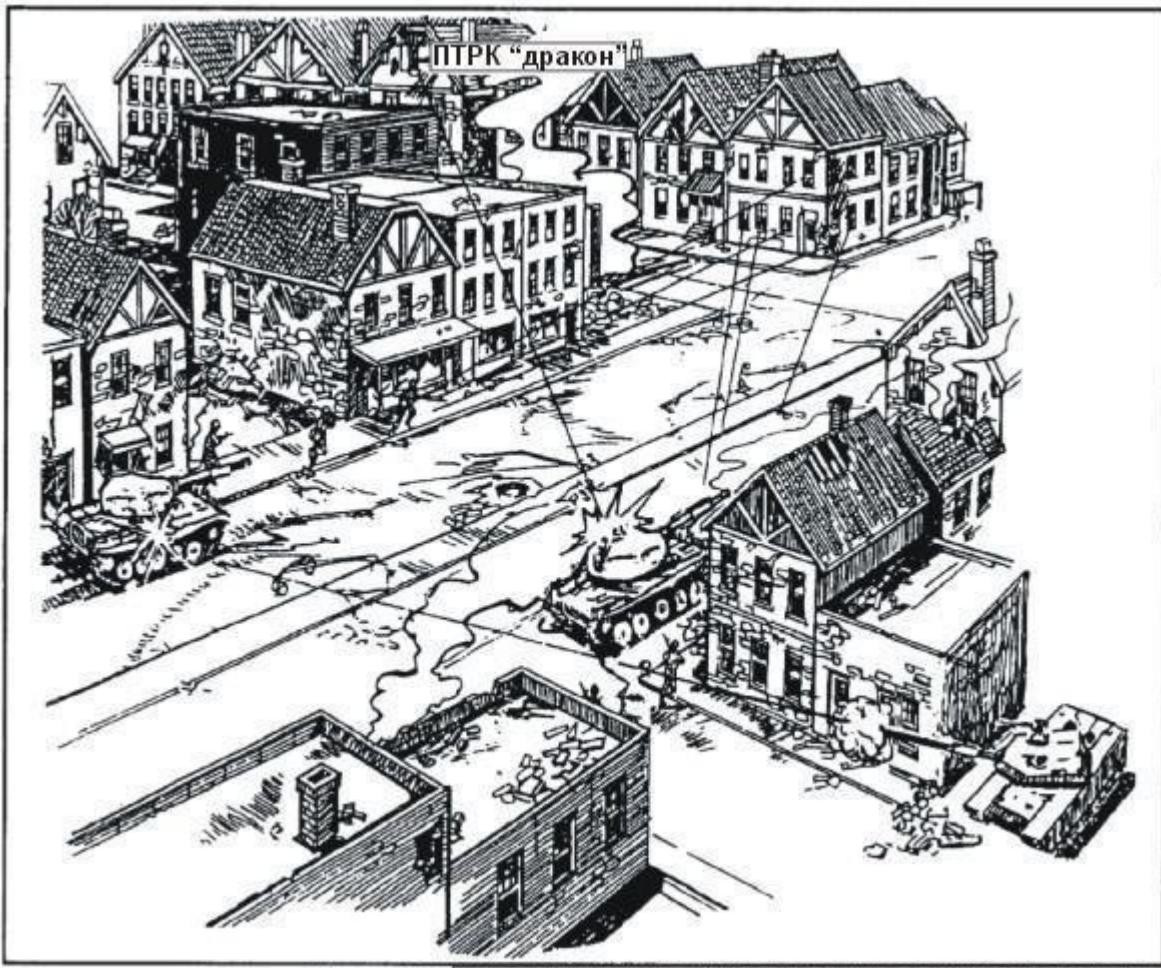


Figure 4-18 СКООРДИНИРОВАННАЯ ПРОТИВОТАНКОВАЯ ЗАСАДА

(Figure 4-19). To do this, the tank platoon must be reinforced with a BMP or APC and one or two rifle company squads. The ambush can be effective against enemy armored vehicles if conducted in an area cleared and reconnoitered by friendly forces.

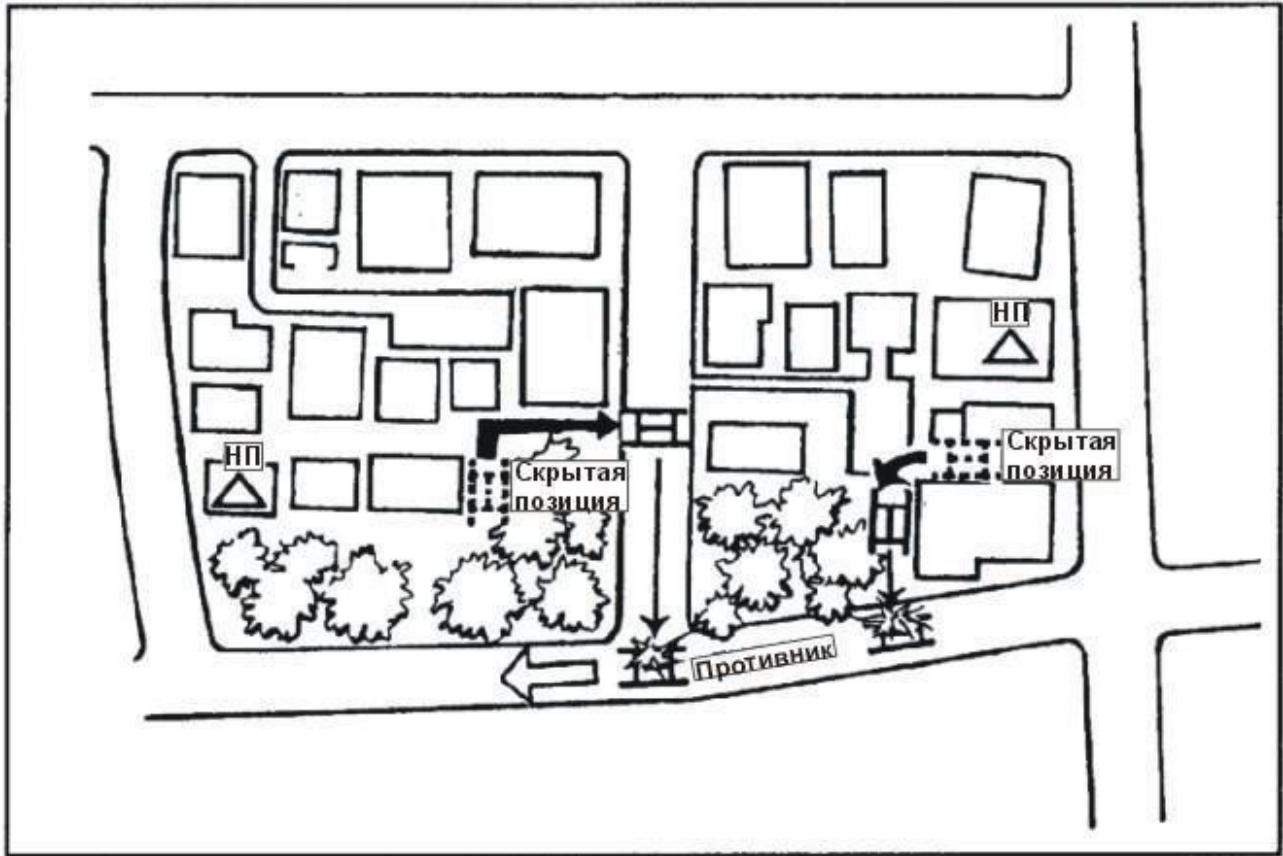


Figure 4-19. ТАНКОВАЯ ЗАСАДА

- a. The operation involves a maneuver on a road network that is free of obstacles. Obstacles outside the ambush area can be used to force the enemy to move along routes and delay him. The ambushing tank platoon must have a good knowledge of the area.
- b. Ambushing tanks should be positioned in a concealed position approximately 1,000 meters from the route along which the enemy is expected to approach. The security post observes and reports the approach, speed, security measures, and enemy actions. This role is assigned to a reconnaissance unit that uses BMPs, self-propelled APCs, or APCs to move from NP to NP. When enemy intelligence is received, the tank platoon leader decides where and how he should move his tanks to execute the ambush.
- c. Tanks move quickly from their concealed positions to firing positions, utilizing all available cover. They fire into the flank of the approaching enemy from an average range of 300 to 400 meters. Firing from this range ensures the tanks' safety from enemy infantry antitank fire. As soon as the enemy is destroyed or halted or has organized resistance, the tanks move out of contact and move to the reassembly point with the provision of short-range

security with an infantry squad. Then move to a new ambush location.

Chapter 9. Fundamental Combat Skills

The success of combat operations in populated areas depends on the proper use of the rifle squad. Every Soldier must be an expert in the methods of combat in populated areas: Moving, entering buildings, clearing buildings, using hand grenades, selecting and using firing positions, navigating in populated areas, and camouflage. Soldiers must be mindful of their responsibilities in teams when moving through an urbanized battlefield.

Movement in populated areas is the first fundamental skill in which the soldier must be a master. Movement techniques must be honed until they become natural. To reduce the effectiveness of enemy fire, the soldier must present a minimal target, avoid open areas, and always choose his next concealed position before moving.

Each Soldier must learn the proper method for overcoming fences and walls (Figure 5-1). Once the other side is scouted, the Soldier quickly crawls over the wall while maintaining a low silhouette. His quickness of movement and low silhouette prevent the enemy from aiming fire at him.

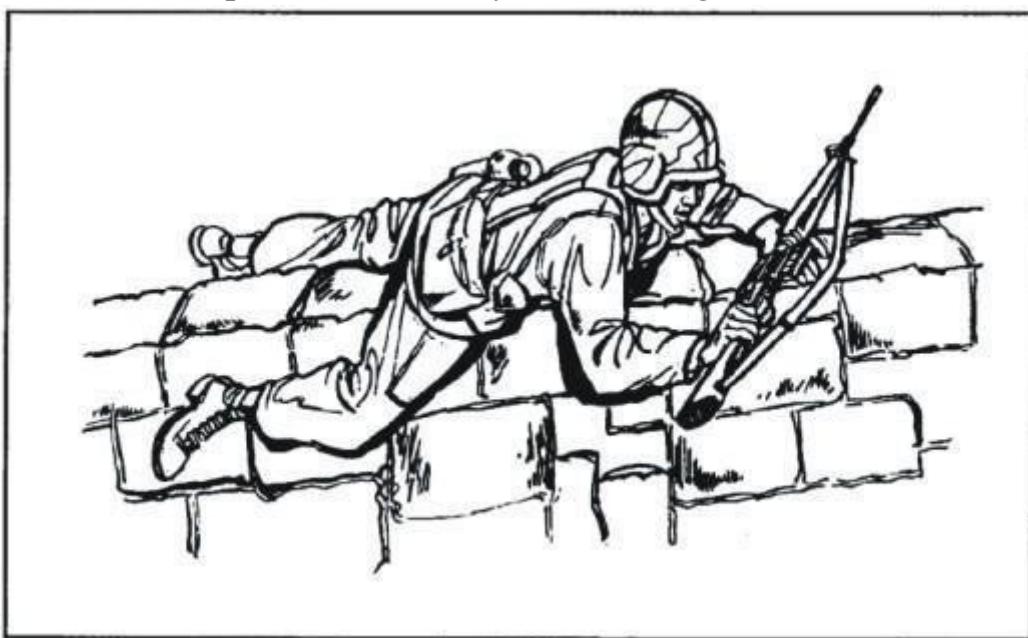


Figure 5-1. [Солдат преодолевает забор]

The area around the corner should be inspected before the soldier starts to go around it. The most common mistake is to display a weapon from around the corner,

which reveals his position to the enemy in advance. The Soldier must be at a lower level (crouched, lying down) in order to stand from around the corner below the level at which the enemy expects to see him. When proper techniques are used to move around a corner (Figure 5-2), the Soldier lies on the ground and does not display his weapon around the corner of the building. He makes sure to use a helmet and to keep his head (at ground level) at a

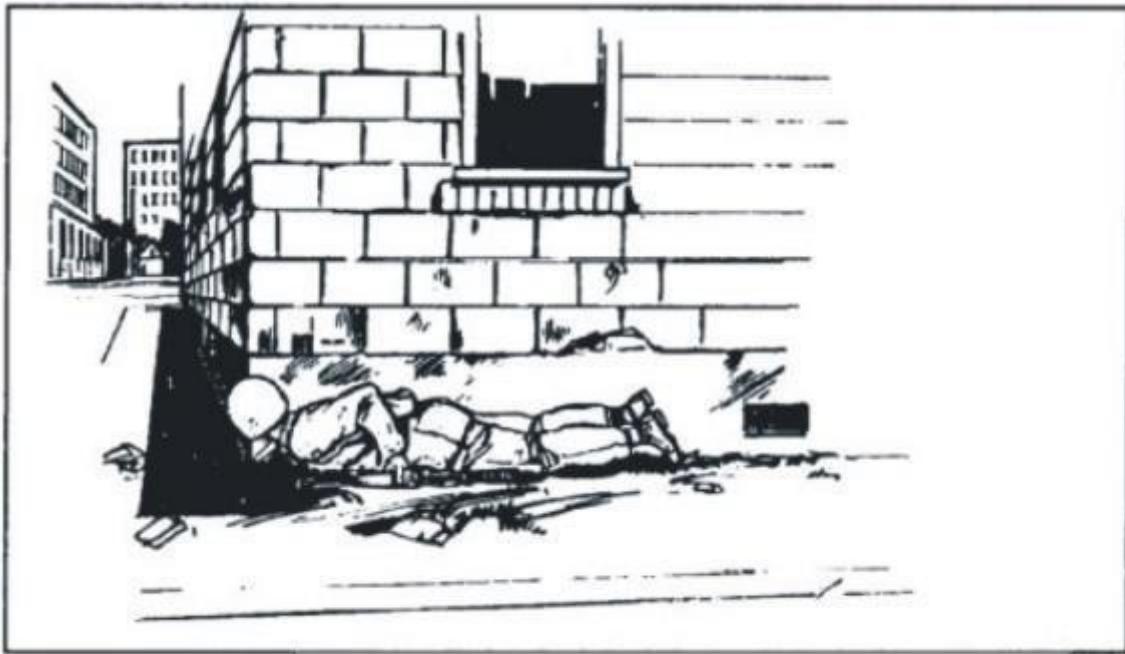


Figure 5-2. Метод осмотра пространства за углом

distance necessary for observation only.

Windows present another hazard to the Soldier and unit commander. The most common mistake when passing a window is to display the head. If the Soldier shows his head (Figure 5-3), an enemy Soldier inside the building can hit him through the window without being under friendly cover fire.



Figure 5-3. Солдат перемещается под окном

- a. When using the correct technique to pass a window, the soldier moves below the level of the windows (ducking or crouching). He is positioned close to the wall of the building. The enemy inside the building is forced to expose himself to cover fire if he tries to hit the soldier.
- b. The same techniques are used when passing by first floor (basement) windows(Figure 54). The soldier should not appear in the basement window area because he is a good target for the enemy inside the building. When using the correct method to pass a basement window, the soldier is positioned close to the wall of the building and walks over or jumps over the window firing sector.

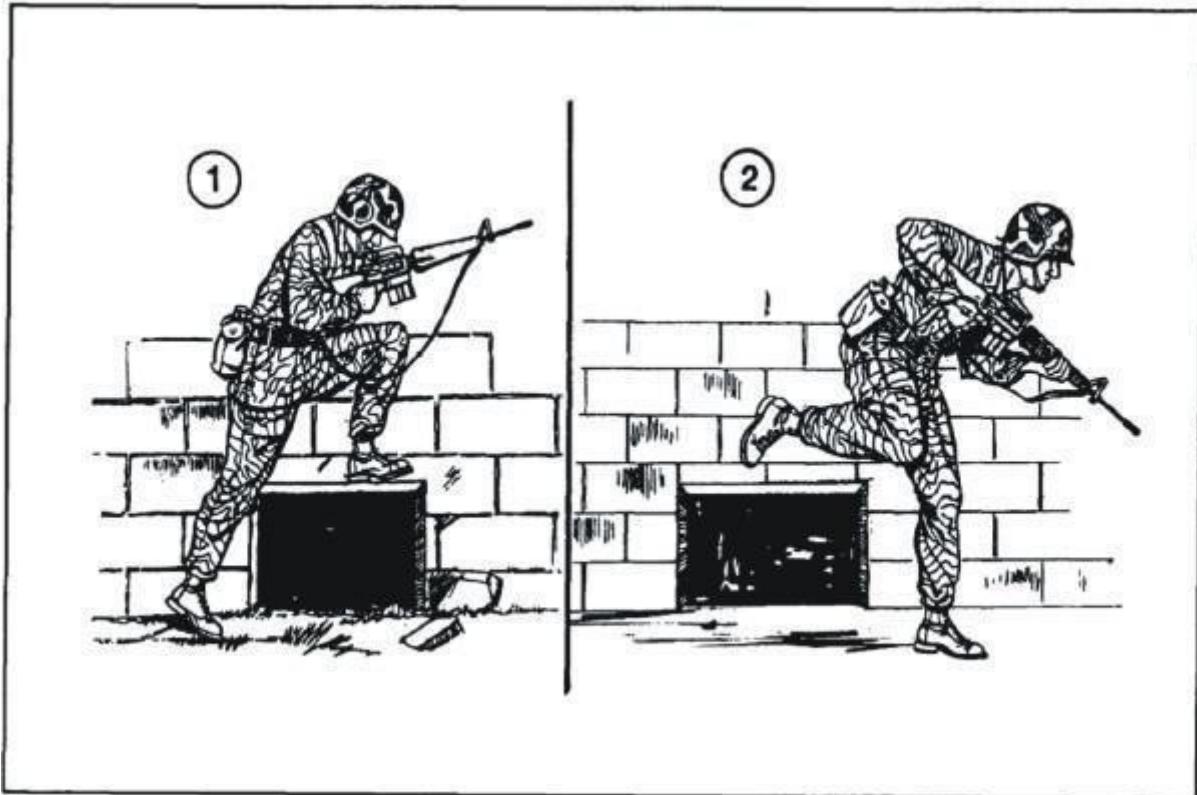


Figure 5-4. Солдат перепрыгивает подвальное окно

Doorways should not be used for entry or exit, as they are normally covered by enemy fire. If a soldier exits through a doorway, he should move quickly through it to his next position, remaining as low silhouette as possible (Figure 55). Advance position selection, speed, low silhouette, and the use of covering fire are especially important when exiting doorways.

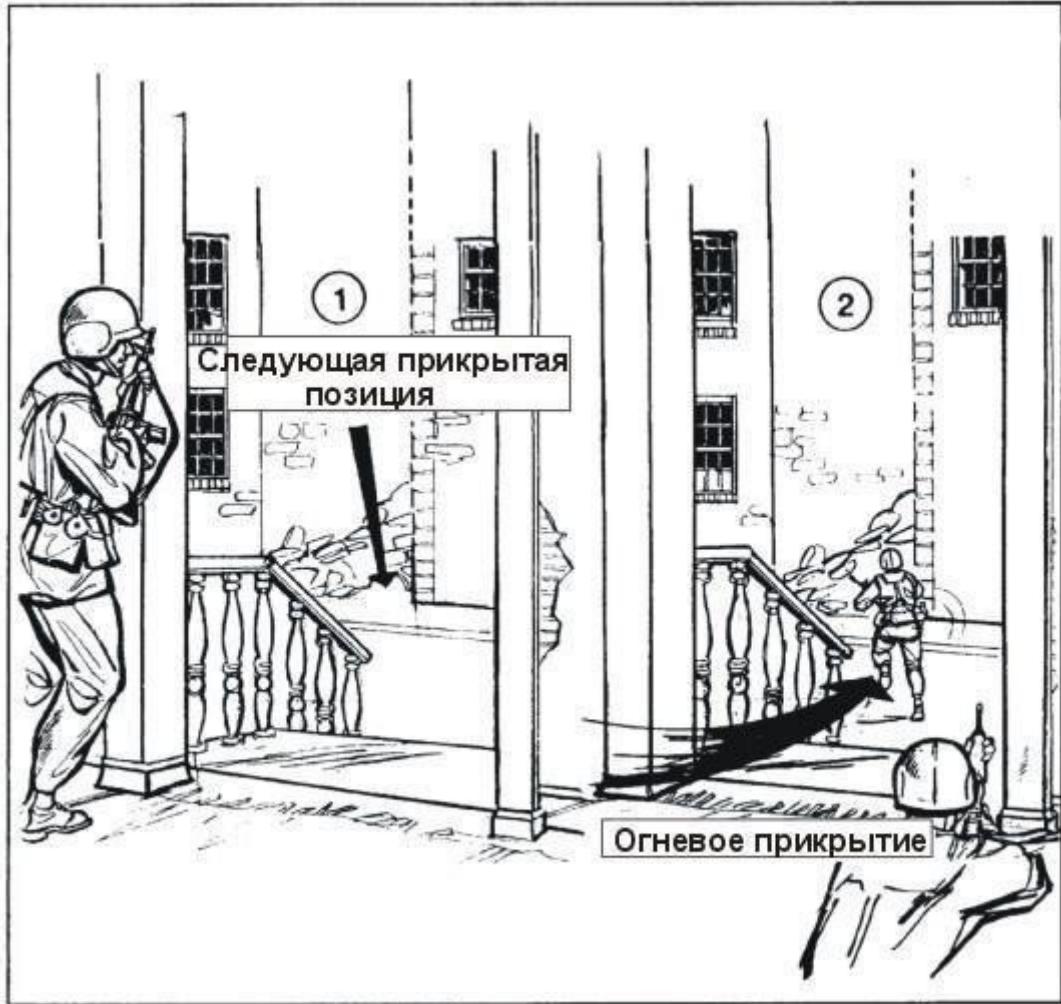


Figure 5-5. Солдат выходит из дверей

Soldiers and units may not always be able to use the inside of buildings as a route of advance. Therefore, they must be able to move from the outside of the building (Figure 5-6). Smoke and covering fire, cover, and concealment must be used to conceal movement. When moving correctly from the outside of a building, the soldier moves close to the wall of the building, staying in the shadows and ducking, moving quickly to his next position (Figure 5-7).

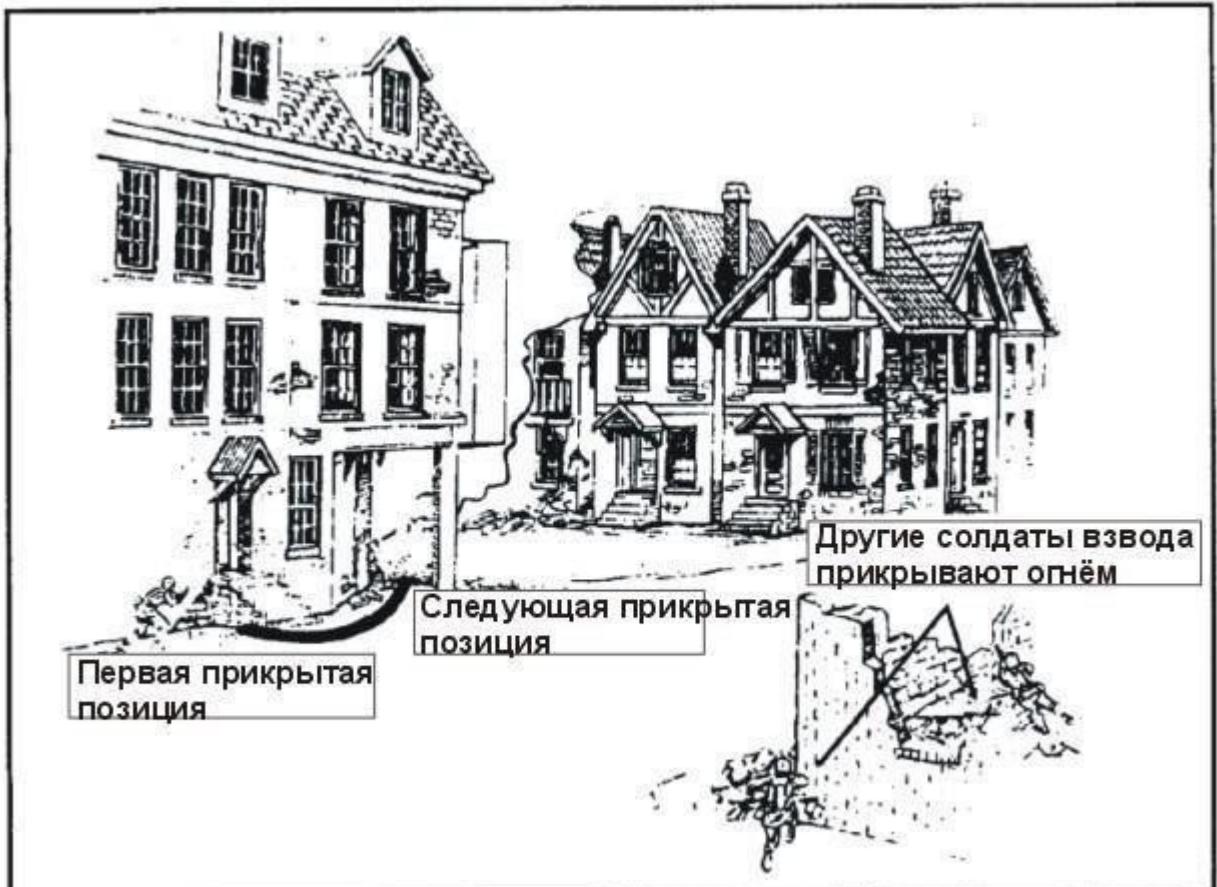


Figure 5-6. Солдат перемещается снаружи зданий

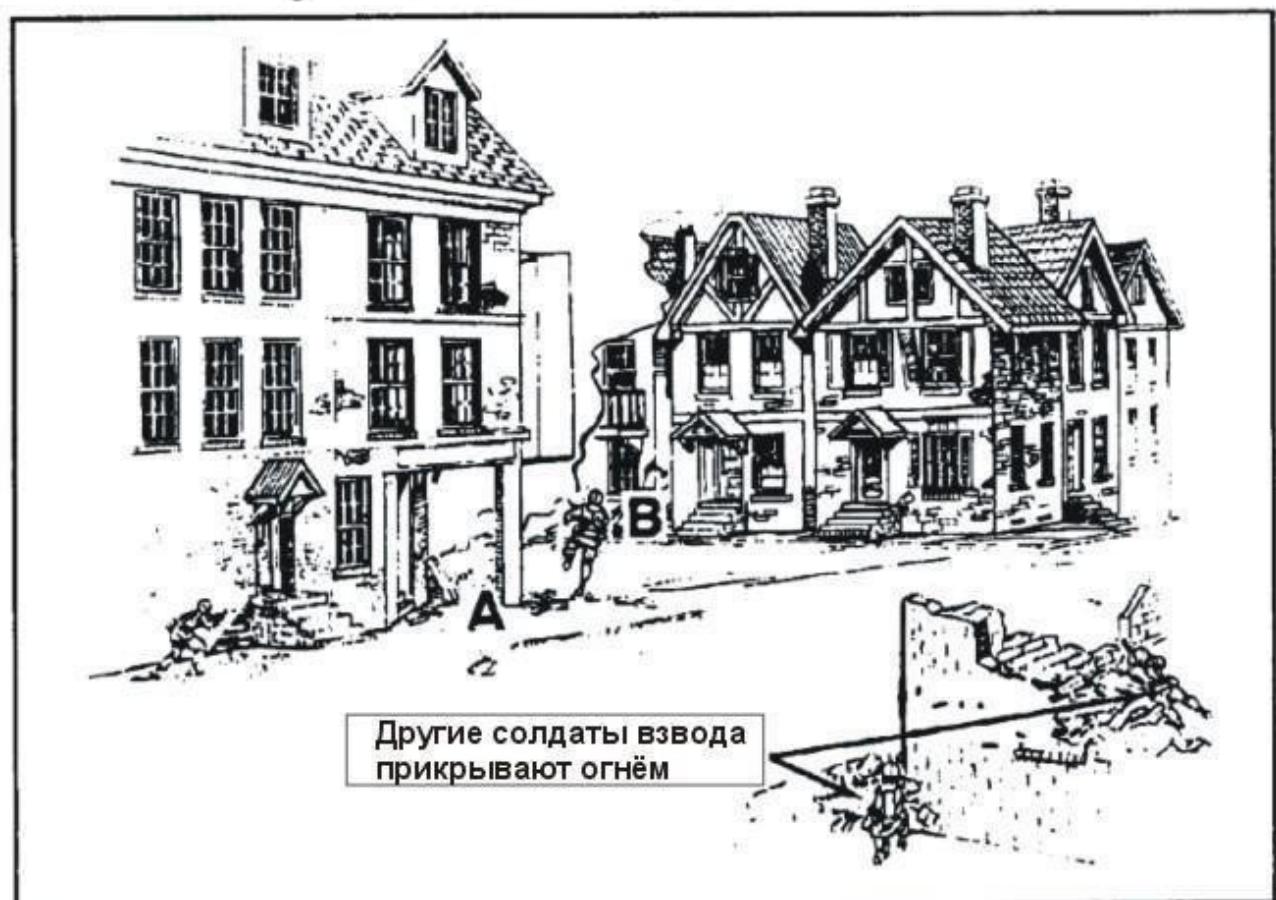


Figure 5-7. Перемещение на следующую позицию

If a soldier is fired upon by an enemy inside the building, he will be exposed to fire from other squad members. In addition, the enemy farther down the street will make it very difficult to detect and fire on the Soldier.

Open areas such as streets, alleys, and parks should be avoided. They are natural killing zones for enemy heavy weapons. These areas can be safely crossed if soldiers or unit leaders apply some basic principles.

- a. When using the correct method to cross an open area, the soldier plans his movement. Smoke hand grenades or smoke bombs should be used to conceal the movement of all Soldiers. Soldiers take the shortest route between buildings and move along the building to the next position. By doing so, they reduce their time in the open and the enemy's ability to target them.
- b. Before moving to another position, the soldier must survey the terrain ahead and select a position for better cover and concealment. At the same time, he must choose the route he will use to get to that position.

Moving a fire team from building to building or between buildings is problematic because the fire team represents a group target (Figure 5-8). When moving from the corner of one building to another, the fire team must move across the open area in the group. Moving from one building to another presents a similar problem, and the movement technique used is the same. The fire team must use the building as cover. When moving to an adjacent building (Figure 5-9), team members should maintain a distance of 3 to 5 meters between them , using the planned signal, make a sharp throw (in line) across the open area to the next building.

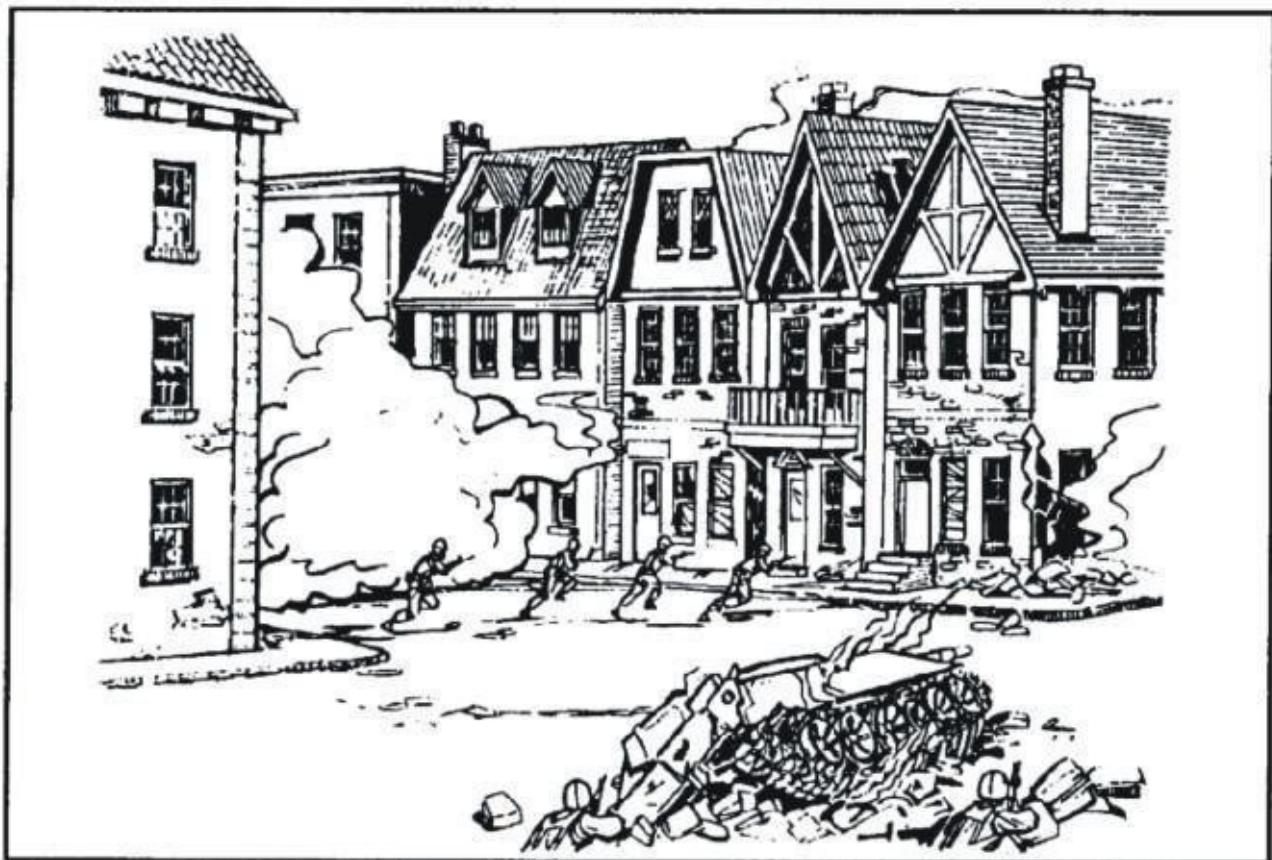


Figure 5-8. Перемещение огневой команды



Figure 5-9. Перемещение к смежному зданию

When moving from position to position, each Soldier must be careful not to come under friendly support fire. When he reaches his next position, he must be prepared to cover the movement of other members of his fire team or squad. He must use his position effectively and fire his weapon from the proper shoulder. a. The most common mistake soldiers make when firing from their positions is to shoot over cover and show their silhouette against the building behind them, thus providing a highly visible target for the enemy. The correct method of firing from a concealed position is accomplished by firing from the side of cover, reducing the target area for the enemy (Figure 5-10).

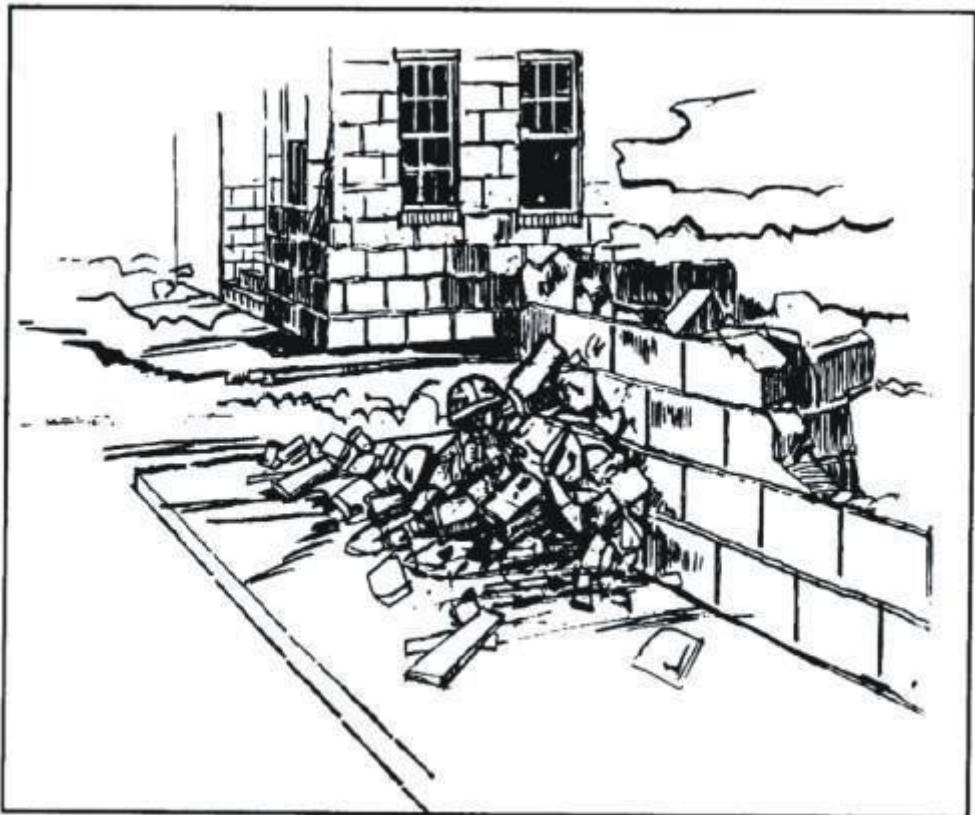


Figure 5-10. Солдат на прикрытой позиции

b. Another common mistake is to fire from the right shoulder from cover (corner of a building) located to the shooter's right. In this case, fire from the left shoulder to take advantage of the cover provided by the building (Figure 5-11). Soldiers must be trained in rapid orientation to maximize the effectiveness of available cover and concealment. Also, Soldiers must be able to fire from different shoulders.



Figure 5-11 Ведение огня с левого плеча

When moving inside a building that is under attack (Figure 5- 12), the soldier avoids appearing in front of doors and windows. If he is forced to

When moving through a hallway (Figure 5-13), he must stay against a wall so as not to present a target to the enemy. In an urbanized combat environment, movement methods may be modified based on rules of engagement.

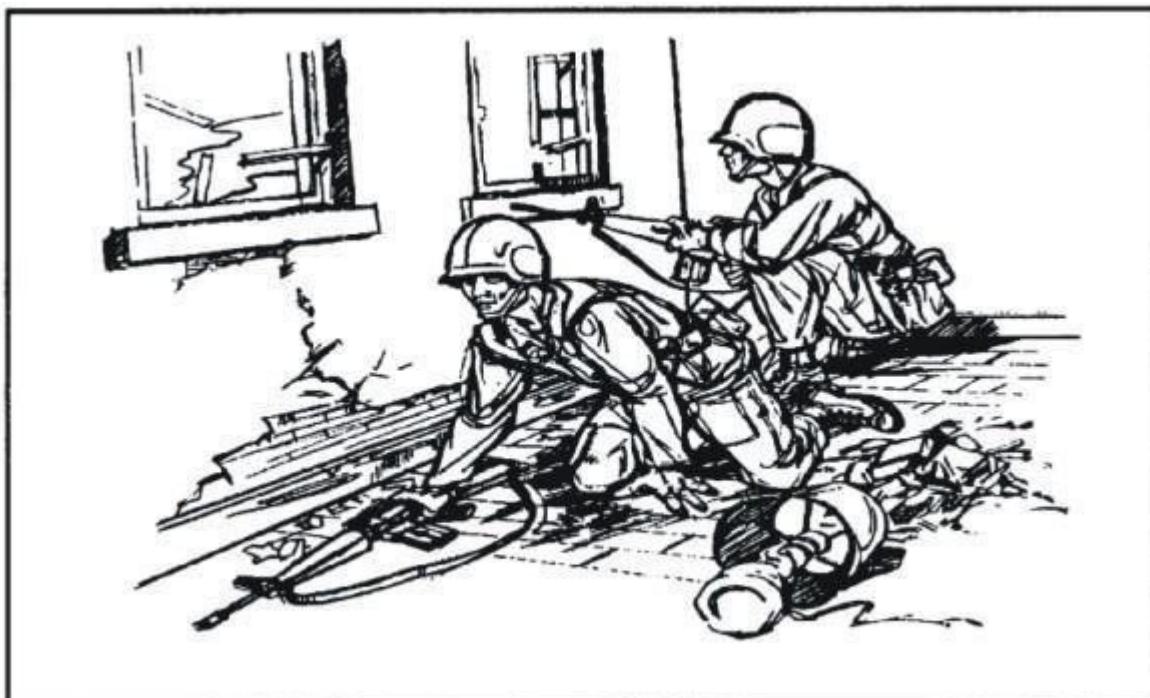


Figure 5-12. Перемещение в здании под обстрелом

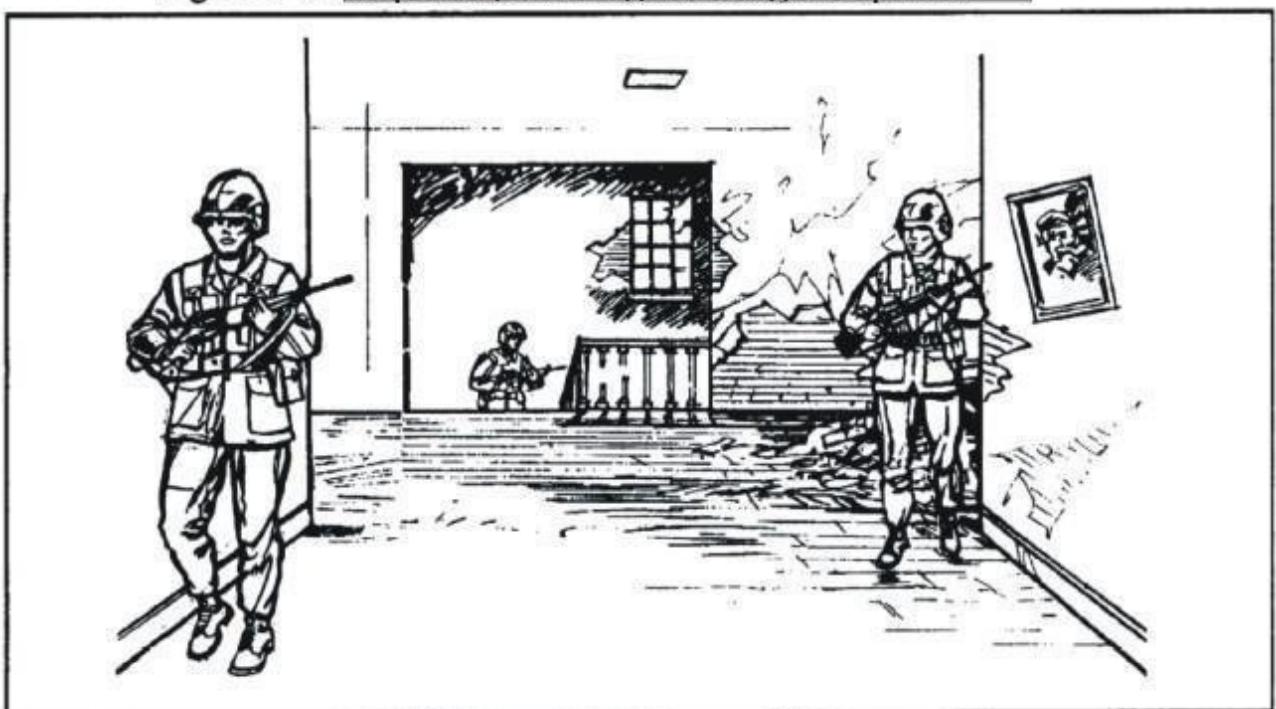


Figure 5-13. Проход по залу

- a. The enemy often blocks windows and doors by using mines - traps. When entering a room, the soldier avoids using the door handle. Instead, he fires a short burst around the lock and then kicks the door. If mines, traps are detected,

they must be noted, they must be reported, and they must be bypassed.

b. Before entering each room, the first soldier prepares to throw a hand grenade by removing the grenade safety pin, releasing the safety lever, counting (one thousand one, one thousand two) and then throwing the grenade into the room. He must be careful, taking into account the thickness of the walls and floor. A voice warning should be given when the grenade is thrown. When a soldier throws a grenade, he gives the command "Shrapnel"; if an enemy grenade is detected, the soldier who saw it shouts "Shrapnel".

-"Grenade.

Since shrapnel from an M67 grenade can hit soldiers outside the room, it should not be used. Soldiers should use MK3A2 offensive hand grenades instead of the M67. Preparing hand grenades can be dangerous if not done properly.

c. After the hand grenade explodes, the second soldier immediately enters the room and fires short at all targets (Figure 5-14). He then systematically sweeps the room. The first soldier follows the second soldier and, if the second soldier takes a position on the right side of the door, the first soldier moves to the left. At this time, the support team outside the room being cleared provides external security. (See FM 7-8 for more detailed information regarding room entry).



Figure 5-14. Метод входа в комнату

d. The soldier uses voice warnings. Voice warnings and signals used by assault teams are extremely important. A member of the assault team should always let the other members of the assault team know where he is and what he is doing. Once the room has been cleared, the assault team gives the command in a voice: - Clear! Before leaving the room to rejoin the support team, the assault team signals with the voice: -Get out! The team then marks the cleared room according to the group's SOP. When moving up or down the stairs, the assault team signals with the voice: "go up!" or "go down!"

e. Breaches are punched with explosives or broken into the wall so that they are approximately 60 centimeters in size for soldiers to enter the room (Figure 5-15). These breaches are safer entrances than doors because doors can easily be turned into a trap and therefore should be avoided. As with any other entrance, a hand grenade should also be thrown into the breach first.

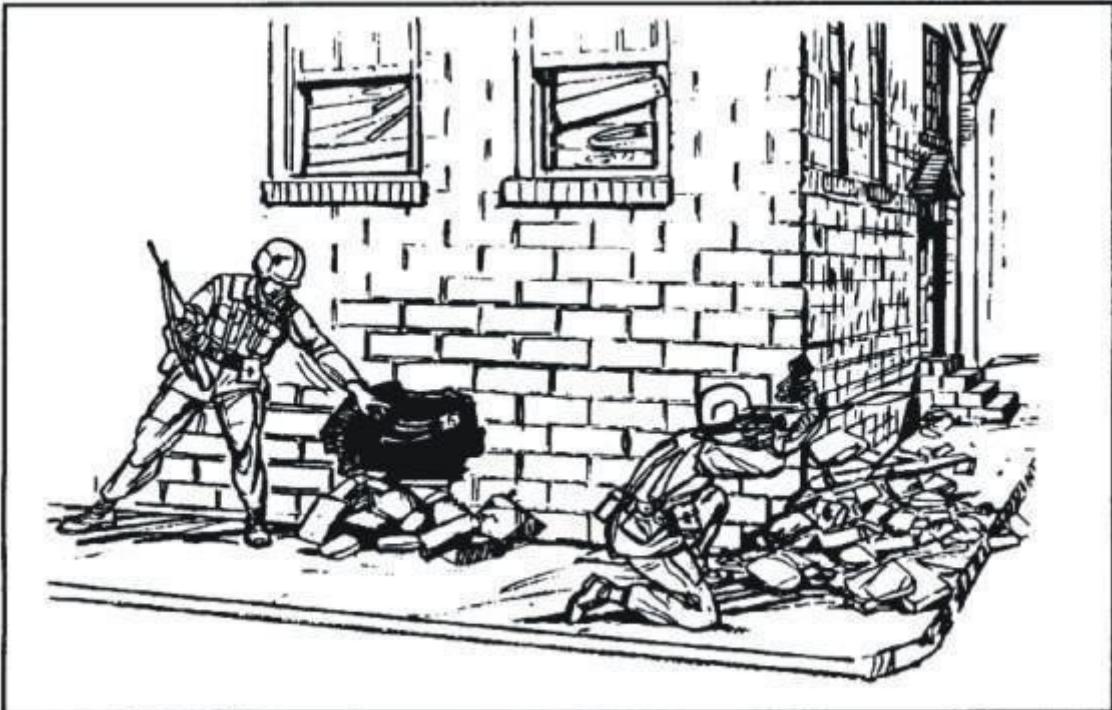


Figure 5-15. Солдаты входят через пролом

When entering buildings, the soldier must move low. He must select an entry point before moving into the building; avoid windows and doors; use smoke to conceal his progress toward the building; use demolition equipment, tank rounds, combat engineer vehicles (CEVs), etc., to breach new entrances; throw a grenade before entering; enter immediately after the grenade explodes and be covered by one of his partners.

Clearing a building from top to bottom is the preferred method. Clearing or defending a building is easier from the upper floors. In this case, gravity and the floor plan of the building will provide advantages when throwing hand grenades and moving from floor to floor.

a. An enemy squeezed from the bottom of a building to the top can be cornered and fought to the last man, or forced to retreat to the rooftops. An enemy squeezed from the top to the bottom can retreat from the building, himself to friendly fire from the cover outside.

b. Various means, such as ladders, drainpipes, vines, helicopters, or the roofs and windows of adjacent buildings, can be used to reach the top floor or roof of a building. In some cases, one soldier may climb on the shoulders of another and, by pulling himself up, get inside. Another method is to use a hook or "cat" on a rope so that the shooter can scale a wall, jump from a

from one building to another or enter the building through an upper window.

Ladders offer the quickest method of access to the upper floors of a building (Figure 5-16). Teams can borrow ladders from local civilians or appropriate locations. Material for ladders can be obtained through supply lines. If required, ladders can be made from material that is available everywhere in the urban area (Figure 5-17). Although ladders will not provide access to the top of some buildings, they will provide a speedy and therefore safe climb.

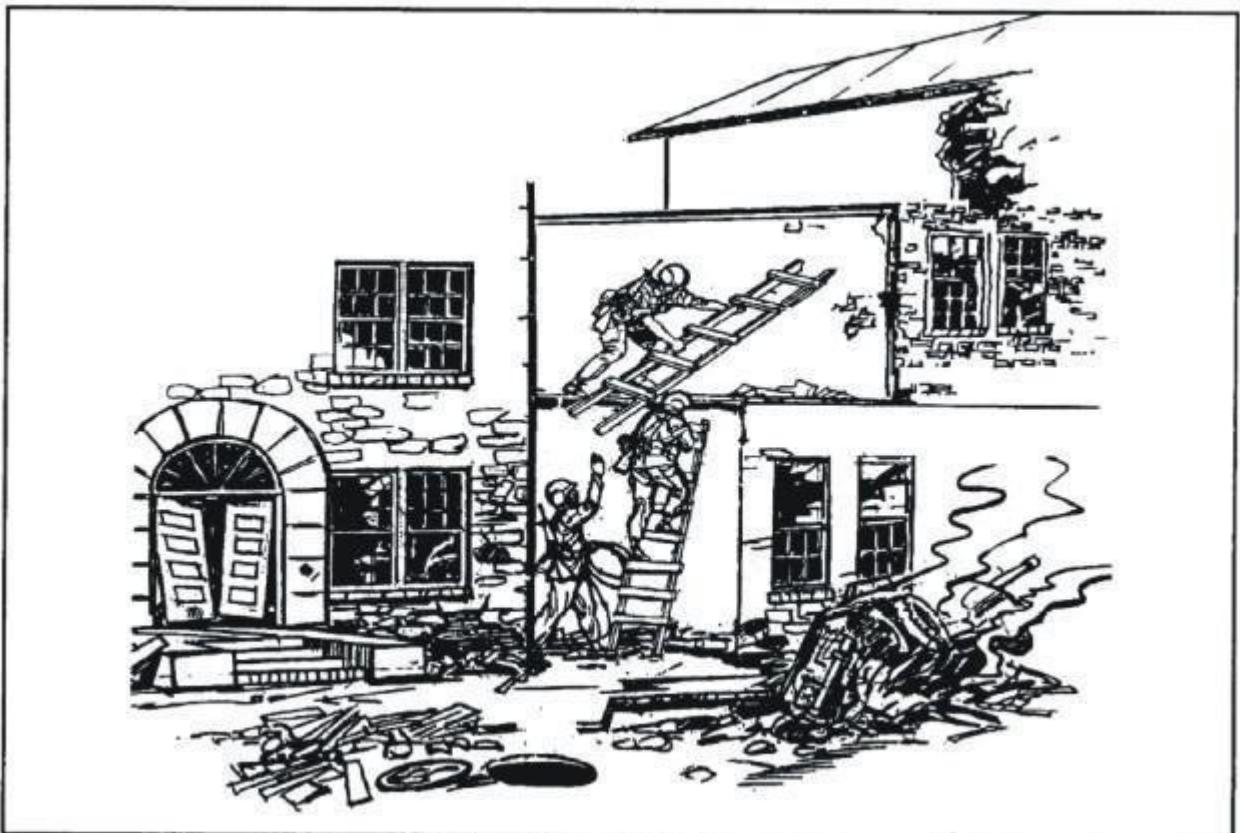


Figure 5-16. Использование лестниц

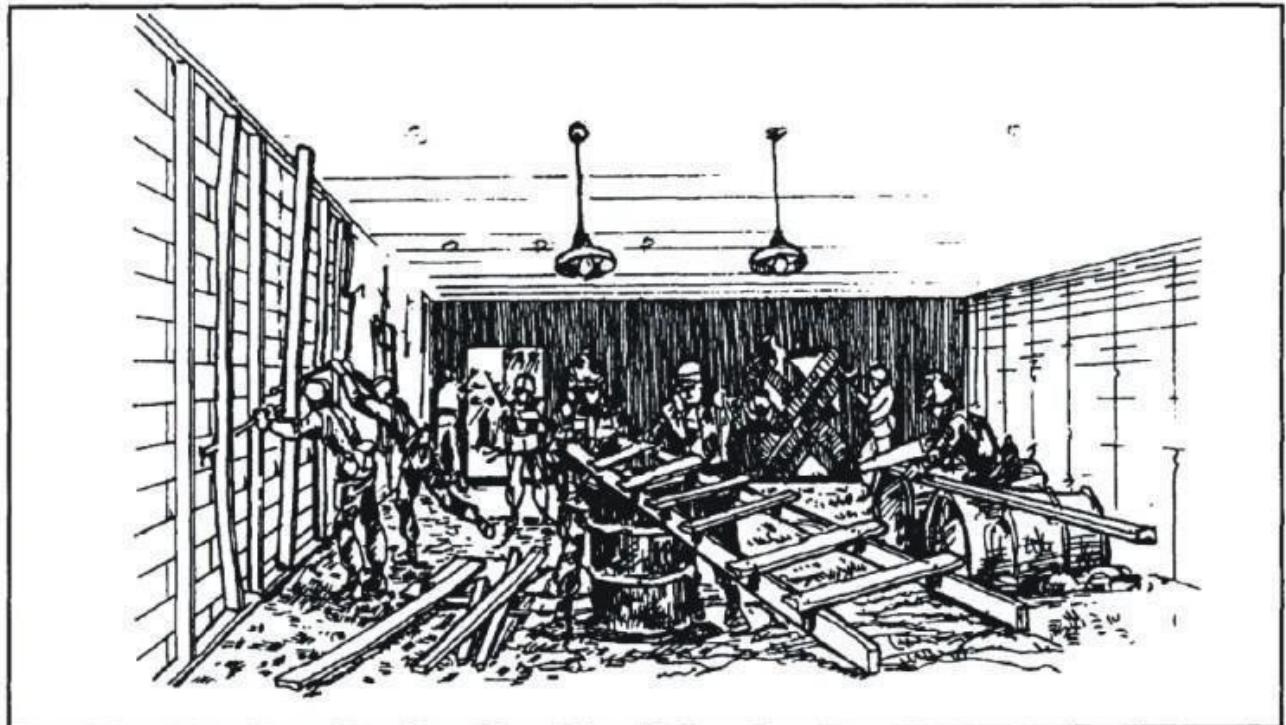


Figure 5-17. Использование материала с внутренних стен

Suitable hooks and ropes should be selected for this method. The hook should be strong, portable, easy to throw and equipped with grips that ensure that the hook is held inside the window. The rope should be 2 to 2.5 cm. in diameter and of sufficient length. Knots on the rope

are knitted at 30-cm intervals to facilitate climbing. The Soldier must follow the procedures described below.

- a. When throwing the hook, stand as close to the building as possible (Figure 5-18). The closer you stand, the less likely you are to be hit by enemy fire. The closer you stand to the wall, the less distance you will have to throw the hook.

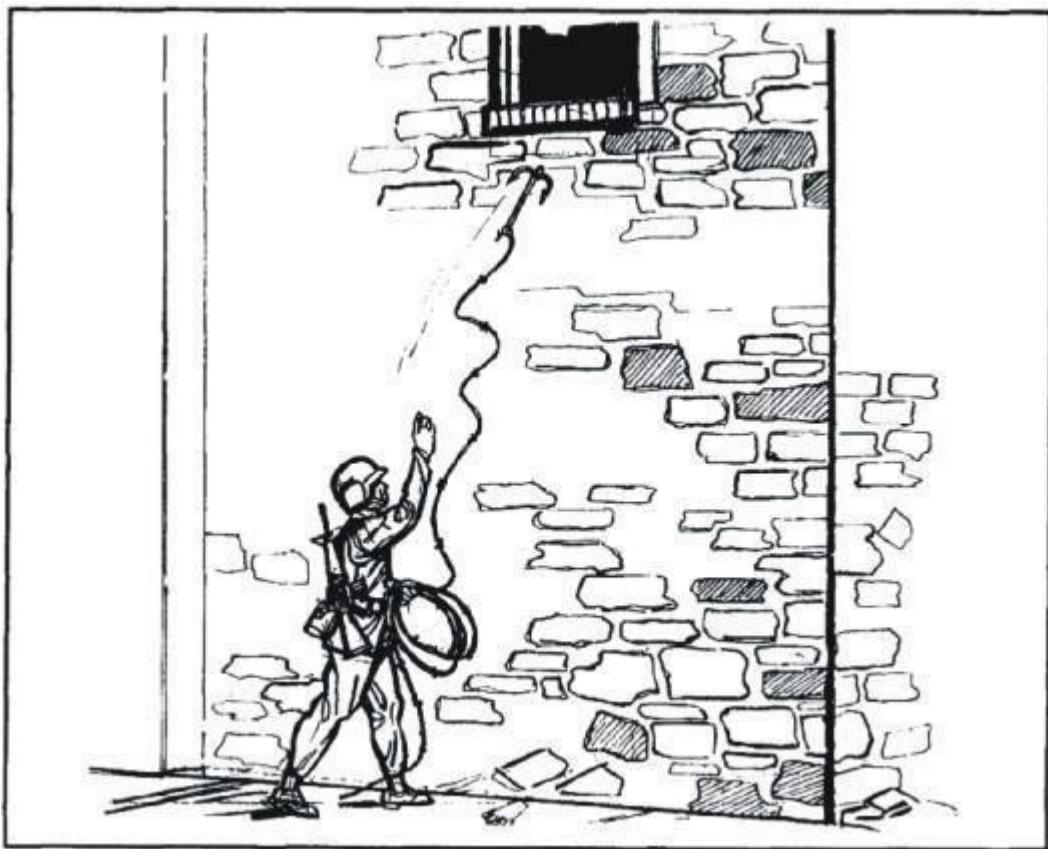


Figure 5-18. Заброс “кошки”

- b. Make sure the rope is long enough to reach the target, secure the hook, and have several loops of rope in the throwing hand. The remainder of the rope in loose loops should be in the other hand. Allow the rope to straighten freely.
- C. Once the hook is inside the window (or on the roof), the rope is tightened to ensure a good hitch before starting the climb. If using a window, pull the rope to one corner of that window to ensure a good hitch and climb at the side of lower windows.
- D. The use of hooks is the least preferred method for entering upper floors of buildings. It should be used only as a last resort and at a safe distance from potential enemy positions. This method may be used to enter buildings that provide concealed use of ropes and connect to buildings where enemy positions are located.

When it is necessary to overcome a wall under enemy observation, all available cover should be used. Smoke and diversionary movement techniques improve the ability to move successfully within the enemy's observation zone. When using smoke for cover, Soldiers must consider wind direction. They must use fire, shouting, and movement to distract the enemy.

- a. A soldier traversing an outer wall is vulnerable to enemy sniper fire. Soldiers moving from building to building and climbing buildings must be covered by fire. Areas between buildings are good sectors of fire for the enemy. A fire system properly organized can suppress and eliminate enemy fire. The M203 underbarrel grenade launcher is effective in clearing rooms inside a building of enemy fire (Figure 5-19).

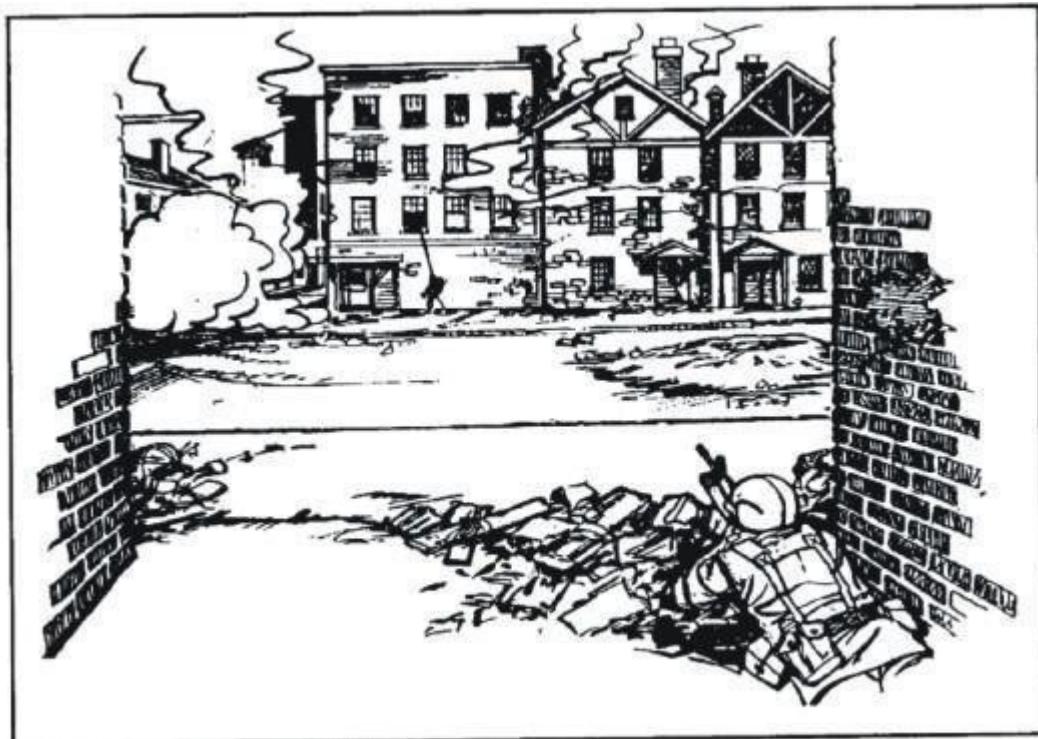


Figure 5-19. Использование подствольного гранатомёта М203 для расчистки зданий

- b. A soldier climbing a wall using a rope should avoid appearing in the window area of unobstructed rooms and exposing himself to enemy fire from lower windows. He must climb with his weapon hanging on his belt on the shooting shoulder side so that the soldier can quickly bring it to his shoulder for firing. He must clear the lower room with a hand grenade before advancing into the window area of that room. First, the soldier loosens the safety pin so that he can throw the grenade with one hand. Before entering the window on the

on the top floor, a hand grenade must be thrown there.

c. The Soldier enters the window while maintaining the smallest silhouette possible (Figure 5-20). Entry can be head-first; however, the preferred method is to throw a leg over the window sill and enter sideways, rolling inward.



Figure 5-20. Солдат входит через окно

Rope rappelling (Figure 5-21) is a technique for entering upper floors that Soldiers can use to descend from the roof of a tall building through a window.

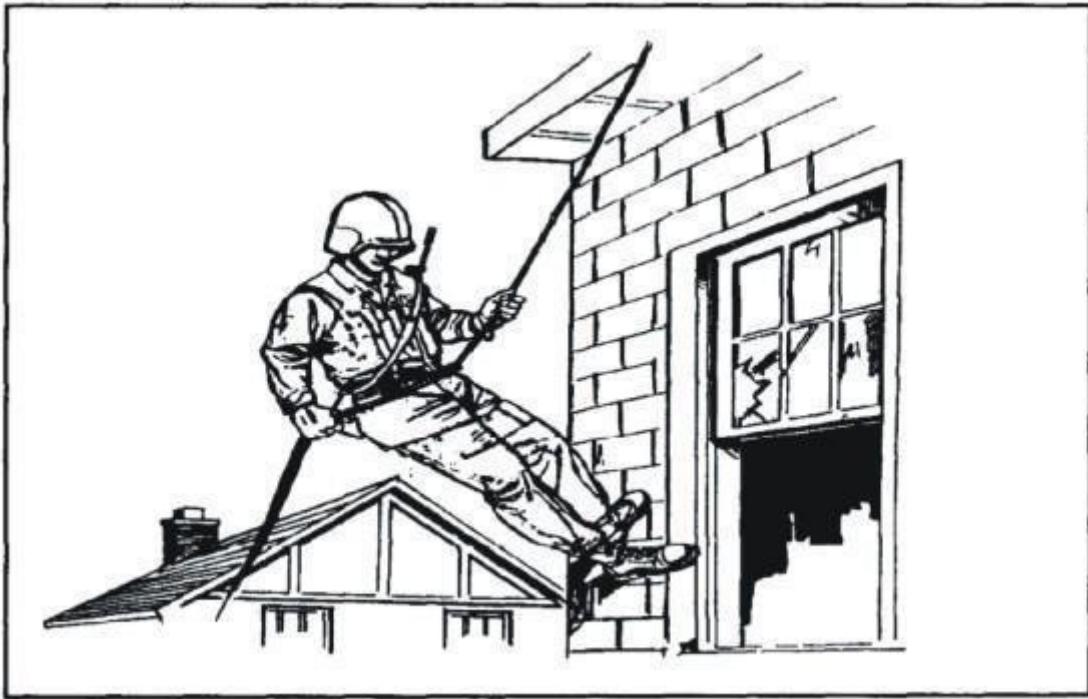


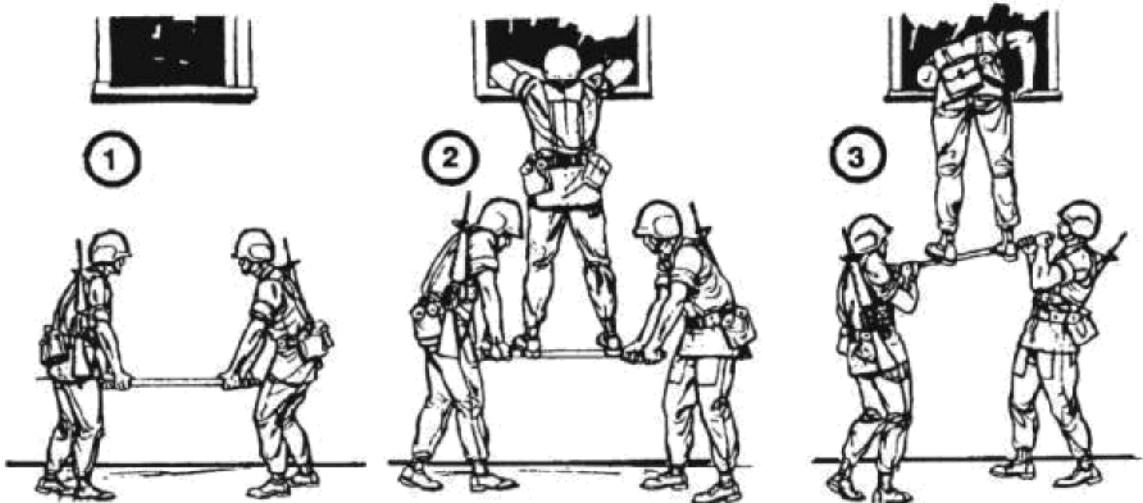
Figure 5-21. Спуск по канату

Buildings should be cleared from top to bottom. However, this may not be possible because there is no entrance to the building from above; therefore, entering the lower floors may be the only course of action. When entering the lower floors of a building, soldiers avoid entering through windows and doors, as both can booby-trapped and are usually covered by fire.

- a. Ideally, breaches created by demolitions, artillery, tank fire, anti-tank fire, or similar means are used to avoid booby traps when entering lower floors. Once a breach has been created, rapid entry is required to utilize the effects of explosion and concussion.
- b. When the only entrance to a building is through a window or door, heavy support fire should be directed at this point. If fire support is not available, hand-held anti-tank weapons may be used instead.
- c. Before entering a breach, soldiers throw prepared hand grenades into the breach to enhance the effect of the initial explosion. Before creating a new breach in a building, Soldiers consider the effects of the explosion on that building and adjacent buildings. If there is a possibility of fire in an adjacent building, soldiers coordinate with adjacent groups. An explosion can destroy wooden buildings. In masonry, brick, or cement buildings, fire supports

targets a corner of the building or a weak point in the building structure.
(Certain methods of entry to lower floors
shown in Figure 5-22.)

THE TWO-MAN LIFT, SUPPORTED

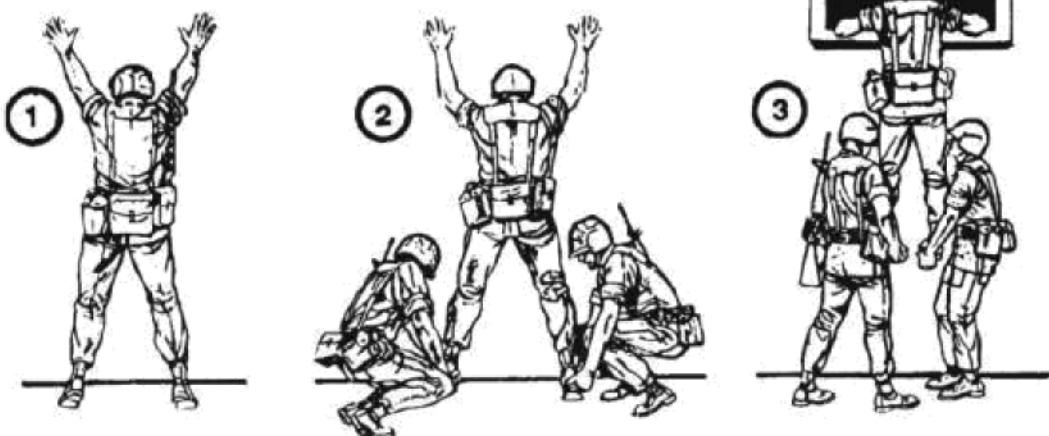


Two men stand facing one another, holding a support (a board or bar).

Another soldier steps onto the support.

Once both feet are on the support, the two men raise it, lifting the third man upward and into the entrance.

THE TWO-MAN MFT WITH FEELS RAISED.



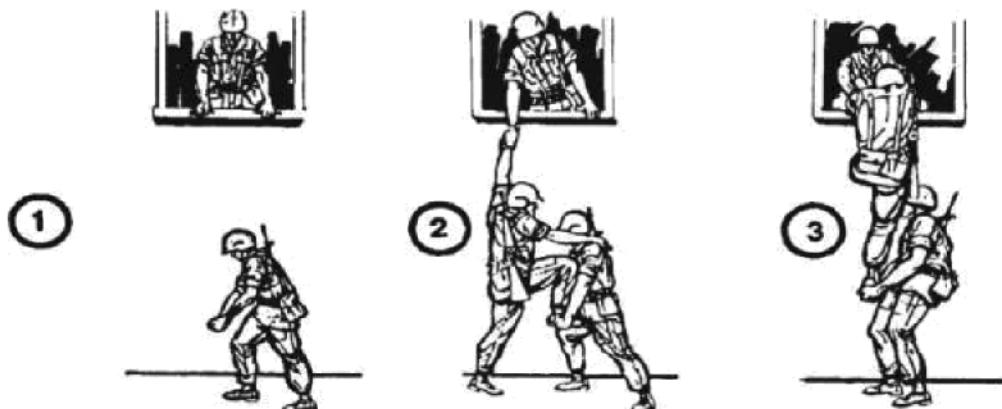
One man, standing with palms flat against the building, feet out from the building about 2 feet with heels raised, is lifted by two men.

Two men bend over facing

each other. They each grasp a heel of the third man, and with one quick move lift him up and into the entrance.

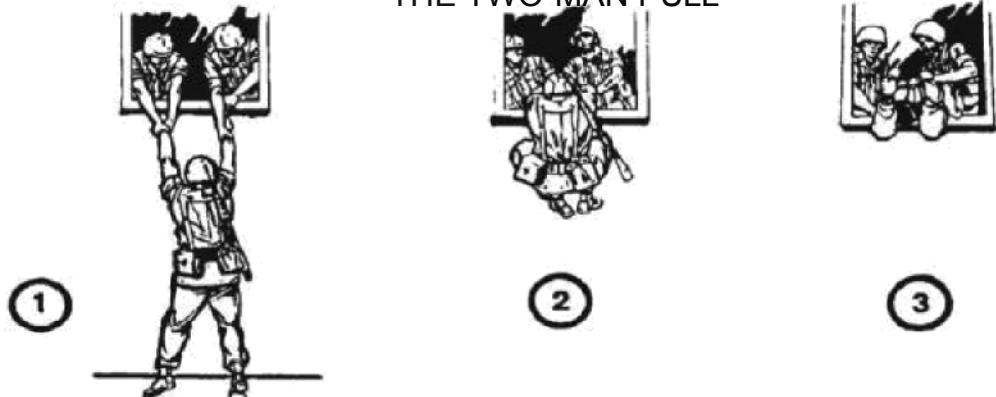
Figure 5-22. Методы входа на нижние этажи

ONE-MAN LIFT



One m-n, wth his beck or side
egalnat tha building and with
hic handq cupped, allows
another man to ra ce one foot
up ^{int} ^{ls}
cuppad handg, end then its him
up and Into the entrance.

THE TWO-MAN PULL



When the firet Mo eoldJare
sre Inside the buldlnq and other
eoldlora seek entrance, the
two already Inelde mey assist
the atharc by pulling them up
into the building.

Figuzc 5-22.' Mezo/tul BXO,zta ma nuxo'age ozaon

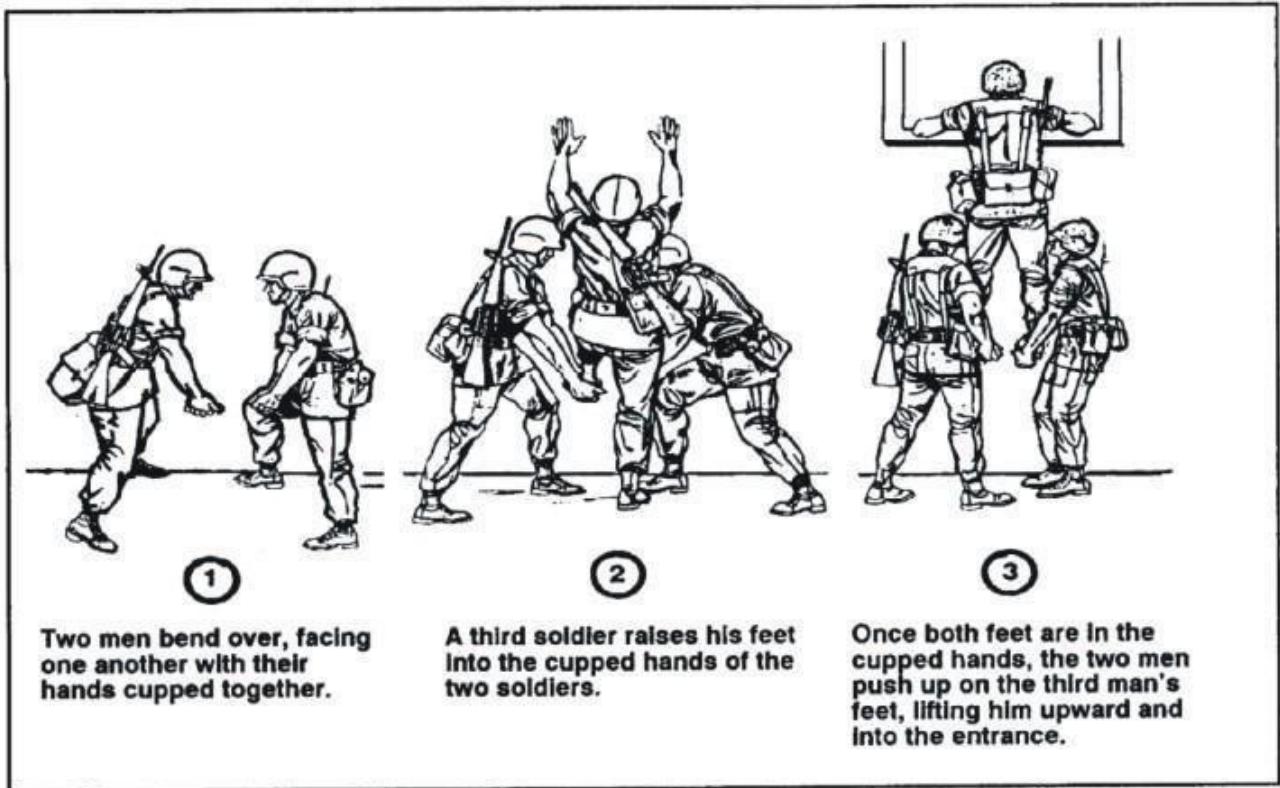


Figure 5-22. Методы входа на нижние этажи

Combat in populated areas (mainly attacks) requires extensive use of hand grenades. The soldier must throw grenades before overcoming ladders, breaches, and so on. This usually requires the use of both hands and top-down and corner throwing techniques. After the safety lever of the grenade is released, wait two seconds before throwing the grenade to prevent the enemy from throwing it back. A. The material used in the construction of the buildings being cleared affects the use of grenades. Offensive grenades are preferred over defensive grenades during offensive operations or when defending rapidly prepared defensive positions. If the walls of the building are made of thin material, the soldier should either lie on the floor with his helmet on, head toward the blast, or move away from walls that could be penetrated by grenade fragments.

b. Soldiers should throw grenades into the opening before entering the building to eliminate any enemy that may be near the entrance (Figure 5-23). The M203 underbarrel grenade launcher is the best tool for delivering grenades into upper floor windows.

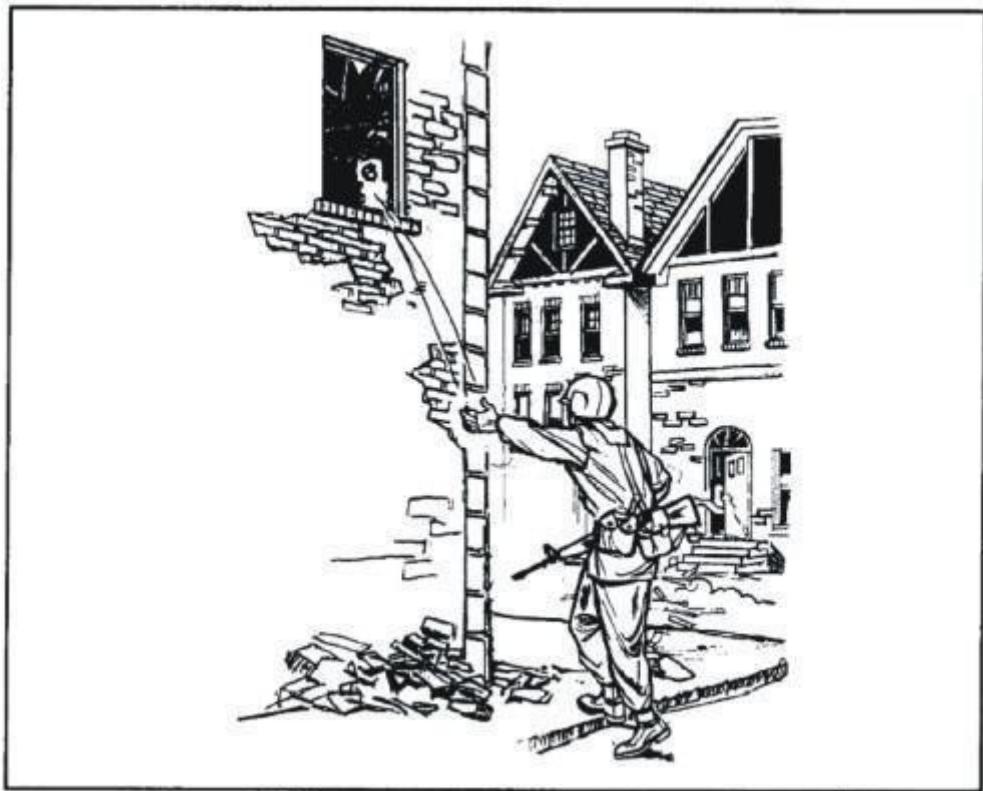


Figure 5-23. Бросок гранаты через окно

- c. When a hand grenade is to be used, the soldier throwing the grenade should stand close to the building, using it for cover. At the same time, that soldier and the rest of the group should have a planned location to which they can move quickly if the grenade falls backwards rather than through a window.
- d. A soldier throwing a grenade should wait approximately two seconds before throwing and move far enough away from the wall to throw the grenade through a window on an upper floor. The weapon must be held in the free hand so that it can be used if necessary. The weapon must never be placed on the ground outside the building or inside the building on the floor. Once a grenade is thrown into the opening (Figure 5-23), the assault team should move swiftly to enter the building. This technique should be used only when there is no glass in the window. Otherwise, the thrown grenade may bounce back.
- e. If soldiers must enter a building through a stairwell, they first inspect the stairwell for booby traps. They then throw a grenade into the stairwell doorway and move quickly inside after the explosion. They can use the stairs for cover.

WARNING

After throwing a grenade, the soldier must immediately signal "shrapnel!" Then he moves quickly to cover, as the grenade may bounce back, the enemy may throw it back, or the enemy may open fire on the soldier.

- f. The best way to enter the building is through a breach in the wall. Again, a grenade must be thrown through the opening, using all available cover (Figure 5-24).

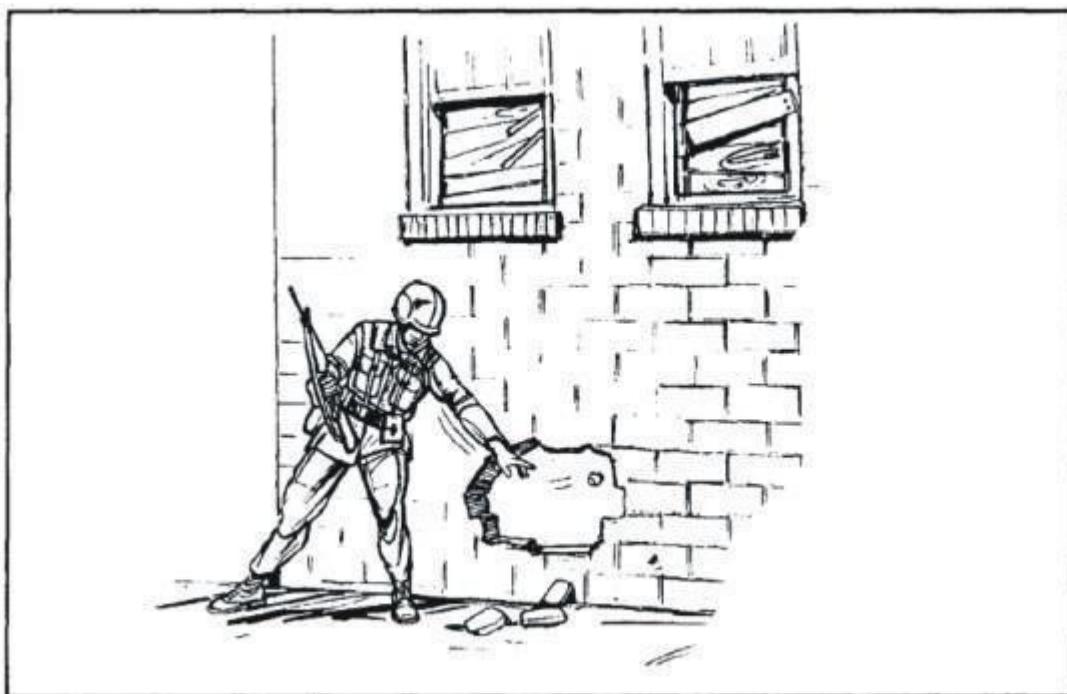


Figure 5-24. Бросок гранаты через пролом

- g. When a door is the only entrance to a room, soldiers must beware of enemy fire within the room and booby traps. Doors can be opened by hand, foot strike, gunfire, or tools such as an axe. When a door is open, soldiers must not expose themselves to fire coming through the doorway. When doors must be opened by hand, a two-man team must be used. The soldiers should be on opposite sides of the doorway. However, it is better to open the door with a leg kick or shots (Figure 5-25). When opening with a leg kick, one Soldier stands on one side of the door and the other opens the door with a leg kick from the side.



Figure 5-25. Солдат стреляет для открытия двери

h. Soldiers open the door by using fire in short bursts and aiming at the door lock. Other methods use an axe or explosives if available. Soldiers can also kick doors with their feet, but this is the least acceptable method as it is difficult and tiring work for the soldiers. Kicking a door with this method is very difficult from the first blow, so enemy soldiers within the room are forewarned (this also gives the enemy the opportunity to fire through the door). Once the door is opened, a hand grenade must be thrown into the room. After the grenade is triggered, the first soldier enters and takes up position in the room to the right (left) of the entrance against the wall; fires at targets in rapid, short bursts and then surveys the room. The rest of the team provides immediate security. The first soldier in the room decides where the next soldier should be positioned and gives the command: "next left! (right!)". The next soldier responds: "coming in left! (right!)", enters the room, positions himself against the wall to the left (right) of the entrance and looks around the room. Once the second soldier is in position, the senior soldier calls out to the next team members: "next!" It is important that all members of the assault team tell each other where they are to avoid casualties from friendly fire.

- i. Another way to enter a room is to breach the wall with explosives. When moving from room to room through breaches, soldiers must also use grenades as they do when moving through doorways. As they enter through a breach, they must duck and use all available cover.
- j. While it is better to sweep buildings from top to bottom, this is not always possible. When clearing the bottom floor, soldiers may encounter a staircase that must be cleared. Here again, grenades play an important role. In order to climb the stairs, soldiers must first inspect them for mines
 - traps, then throw the grenade up the ladder (Figure 5- 26).

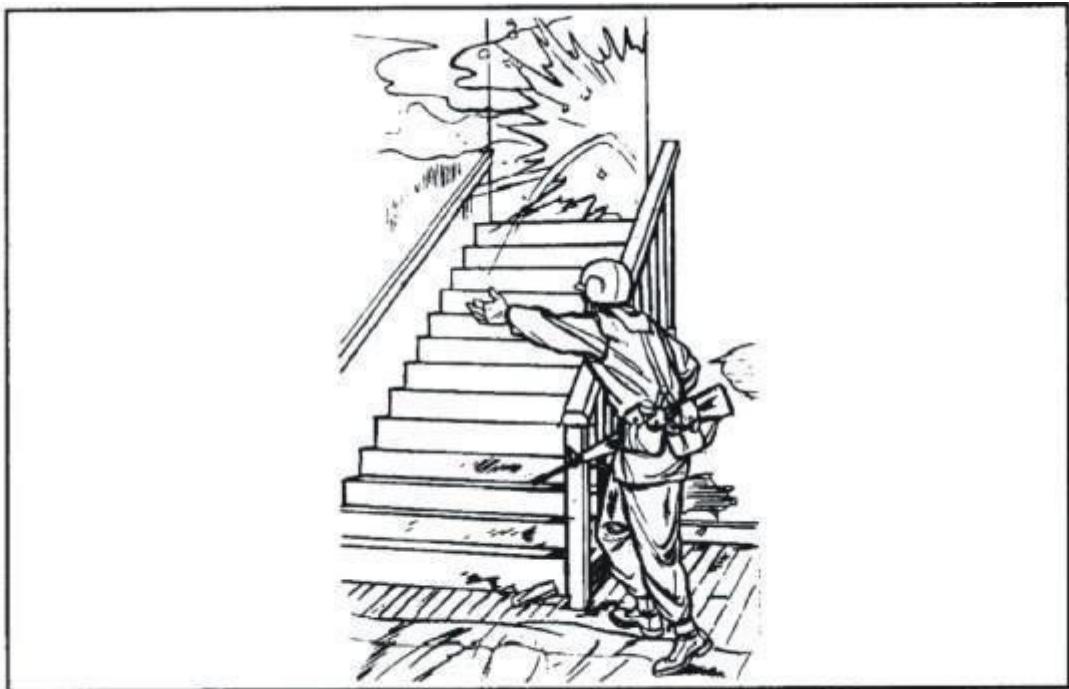


Figure 5-26. Солдат забрасывает гранату наверх по лестнице

Soldiers should use voice warnings when throwing grenades. Once the first grenade has exploded, other grenades should be thrown over the stair railing and into the hallway, destroying any enemy lurking there. Using the stairs for cover, Soldiers throw the grenade around the corner to reduce the risk of it bouncing or rolling back down the stairs.

- k. Once the stairs are cleared, the assault forces move to the upper floors and clear them using the methods described earlier. After the upper floors are cleared, the groups move down and clear the middle and lower floors.

NOTE: Since large numbers of hand grenades are used in clearing buildings, there must be a continuous supply of grenades for forces performing this task within the population center.

Whether in attack or defense, the success of the operation depends on each soldier's ability to fire accurately at the enemy while avoiding enemy return fire. Consequently, the soldier must continually seek out and, if necessary, properly utilize firing positions.

A rapid fire position is usually engaged in the attack or early stages of defense. It is a position from which a soldier can fire at the enemy while using available cover to defend against return fire. The soldier may occupy this position voluntarily or involuntarily because of enemy fire. In either case, the position will be inadequately prepared. Some of the most typical rapid fire positions in populated areas and methods for taking them are: corners of buildings, behind walls, behind windows, unprepared observation slits, and roof tops.

a. Building Corners. A building corner provides cover for a quick firing position if used properly.

(1) The shooter must be able to use his weapon from both the right and left shoulder. A typical mistake when shooting from an angle is to shoot from the wrong shoulder. This exposes most of the shooter's body to return fire from the enemy.

(2) Another common mistake when shooting from an angle is shooting while standing. The shooter positions himself at the height at which the enemy expects to see him and exposes the full length of his body as a target for the enemy.

b. Walls. When firing from behind walls, the soldier must fire from the side of the cover, not from above (Figure 5-27).



Figure 5-27. Солдат ведет огонь сбоку прикрытия

- c. Windows. In a populated area, windows provide convenient firing positions.

The soldier should avoid firing while standing, as this exposes most his body to return enemy fire and may mark his silhouette against the light interior. This is an obvious indication of a firing position, especially at night when the flash of the shot is clearly visible. When using the proper window firing method (Figure 5-28), the Soldier steps back from the window into the room so that the flash of the shot can be seen from a minimum sector outside, and kneels (crouches) to reduce his outline and avoid standing out against the interior.

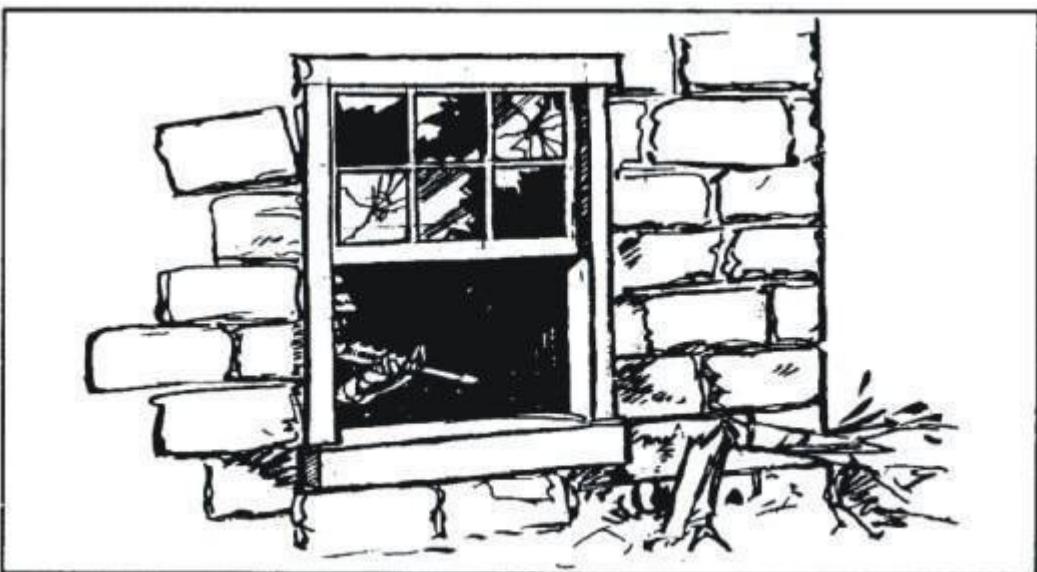


Figure 5-28. Солдат ведет огонь из окна

- d. Observation slits. A soldier can fire through a hole in the wall, avoiding windows (Figure 5-29). He

is positioned some distance from the observation slot so that the barrel of the weapon does not stick out of the wall and



Figure 5-29. Солдат ведет огонь через пролом
the flash of the shot is concealed.

e. Roof. The ridge roof provides a vantage point for snipers, increasing their field of view and range (Figure 5-30). A chimney, smoke stack, or any other object located on the roof of a building and used as cover by a sniper can reduce the likelihood of enemy return fire and effectiveness.

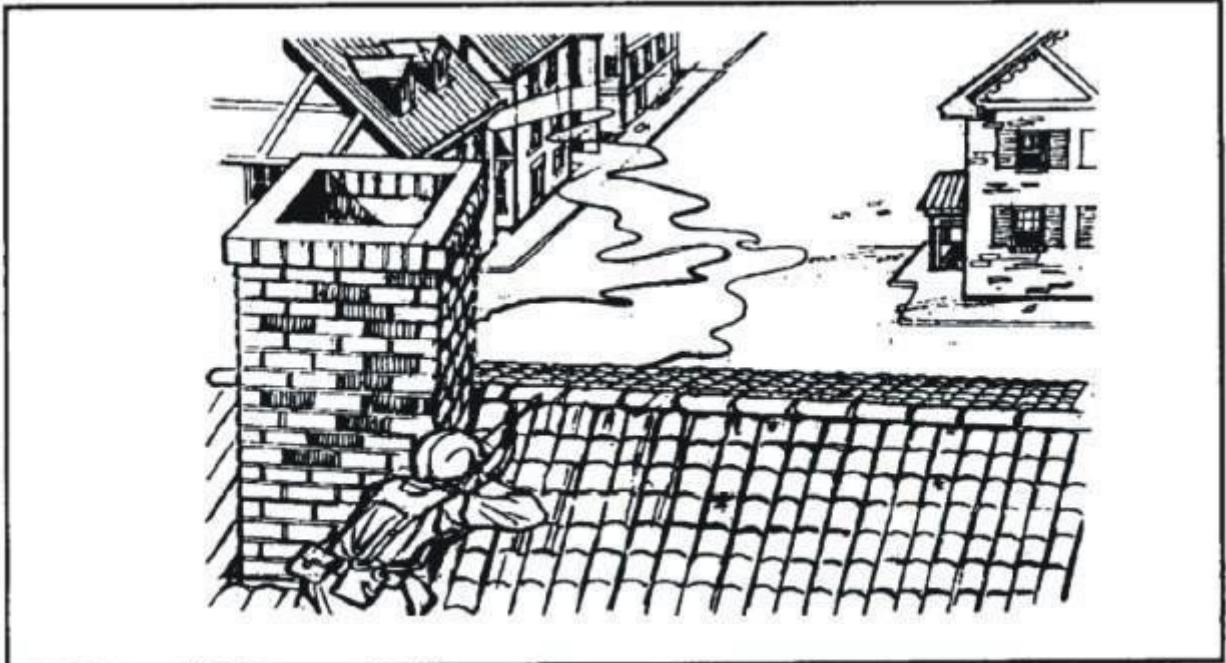


Figure 5-30. Солдат ведет огонь с крыши

f. No Available Positions. When a Soldier is under enemy fire and none of the positions mentioned above are available, he should try to present as small a target as possible. If the soldier is under fire in an open area between buildings (street or alley) and there is no cover nearby, and the enemy firing at him is located in one of the buildings along the front, the soldier should lie as close to the building in which the enemy is located as possible. In this case, the enemy will have to lean out of a window to shoot at the downed soldier and expose himself to return fire.

g. No Available Cover. When no cover is available, the soldier should fire from a lying position, from the shadows, and avoid marking his silhouette against buildings.

A prepared firing position is a constructed or improved position that allows the shooter to fire at a specific sector, route, or enemy position, reducing the effectiveness of return fire. Examples of prepared positions include: barricaded windows, fortified observation slits, sniper positions, anti-tank weapon positions, and machine gun positions.

a. Natural firing positions provide windows. These positions can be improved by barricading, leaving a small opening for the shooter to use (Figure 5-31).



Figure 5-31. Огневая позиция у окна

Barricading can be accomplished with interior building wall materials or any other available materials. Avoid windows when barricading:

- (1) Barricade only those windows that will be used for firing positions. The enemy will quickly determine that the barricaded windows are firing positions.
- (2) Creating square or rectangular openings that will be easily identified by the enemy. A barricaded window must not have a clear, regular loophole. The window should retain its original shape so that the shooter's position is difficult to detect. Firing through the base of the window gives the gunner an advantage because the loophole is less obvious to the enemy. Sandbags are used to reinforce the wall below the window and increase protection for the gunner. All glass should be removed from the window. Blinds allow the shooter to observe and interfere with enemy observation. Damp blankets should be placed under the weapon to reduce dust when firing. Wire mesh on the window prevents the enemy from throwing hand grenades.

b. Although windows are usually good firing positions, they do not always allow the shooter to fire in his sector.

(1) Avoid firing from windows at all times. An additional position such as a prepared observation slot is required (Figure 5-32). The slot is cut, drilled, or knocked into the wall to allow the shooter to observe and fire in his sector.



Figure 5-32. Подготовленная щель

(2) Sandbags are used to reinforce the walls below, around and above the observation slot. Two layers of are placed on the floor, under the shooter, to protect him from an explosion on the lower floor (if the position is on the second floor or higher). A wall of sandbags, building debris, furniture, etc., must be created at the rear of the position to protect the shooter from an explosion in the room. (3) A table, bed frame, or other available material provides overhead cover for the position that protects the shooter from falling debris or explosions above his position.

(4) The position must be camouflaged, which is accomplished by punching other holes in the walls, making it difficult for the enemy to determine which slits are being used for firing.

c. A chimney or other object on the roof provides a base at which a sniper position can be prepared. Some of the roof material is removed, allowing the sniper to shoot from the side of the chimney. The sniper should stand inside the building on a platform, with only his head and shoulders above the roof (behind the chimney). Sandbags placed on the sides of the position protect the sniper's flanks.

d. When the roof has no prominent feature to provide protection (Figure 533), a sniper position should be prepared at the bottom of the roof slope, on the enemy side. The position is reinforced with sandbags and a small portion of the roof material is removed to allow the sniper to fire in his sector. The missing part of the roofing material should be the only indication that the position exists. Other parts of the roof should be removed to deceive the enemy as to the true sniper position. The sniper and the flash of the shot must be invisible from outside the building.

e. Some rules and considerations for selecting and



Figure 5-33. Позиция снайпера

occupying an individual firing position:

- (1) Make maximum use of available cover and concealment.

- (2) Avoid shooting over cover; if possible, shoot from the side of cover.
 - (3) Avoid appearing full-length against light-colored buildings, light-colored skyline, etc.
 - (4) Carefully choose new firing position before abandoning the old position.
 - (5) Avoid shooting from one location; shoot from barricaded and unbarriered windows.
 - (6) Keep the heat a minimum.
 - (7) Start improving your quick stance immediately after class.
 - (8) Use material that is available in the locality to prepare positions.
 - (9) Remember that positions that provide cover at ground level cannot provide cover from higher floors.
- f. When attacking a populated area, recoilless guns and ATGMs have difficulty selecting firing positions because of the problems with the reactive jet of these weapon systems. They do not have enough time to remove a wall in a building and clear the area for the jet. They must choose positions that allow the jet to exit freely - for example, corner windows where the fire is coming from one window and the jet is coming from another. A position in the corner of a building can be improved with sandbags (Figure 5-34).



Figure 5-34. Угловая огневая позиция

- g. The rifle squad is often reinforced with anti-tank weapons during an attack or defense of a populated area. Therefore, the rifle squad leader must be able to select good firing positions for the anti-tank weapons under his control.
- h. The various principles of anti-tank weapon use have universal requirements: maximizing the use of cover; providing mutual support; and accounting for the reactive jet in positions of recoilless weapons, TOW PTRKs, "Dragon, LAW RPG or AT-4.
- i. Soldiers must choose numerous additional positions, especially when the building does not provide cover from small arms fire.
- j. Recoilless weapons and ATGMs firing from the top of a building can use the chimney for cover (Figure 5-35). The rear of this position should be reinforced with sandbags.

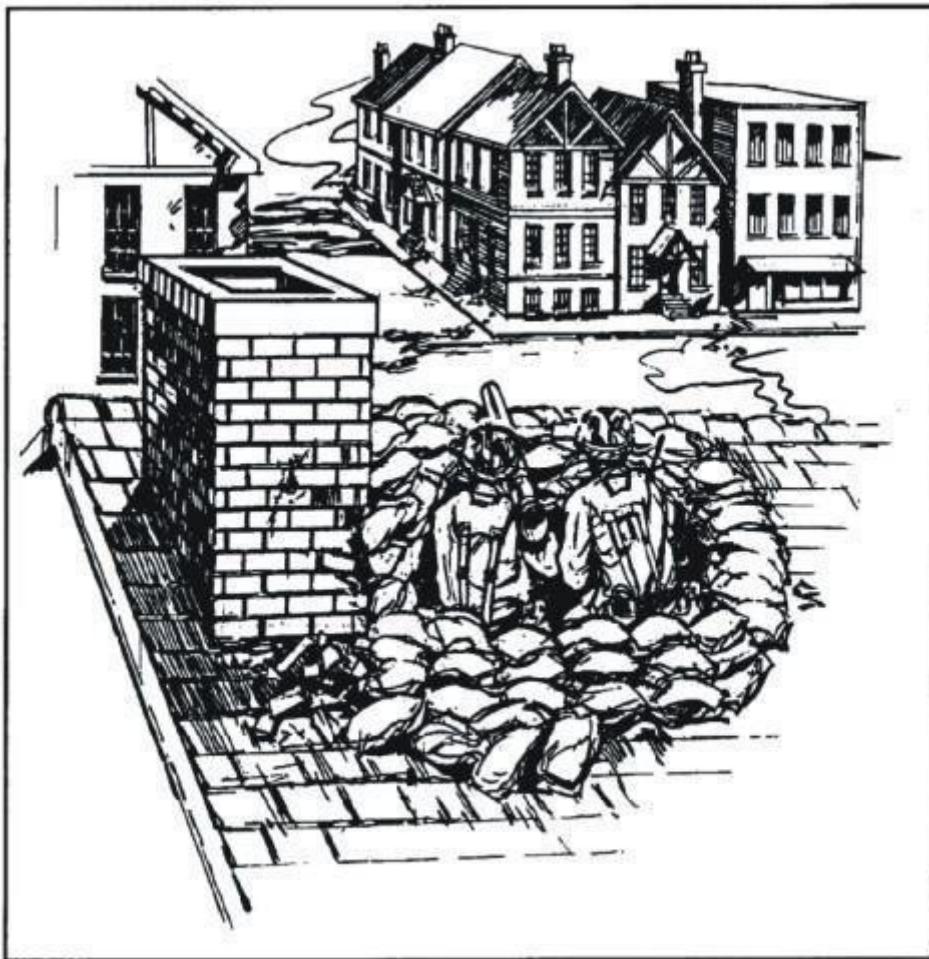


Figure 5-35. Огневая позиция безоткатного оружия

к. When selecting firing positions for recoilless weapons and ATGMs, make maximum use of ruins, building corners and vehicles in the streets to provide cover for the crew. Recoilless weapons and ATGMs can also be placed on rooftops to obtain a better sector of fire. If the building is located on an elevated site and has multiple floors, the building's floor slabs can be used for overhead protection of the position (Figure 5-36). The reactive jet below the building must not damage the building or threaten the calculation.

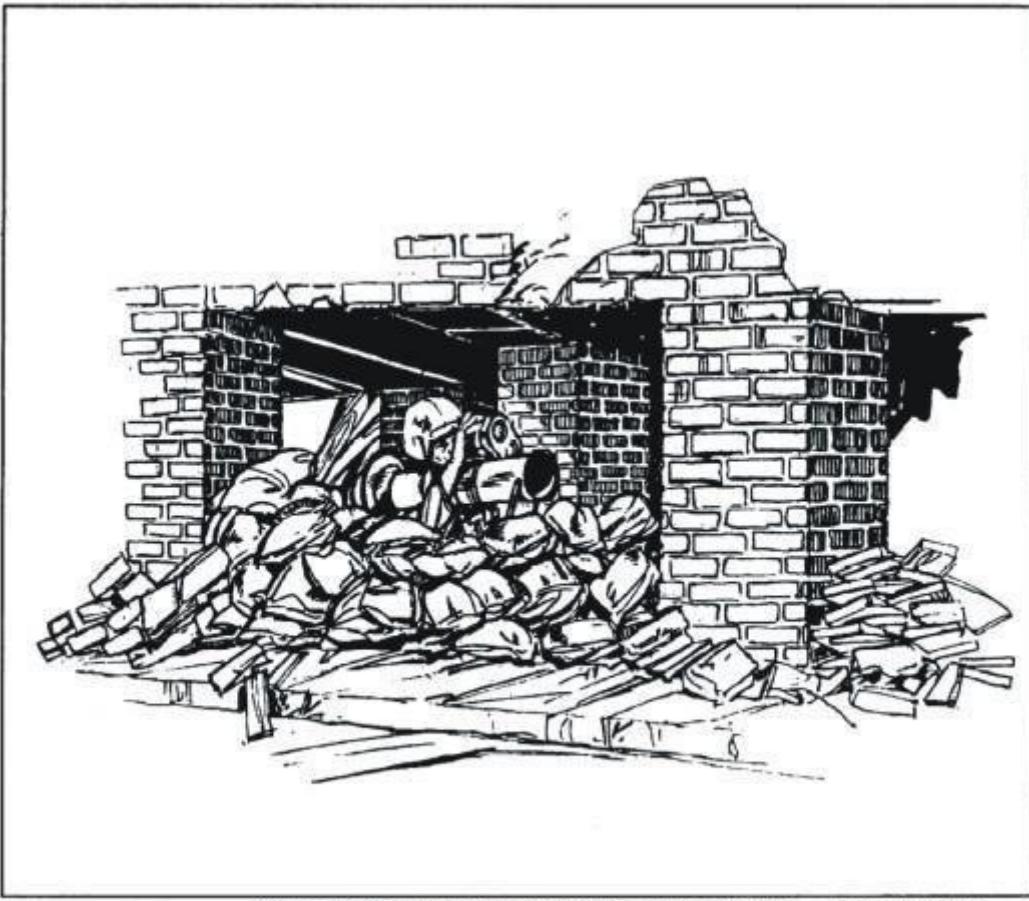


Figure 5-36. Подготовленная позиция с верхним прикрытием

NOTE: When firing from an inclined trajectory, ensure that the angle of the launcher to the ground or platform does not exceed 20 degrees. When firing from a building, ensure that there is a space of at least 3 to 4 meters behind that is clear of debris and objects and that the walls have windows, doors, or openings for the jet to exit.

- I. In an attack, windows and doors represent ready firing positions (Figure 5-37). For this reason, the enemy usually keeps windows and doors under observation and fire. Any opening in the walls that has been created during combat can be exploited with minimal risk. When no other openings are available, observation slits can be created by small explosive charges (Figure 5-38). Regardless of which openings are used, the machine gun barrel must not extend beyond the building and the crew must be positioned in the shade.

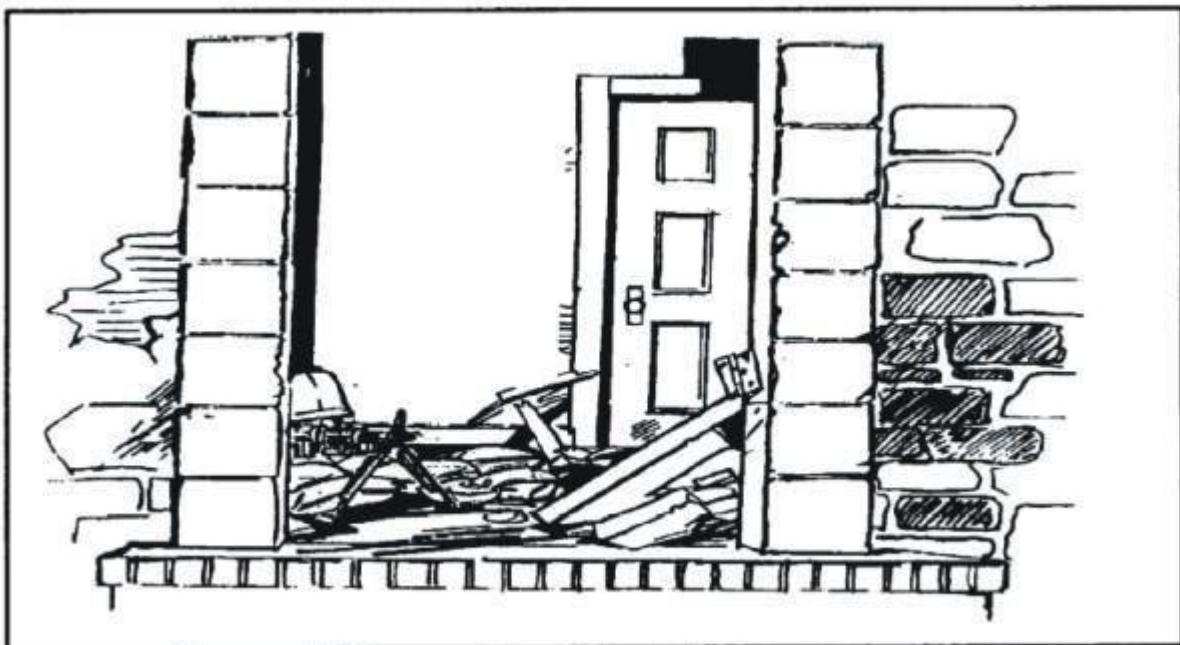


Figure 5-37. Позиция пулемёта в дверном проёме

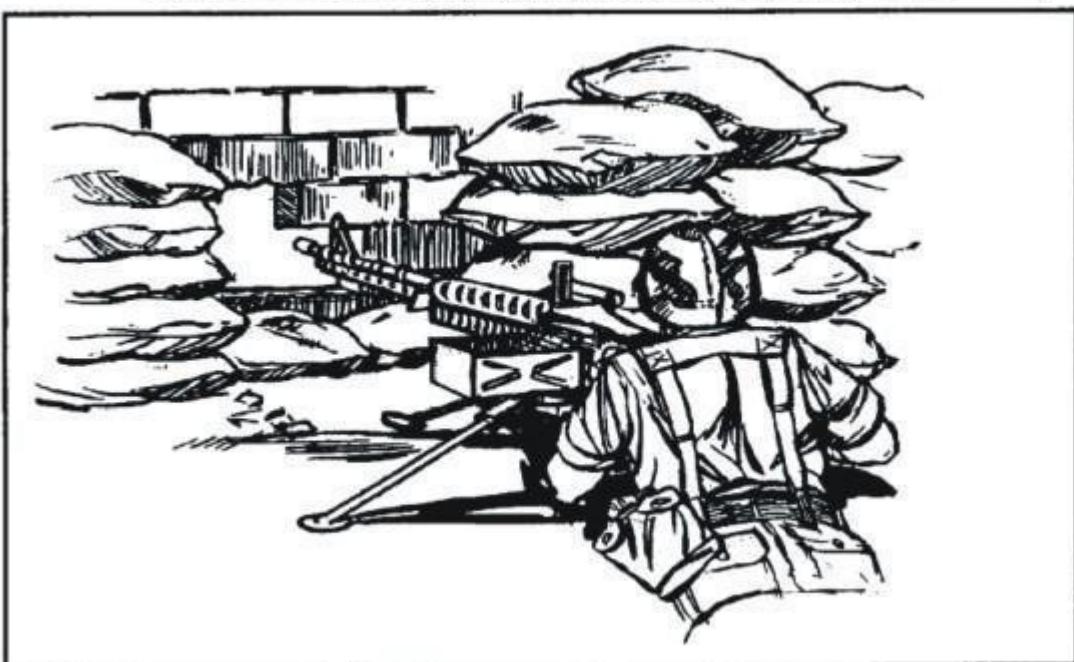


Figure 5-38. Использование щели для позиции пулемёта

m. After occupying a building, soldiers block all windows and doors with improvised material, leaving small gaps between boards, blocks, bags, etc. Soldiers can use the windows and doors as good additional firing positions.

n. Viewing slots should be used intensively in defense. They should not be created in any logical order, nor should they be created in a line at floor level. Varying their height and location makes them difficult for the enemy to detect and accurately fire.
False

observation slits or cutouts that are not intended to be used as firing positions help deceive the enemy. Observation slits located behind shrubbery, under door jambs, and under the eaves of buildings are difficult to detect. In the defense, as in the offensive, building ceilings can be used for overhead protection of firing positions.

o. Larger sectors of fire can be obtained by placing the machine gun in a corner of a building or under a building (Figure 5- 39). Available materials such as tables, chairs, couches, and other furniture should be integrated into the design of position protection to increase cover and concealment (Figure 5-40).

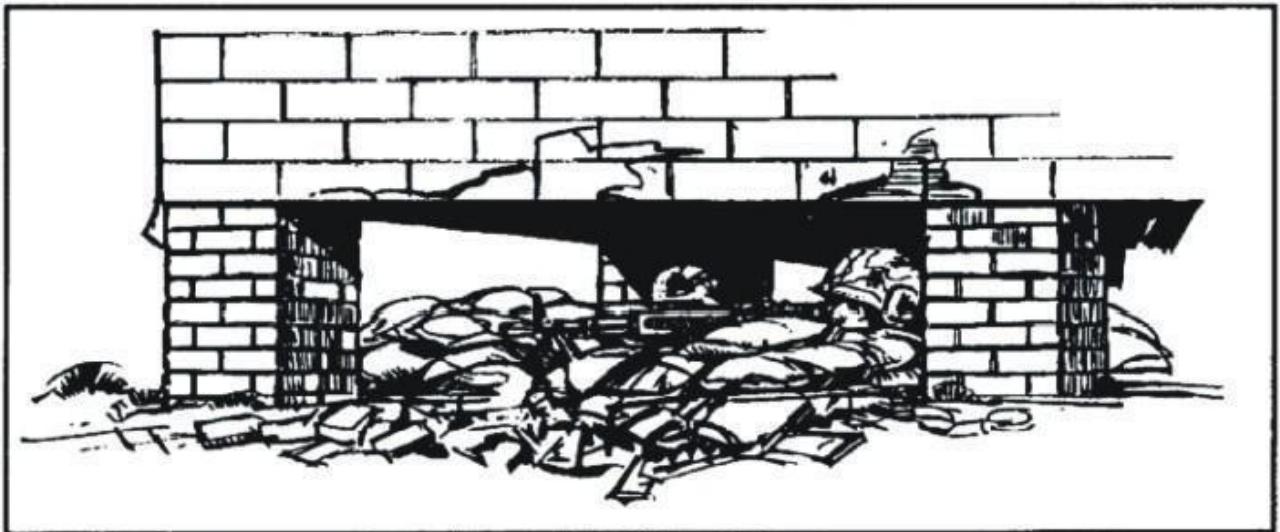


Figure 5-39. Позиция пулемёта под зданием, укреплённая мешками с песком



Figure 5-40. Угловая позиция пулемёта с верхним прикрытием

p. Although overhead fire is desirable when using the machine gun, it may not always be applicable. Where destroyed vehicles, debris and other obstacles limit the sectors of overhead fire, the machine gun may be mounted above ground level to fire over obstacles. Therefore, a machine gun position with an observation slot on the second or third floor may be necessary. The firing position can be placed under a roof (Figure 541) and equipped with an observation port. Again, the exact location of the position should be concealed by removing some roofing elements throughout the roof.



Figure 5-41. Огневая позиция под крышей

Buildings mask movement and reduce the effects of direct and mounted fire. Ruins and buildings provide cover and protection for attackers and defenders, making reconnaissance more difficult. The city offers defined approaches that can be easily divided into sectors.

A. Patrolling and observation post techniques are as applicable in the city as they are in the wooded landscape. These methods enable teams to establish enemy locations to identify targets for direct fire and mounted fire in the defense and to locate uncovered enemy approaches in the offensive.

b. Most weapons and vehicles have various indications of their presence. These signs depend on the characteristics of the system or the environment in which the systems are used. For example, a tank gun firing in a dry, dusty, and debris-covered street raises a cloud of dust; a tank moving in a populated area makes much more noise than the same tank moving through an open field; soldiers moving through debris on a street or in the halls of a damaged building make more noise than in a wooded area. Soldiers must know the signs of various weapons, equipment, and infantry systems so can locate and identify targets. Observation, hearing, and smell assist in detecting and identifying signs, which leads to locating targets, identifying them, and killing them quickly. Soldiers must

Look for targets in areas where those targets are most likely to be used.

c. Reconnaissance must be continuous, both when stopping and moving. Settlements provide both the attacker and the defender with good cover and concealment, but the defender usually has the advantage initially. This makes reconnaissance an extremely important issue, since the side that fires first has the advantage.

d. When moving a team when enemy contact is likely, the team should have a cover element. This principle applies in populated areas as it does in other types of terrain, except that the cover element must observe both the upper floors of buildings and the street level.

e. When moving in populated areas, stealth should be used since attackers and defenders are separated by a short distance. Only hand signals should be used until contact with the enemy is established. The group should stop, listen, and observe periodically to ensure that enemy forces are not in pursuit or that the enemy is not moving parallel to the flank of the group to ambush it. Routes should be carefully chosen so that buildings and debris mask the movement of the team.

f. Observation tasks must be clearly defined for the members of the squad in order to guarantee all-round safety while driving. This safety is also maintained during a stop.

All senses must be used to identify targets, especially hearing and smell. Soldiers can quickly identify the sounds of vehicles and people moving through streets that are littered with debris and through rubble. The smell of fuel, cologne, and food can reveal enemy positions.

g. Observation posts are positions from which soldiers can observe enemy activity and listen to the situation in a particular sector. They alert the group to enemy approaches and are ideal for use in populated areas. Located on the top floor of a building, gives Soldiers advantages

of sight distance, as opposed to being located at street level.

h. In a defensive situation, the platoon commander organizes the NP for direct protection by order of the company commander. The platoon commander selects the general location for the NP, and the squad leader directly organizes the NP (Figure 5-42).

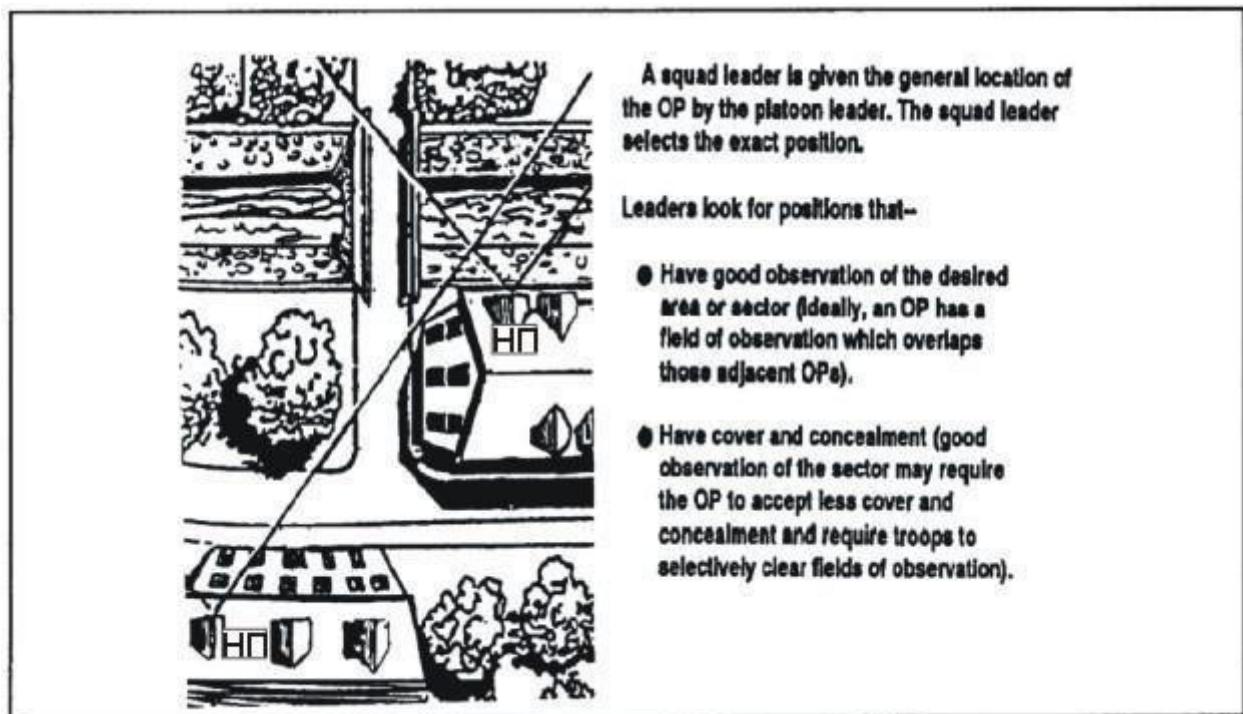


Figure 5-42. Выбор места для НП

Normally at least one NP is established for each platoon. The force at the NP consists of two to four men, and the NP itself is located within small arms range of the platoon to support it. Commanders look for positions that have good sectors of observation and fire. Ideally, one NP should have observation sectors partially overlapped by those of an adjacent NP. The position selected for the NP should have cover and concealment for groups moving to or from the NP. Upper floors of buildings may be used for the NP. The squad leader should not select obvious positions, such as water towers or church spires, that attract enemy attention.

i. The Soldier must know how to view the observation sector from the CP or from a fighting position. Using proper observation techniques allows squad members to quickly locate and identify targets. First, the Soldier quickly surveys the area without optics. If no targets are found and time permits, he conducts a more detailed landscape survey of the designated sector in a 50-meter-wide area

from right to left (using binoculars, if available). He then inspects the next strip from left to right, with the next strip partially overlapping the previous strip. This process continues until the sector is fully inspected. In an urban center or in the center of the periphery, where the observer encounters multi-story buildings, the overlapping zones may be elevated rather than removed.

j. Soldiers in the NP and other positions must utilize observation devices. These devices include binoculars, night vision devices, thermal imaging devices, ground surveillance radar (GSR), remote sensors (RRS), and platoon early warning systems (PEWS). All of these devices can augment the teams' ability to detect and destroy targets. Multiple types of devices should be utilized because a single device cannot provide all of a group's needs. A suite of devices could include PEWS sensors to cover blind and dead spaces, night vision devices for close-range observation, thermal imaging devices for covert observation, observation through smoke, and low-light observation. A suite of devices is preferable because multiple devices are allowed to cover sectors, cover more space, and the capabilities of one device can override the limitations of another.

k. Reconnaissance techniques used at night are similar to those used during the day. When observing with the naked eye or using daylight optics at night, the soldier should not look at the object itself, but a few degrees to the side. The edge of the eyeball is more sensitive to dim light. When viewing with the line of sight away from the target, the soldier moves his eyes in short, sharp movements. At each area of likely enemy appearance, he holds his gaze for a few seconds to detect any movement.

l. Sounds and odors can assist in identifying targets at night because their propagation is enhanced in the cold, still, night air. Running engines of vehicles vehicles and soldiers, moving through the

Streets littered with ruins can be heard from a great distance. The smell of diesel fuel, gasoline, groceries, tobacco, cologne, and so on give away friendly and enemy locations.

Incendiary munitions, special weapons, and the ease with which incendiary devices can be created from gasoline and other flammable materials place the threat of fire in an important position in operations in populated areas. During defensive operations, the question of fire safety must be placed among the first priorities. Proper steps must be taken to reduce the risk of fire that could render the selected position unsuitable for defense.

- a. Soldiers select or establish positions that do not have large openings. These positions shall provide sufficient cover to prevent the penetration of incendiary munitions. All unnecessary flammable materials are removed, including ammunition boxes, furniture, mats, newspapers, curtains, and so on. The electricity and gas in the building shall be turned off.
- b. A concrete block building with concrete slabs and a metal roof is an ideal position. However, most buildings have wood floors, wood rafters and wood interior walls that need improvement. The interior walls are being removed and replaced with blankets to resemble walls when viewed from the outside. Sand 2 inches deep is poured on the floors and in the attic to discourage fire.
- c. All available firefighting equipment should be located in position as it may be needed during the course of the battle. This equipment includes tools such as shovels, buggers, buckets, etc., sand and blankets. This equipment is supplemented by fire extinguishers.
- d. Fire can be so destructive that it can easily destroy personnel regardless of extraordinary precautions. Soldiers plan escape routes so that evacuation priority is given to combat positions. This allows soldiers to exit through areas that are free of combustible material and provide cover from enemy direct fire.

e. Limited space and large amounts of combustible material in populated areas can affect the enemy's use of incendiary devices. Two major problems that are more important than in the open battlefield are burns and smoke asphyxiation, which creates a lack of oxygen. These can easily occur in buildings and reduce troop effectiveness by causing casualties. Although there are no specific remedies for fire and lack of oxygen, smoke inhalation can be reduced by the use of gas masks. Regardless of the danger of fire, planning for defensive combat in populated areas should include the use of . Corpsmen must locate casualties and their equipment and should have extra supplies for burns and respiratory treatment.

f. Offensive operations also require a fire plan, since successful mission accomplishment can easily be jeopardized by fire. Poorly planned use of incendiary munitions can provoke fires so extensive that they become obstacles to offensive operations. The enemy can use fire to cover his retreat and to obstruct the attacker.

g. When planning offensive operations, the attacker must consider all available weapons. The best weapon systems for creating fires are the M202 "FLASH" and the flamethrower, which is currently decommissioned in the Army but can be obtained by special request through materiel channels. The flamethrower is well suited for operator training as the flammable liquid can be replaced with water and the effects of the weapon can be learned by using water. No training ammunition is currently available for the M202. When fire is used in an operation, fire support must be available to avoid using soldiers to fight fires. Soldiers select targets during initial planning to avoid inadvertently destroying critical assets within the population center. When using fire operations in a populated area, Soldiers prioritize fire support (hospitals, power plants, radio stations and t. e.). h. Each soldier,

involved in an attack must be prepared to fight fire. Typical firefighting equipment includes tools, a helmet (for carrying sand or water) and a blanket (for suppressing small fires). Fire extinguishers should be available on each vehicle supporting the attack.

Chapter 10. USE OF SNIPERS

The value of a sniper in a team operating in a populated area depends on several factors. These factors include the type of operation, the level of conflict, and the rules of engagement (ROE). Where ROE allow destruction, snipers may not be needed because other weapon systems available to mechanized forces have a greater destructive effect. However, they may contribute to combat where ROE prohibit collateral destruction. Snipers may then be the most valuable tool a commander has. (See FM 7-20; FM 1-2, C1, and TC

23-14 for more information.)

- a. The effectiveness of snipers depends partly on the landscape. Their control is impaired by the characteristics of an urbanized area. Provided with timely and effective support, the sniper must have a clear understanding of the operational commander's concept and intentions.
- b. Snipers must be located in sturdy buildings. These buildings must also provide long-range sectors of fire and comprehensive observation. The sniper has an advantage because he does not have to move or take up a position. He can take a higher position in the rear or on the flank and some distance from the element he is supporting. The sniper must position himself some distance from other elements to avoid enemy fire, but he must remain close enough to them to destroy distant targets that threaten the group. Snipers should not be positioned in obvious positions, such as church steeples and on the tops of rooftops, because the enemy often views them and they are

targets for destruction. Overhead fire can destroy roofs and cause casualties on the upper floors of buildings. Also, snipers should not be positioned where there is heavy traffic; these areas are also scrutinized by the enemy.

c. Snipers must work everywhere in the area of operation, moving with company cover support as needed. Some teams may operate independently of other forces. They search for targets in isolation, especially enemy snipers. A team may occupy multiple positions. A single position does not provide adequate observation for the entire team without increasing the danger of enemy detection. Separate positions must provide mutual support. Alternate and additional positions should also be established in urban areas.

d. Snipers may be assigned the following tasks:

(1) Destroying snipers enemy snipers (anti-sniper fire).

(2) Destroying emerging targets. The commander may prioritize the destruction of such targets. Targets may include snipers, commanders, crews, radio operators, sappers, and enemy machine gun/grenade launchers.

(3) Covering the approaches to certain areas or facilities (Controlling key areas of terrain).

(4) Providing fire cover for barricades and other obstructions.

(5) Observation of flanks and rear approaches (screening).

(6) Supporting local counterattacks with accurate fire.

Settlements present various challenges, including navigation. Deep in the urban core, the usual landscape features shown on maps cannot be applied, as buildings will become major landscape features and groups will become tied to streets. Combat in the city destroys buildings whose ruins block the streets.

d. Operations in a populated area adversely affect the effectiveness of sophisticated electronic devices such as GPS and data distribution systems. These systems function much like communications equipment - within line of sight. They cannot determine underground locations or positions within buildings. These systems should be used on the upper floors of buildings (rooftops), in open areas and on streets where obstacles will not screen the line of sight.

e. City service workers can provide significant assistance to groups fighting in populated areas. They can provide maps of collectors, electrical grids, and information regarding the city. This is especially important with regard to the use of collectors. Collectors can contain pockets of methane gas, which is highly toxic to humans. City collector workers know the locations of these danger zones and can help the group avoid them.

Most global navigation and positioning systems use the triangular methodology, using satellites to calculate their positions. Preliminary tests have shown that GPS has no problems in small populated areas like villages. However, large built-up areas with a mixture of tall and short buildings somewhat degrade the performance of most GPS. This degradation can increase if the system is moved inside a large building or into underground areas.

Current aerial imagery is also an excellent addition to, and can replace, military urban maps. A topographic map or military urban map may be out of date if it was published many years ago. An aerial photograph taken just now shows changes that have occurred since the map was issued. These changes may include destroyed buildings and streets blocked by debris, as well as enemy defensive preparations. By using aerial photographs and maps together, more information can be gained than using what
- or one of them.

To survive and win combat in populated areas, the team must supplement cover and concealment with camouflage. To properly camouflage men, vehicles, and equipment, Soldiers must study the surrounding area and construct positions so that they do not disturb the local landscape.

Only the material needed to camouflage the position should be used, as excess material can make the position easier to locate. The material should be collected over a large area so as not to upset the surrounding balance of materials.

- a. Buildings provide numerous covered positions. Armored vehicles can often find isolated positions under vaulted passageways or inside small industrial or commercial buildings. Walls of concrete, stone or brick provide excellent protection from direct fire and provide covered routes.
- b. After the camouflage is complete, the soldier examines the position from the enemy's point of view. He determines whether the camouflage looks natural and conceals the position. If the camouflage does not look natural, the soldier must rebuild or replace it.
- c. Positions should be well camouflaged after they have been prepared. Work should continue until all camouflage is complete. When the enemy has air superiority, work may be possible only at night. Bright or light objects that attract attention from the air should be concealed.
- d. Clothing should not be new, so that it does rustle or reflect light. Open areas of the body should be covered or camouflaged as they reflect light and attract the attention of the enemy. Even dark skin reflects light due to sweat and grease.
- e. Camouflage face paint is available in three standard, two-color pencils. When established face coloring pencils are not available, burnt cork or charcoal may be used to darken uncovered areas of the body. Dirt should be used last, as it dries and flakes off quickly and may contain harmful bacteria.

Buildings in populated areas cast distinct shadows that can be used to conceal vehicles and equipment (Figure 5-43). Soldiers should avoid areas without shadows.

Cars will probably need to be moved periodically as shadows shift throughout the day.

Locating it inside the building provides better shelter.

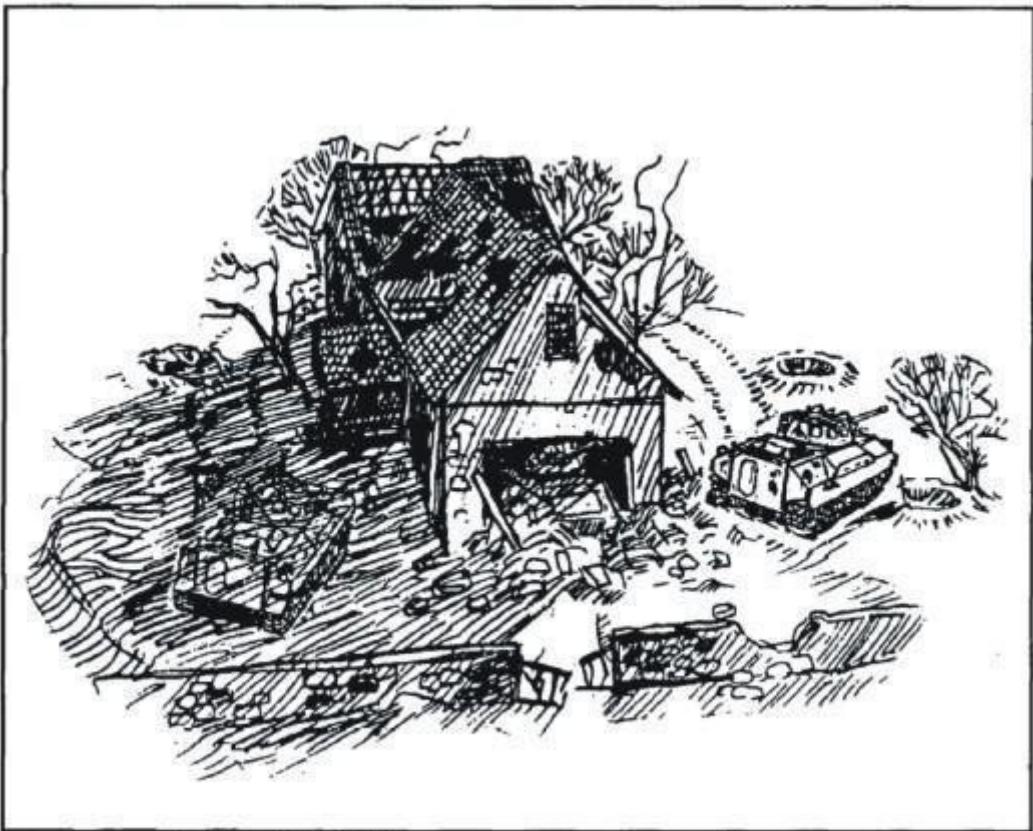


Figure 5-43. Использование теней для прикрытия

- a. Soldiers should avoid lighted areas near windows and observation slits. They be better covered if firing from a shaded room (Figure 5-44).

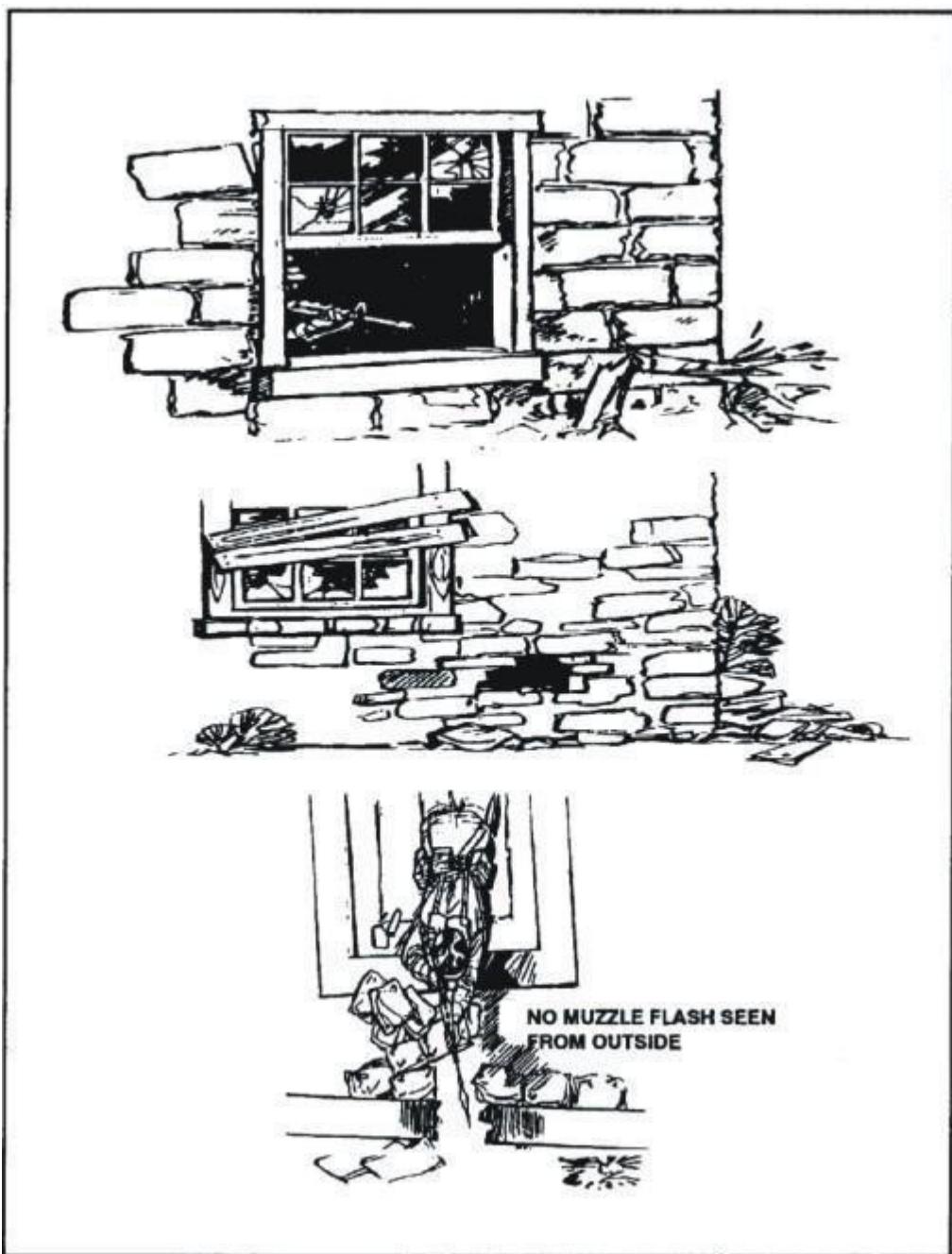


Figure 5-44. Concealment inside a building.

b. Blinds or cloth curtains provide additional cover for soldiers inside rooms if curtains are common in the area. The use of fire inside buildings is prohibited. The standard type of camouflage painting of equipment is ineffective in populated areas because there is a predominance of uniform dark colors and shadows. Since it is not always advisable to repaint machines before entering a populated area, the light sand color should be darkened with the color of dirt or earth.

a. There is as much need to break the silhouette of helmets and personalized equipment in populated areas as there is to

and everywhere else. However, burlap or canvas is more suitable than foliage (Figure 5-45). The predominant colors are brown, beige, and various shades of gray preferable to green.



Figure 5-45. Маскировка шлема полосами ткани

- b. Wet blankets (Figure 5-46), canvas, or cloth should be used in positions to prevent dust from being raised by fire.

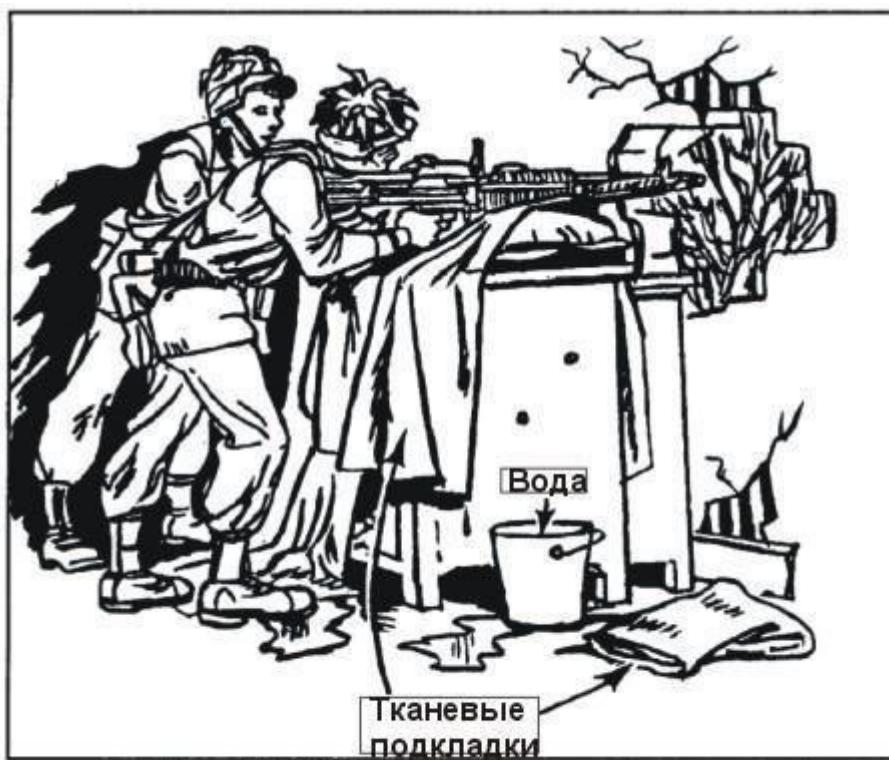


Figure 5-46. Использование подкладок для предотвращения образования пыли

- c. Command posts and rear locations are easier to camouflage if they are located in subways. Antennas can be located on upper floors or on higher floors

buildings. Field telephone wire shall be laid in conduits, in collectors, or through buildings.

d. Soldiers must be aware of their surroundings so that they do not stand out. Soldiers must not make typical camouflage mistakes:

Treaded paths or other signs of troop presence. Glare or shadows.

Unnatural color or texture. Gunshot

flashes, smoke or dust. Unnatural

sounds or odors.

Motion.

e. False positions may be used to distract the enemy by fire and force him to give away his position.

f. Settlements provide cover, resources for camouflage and locations for concealment. The following basic rules for cover, camouflage, and concealment must be strictly adhered to:

(1) Use the landscape and change camouflage to match the surrounding terrain.

(2) Use building camouflage that is misleading.

(3) Continue to improve positions. Reinforce fighting positions with sandbags or other materials that resist bullets, explosions, and shrapnel.

(4) Maintain the natural look of the area.

(5) Ensure stealth of positions by minimizing the clearing of debris for sectors of fire in front of those positions. (6) Select firing slots in inconspicuous locations if possible.

NOTE: Remember that forces that are CORRECTED and PRECISED have a significant advantage over forces that are neither CORRECTED nor PRECISED.

Chapter 11. COMBAT SUPPORT

Combat support is supporting fire and other assistance that supports the actions of combat elements. It usually includes field artillery, air defense, aviation (less often airmobile troops), engineer support, military police, communications, electronic warfare, and radiation and chemical support.

Mortars are the fastest-acting mounted fire system available to battalion and company commanders. Their mission is to provide close and direct fire support to line units. Mortars are well suited for combat in built-up areas because of their high rate of fire, high angle of incidence, and short minimum range. Battalion and company commanders must plan mortar support with FSO as part of the overall fire support system. Role of mortar teams. Mortar teams must provide suppressive fire to support maneuver, especially against hasty infantry. Mortars during operations in the urbanized landscape may be used to blind, neutralize, suppress, or illuminate. Mortar fire suppresses enemy fire and movement, allowing friendly forces to maneuver and move to positions of advantage. Effective integration of mortar fire with the rushing infantry maneuver is the key to success in the battle in a populated area at the company and battalion level.

a. Position Selection. The choice of positions for mortars depends on the size of the buildings, the size of the urban area and the objective. Ruins can also be used to create sites for firing positions.

(1) The use of existing buildings (e.g., garages, office buildings, or overpasses) to provide concealed positions provides maximum protection and minimum camouflage effort. Survivability can be increased by proper use of . If the mortar is positioned so that the frontal mask of the position is more than 885 mm above the mortar barrel cutoff, the threat of enemy counterbattery fire is greatly reduced. These principles can be used both offensively and defensively.

(2) Mortars shall not be placed directly on concrete; sandbags may be used as a buffer. Sandbags shall be placed in two or three levels; resting against the curb or walls and extending beyond the limits of the

the mortar baseplate by at least one sandbag width.

(3) Mortars are not normally placed on the roofs of buildings because the lack of cover and camouflage makes them vulnerable. They should not be placed inside a building with a damaged roof unless the strength of the building has been tested. A shock wave can cause casualties and the recoil on the floor can weaken or destroy the building.

c. Communications. Increased use of wire communications, messengers, and visual signals will be required. However, wire communications should be the primary means of communication between forward observers, fire support team, fire direction center, and mortars if elements are close together. FM radio transmissions in populated areas are likely to have problems. Buildings reduce the range of radios; however, moving antennas to upper floors or rooftops can improve communications and increase operator survivability. Another method is the use of radio retransmissions. Existing civilian communications systems should be utilized whenever possible.

d. Magnetic Exposure. In an urban environment, all magnetic devices are exposed to surrounding structural steel, electrical cables and automobiles. Due to the minimum sighting line distances, the use of the M2 aiming circle will be difficult. To overcome this problem, the azimuth is determined to a distant point of aim. From this azimuth, the azimuth of the direction of fire is subtracted. The difference is transferred to the red scale and the mortar is aimed at the distant aiming point up to the vertical. Instead of a distant aiming point, features such as street direction can be used.

e. Breezable munitions. During operations in the urbanized landscape, mortars use these munitions more frequently than any other type of mounted fire weapon. The most common and valuable use of mortars is to provide barrage and harassment fire. One of the most useful functions of mortars is to cut off supply, evacuation, and reinforcement behind enemy lines directly behind the enemy's forward defense positions. Although mortar fire is often conducted along roads and other open areas,

the natural dispersion of mounted fire will result in multiple hits to buildings. Commanders must take this into account when planning mortar fire to reduce collateral damage.

(1) Breeze munitions, especially 120mm mines, give good results when used against lightly constructed buildings within cities. However, they are not as effective against the reinforced concrete present in a large city.

(2) When using breezant ammunition in urban combat, only delayed fuzes should be used. The use of instantaneous fuzes should be avoided because the nature of populated areas causes them to detonate prematurely. Instantaneous fuzes are, however, useful in destroying rooftop NP type targets.

(3) During World War II and in recent Middle East conflicts, light mortar fire was used intensively to prevent the enemy from using streets, parks and squares.

f. Illumination. In the offensive, illumination munitions must be detonated over enemy positions. If flares are detonated behind targets, enemy troops will be in shadow rather than light. In defense, flare munitions should be detonated behind friendly troops to shade them and illuminate enemy troops. Buildings reduce the effectiveness of lighting by creating shadows. Continuous lighting requires good coordination between forward observers and the FDC to produce the proper effect, creating illumination over defense positions as enemy troops approach buildings.

g. Special Considerations. When planning for the use of mortars, commanders should consider the following:

(1) Adjusters should be positioned on the roofs of buildings from which observation and correction of fire can be made.

(2) Commanders must know the effects of ammunition to properly determine the number of rounds required to accomplish certain objectives. The effects of using white phosphorus ammunition can create unwanted smoke screens or limit visibility, which can affect the tactical plan.

(3) Correctors must be able to identify dead space. Dead space is an area where mines cannot reach street level because of buildings. This area is a safe zone for the enemy. Mortar dead space is approximately half the height of a building.

(4) Mortar crews must plan for their own safety.

(5) Commanders must anticipate where and when mortars must move to provide immediate mounted fire in support of the overall tactical plan. In urbanized terrain operations, the ability of mortars to change positions is impaired due to rubble and the close proximity of enemies.

A field artillery battalion is normally assigned the tactical task of supporting a brigade maneuver with direct fire. In another case, the battery may not participate in direct fire support of the battalion task force, but it may be attached to the task force.

a. Appropriate fire support coordination measures must be carefully considered, since combat in a populated area normally devolves into close combat. When planning fire support in a populated area, the battalion commander, in coordination with his FSO, considers the following:

(1) Reconnaissance of targets can be difficult due to the large amount of cover and concealment provided by the landscape. Ground observation is limited in populated areas, so spotters must be placed on top of buildings. Corrective fire is more difficult because buildings make it impossible to see where the ammunition is hitting; therefore, a lateral method of correction must be used.

- (2) Rifle rounds are corrected from the side when projectiles hit a street perpendicular to the leading edge of the battle area. Air burst ammunition is better suited for this correction. The correction must be made by sound. When the ammunition hits the perpendicular street, it is range corrected. When the range is corrected, a lateral shift to the target is made and fire to kill.
- (3) Special attention must be paid to the use of various ammunition if their effects are limited to buildings.
- (A) Careful use of VT is required to avoid premature cocking.
 - (B) Hinged fire can create undesirable destruction.
 - (C) Proximity troops adversary requires careful Coordination.
 - (D) White phosphorus can create unwanted fires and smoke.
 - (E) Delayed detonation fuzes should be used so that the munitions penetrate the fortifications before detonation.
 - (F) Flare munitions can be effective; however, friendly positions should remain in shadow and enemy positions should be illuminated. Tall buildings may reduce the effectiveness of illumination munitions.
 - (G) VT, TI and ICM ammunition is effective in clearing enemy positions, neutralizing observers and eliminating rooftop antennas.
 - (H) Swirling winds can impair smoke utilization.
 - (I) FASCAM (remote minefield) munitions can be used to interdict enemy movement. The effectiveness of the FASCAM is reduced when this minefield is placed on a hard surface.
- (4) Planning in the urban landscape is difficult because the enemy has many covered and concealed positions and routes of travel. The enemy can be on rooftops and in buildings, in subway systems and in sewers. Airborne observers are extremely useful for

planning because they can see deep into the city and detect movement, rooftop positions and fortifications. Roof fire is planned to neutralize enemy adjusters and destroy communications and radar equipment. Fire is also planned on main roads, intersections, and known or probable enemy fortifications. The use of artillery in direct fire mode to destroy fortifications must also be considered. Limited fire support coordination measures (such as a restricted or no-fire area) may also be considered for the safety of civilians and critical structures.

(5) The 155-mm and 203-mm self-propelled howitzers are effective in neutralizing concrete targets with direct fire. The concrete-piercing shells of the 155-mm and 203-mm howitzers can penetrate 900 mm and 1,400 mm of concrete, respectively, at ranges of up to 2,200 meters. These howitzers must be provided with close-in protection when used in direct fire mode, as they have no significant crew protection. Restrictions may be placed on the types of artillery ammunition to reduce the destruction on lines of travel that may be used by friendly forces.

(6) Forward observers should be able to determine where large dead spaces are and what size they are. A dead space is an area where canopy fire cannot reach street level due to buildings. This area is a safety zone for the enemy. For low-angle artillery systems, the dead space is approximately five building heights. For mortars and high angle artillery systems, the dead space is approximately half the height of the building.

(7) Air observers are effective for observing spaces behind buildings. They are extremely useful when using ladder adjustments because they have the ability to see where the ordnance is hitting. Air observers can also relay artillery fire calls from ground teams when communications are impaired by power lines or buildings.

(8) Radar can detect most artillery and mortar targets in an urban environment because of the high percentage of steep trajectory fire. If radars are placed too close to tall buildings on the opposite side from the enemy (and his artillery), their effectiveness will be somewhat reduced.

b. The use of aerial detonation fire is effective

a means of clearing rooftops of snipers. Fuzed projectiles delayed fuzes may be effective against enemy troops on the upper floors of buildings, but, because of the overhead cover provided by buildings, such projectiles have little effect on enemies in lower floors.

Shipboard gunfire can provide effective fire support to ground groups. If shipboard gunfire is used, the battalion may be assigned a Support Liaison Team (SALT) from the U.S. Marine Corps Airmobile Support Liaison Company (ANGLICO). The SALT consists of one liaison section that operates from the battalion's main control point. It also has two company-level fire control teams that provide ship-to-shore communications and coordinate shipboard fire. SALTs coordinate all shipboard gun fire with the battalion's FSE.

When fighting in a populated area, the battalion may be supported by elements of the Air Force, Navy, U.S. Marine Corps, or allied fighters, attack aircraft, and attack helicopters. a. The use of close air support depends on the following:

(1) Impact and concussion. Heavy aerial bombardment provides tactical advantages to the attacker. Impact and concussion bombardment reduces the effectiveness of defending troops and destroys defensive positions.

(2) Ruins. Ruins created by air strikes can increase cover for the defender and create obstacles to the movement of attacking forces.

(3) Proximity of friendly forces. Close proximity of enemy forces to friendly forces may require the use of guided munitions and temporary withdrawal of friendly forces. The AC-130 aircraft is an aerial engagement platform for precision operations in the urbanized landscape when close proximity of friendly forces precludes other use of tactical air support.

(4) Local civilians or key assets. The use of aerial ordnance may be limited by the presence of civilian residents or by requirements to preserve important structures within the city.

(5) Limited Ground Surveillance. Limited ground surveillance may require the use of an airborne **FAC**.

b. Close air support can be used during offensive operations to:
Support the isolation of a city by blocking exit and entry routes.

Supporting attack groups by destroying enemy strongholds with guided munitions. Conducting tactical aerial reconnaissance and providing detailed information on enemy locations and equipment.

c. Close air support can be used during defensive operations for:

Strikes against the advancing enemy and their concentrations outside the populated area.

Providing support for counterattacks with guided munitions.

Basic air defense doctrine does not change when groups operate in an urbanized landscape. The fundamental principles of connectivity, focus, mobility, and integration all apply when utilizing air defense assets.

a. In developing his air defense plan, the ground commander should consider the following:

(1) Targets for enemy aircraft, often available in and around populated areas, such as major communication lines, road and railroad networks, and bridges.

(2) In populated areas, it is difficult to find and establish a good firing position for a long-range air defense missile system. Therefore, the number of installations a commander can use may be limited.

(3) Movement between positions is usually restricted in populated areas.

(4) Long-range systems can provide air defense from positions on the edge of a city or beyond.

(5) Radar blockage and degraded communications reduce the range of air defense systems. Air defense control measures must be adjusted to increase air defense effectiveness within this environment.

b. The deployment of Vulcan air defense SAMs in populated areas is often limited to large open areas without obstacles such as parks, fields, and railroad stations. Non self-propelled Vulcan SAMs (or removed from SAMs) can be mounted by helicopters on rooftops in densely populated areas to provide protection against air attack from all directions. This should be accomplished only when the location and size of the friendly forces and the enemy air threat are accurately known.

c. Stinger MANPADS provide protection for battalions just as they do in any other operation. When used within a populated area, rooftops usually offer the best firing positions.d. Large-caliber machine guns mounted on rooftops can provide additional air defense. 6-6.

Tasks in support of urban operations by Army aviation include: attack, surveillance, troop transportation tasks andsupport of air assault, command and control, reconnaissance, electronic warfare, relay, and medical evacuation. When using Army aviation, the commander considers the air situation, the enemy air defense system, the landscape in and adjacent to the city, and available Army or Air Force assets.

a. Tasks in offensive operations. Army aviation tasks in support of urban offensive operations include:

(1) Air assault operations to capture key terrain adjacent to or within an urban area and key facilities when the area is poorly defended or the enemy has been previously suppressed.

(2) Use of attack helicopters to support the commander's maneuver in a populated area or adjacent landscape.

(3) Air transportation and medical evacuation.

- (4) Command and Control, providing rapid delivery of command to critical areas and airborne leadership of forces.
 - (5) Airborne relay.
 - (6) Intelligence Operations.
 - (7) Long-range anti-tank fire.
- b. Tasks in defense. Army aviation tasks during urban defense operations include:
- (1) Long-range anti-tank fire.
 - (2) Fast delivery or redeployment troops (anti-tank teams and reserves).
 - (3) A quick concentration of strength and fire.
 - (4) Covering the withdrawal of friendly forces.
 - (5) Logistics Operations.
 - (6) Command and Control.
 - (7) Communication.
 - (8) Intelligence Operations.

An advantage in the attack may be gained by air assault on the roofs of buildings. Before executing the mission, rooftops should be inspected for obstacles such as electrical wires, telephone wires, antennas, or enemy mines and wires that could cause casualties to helicopters or troops. In many modern cities, office buildings often have rooftop helipads that are ideal for helicopter landings. Other buildings, like parking garages, are usually strong enough to support the weight of a helicopter. Delivering troops to a building can also be accomplished by rope drop from a helicopter or by landing from a hovering helicopter.

- a. A small force assault. Units will probably have to be landed on the roof of a key building. Success depends on minimizing casualties and suppressing all enemy positions from which helicopter fire can be directed. Depending on the design of the roof, a rope drop may be more advantageous to troops than their exit from a landing helicopter. Descending by rope is often more reliable and safer for troops than exiting from a low-hanging helicopter. Trained soldiers can rappel in minimal time.
- b. Large-scale air assault. Roof landings are not used for large-scale air assault. Instead of

open areas (parks, parking lots, sports arenas) within a should be used. Several sufficiently large locations for helicopter operations can usually be found within 2 kilometers of an urban center.

c. Air transportation of troops and air supply. In a battle in a populated area, troop transportation by helicopter may be a major requirement. Groups engaged in street combat usually suffer more casualties than groups fighting in open terrain. Casualties must be evacuated quickly and replaced by new troops. At the same time, roads are likely to be crowded with supply and evacuation vehicles and may be blocked by craters or debris. Helicopters provide rapid troop movement by using the obstacle avoidance flight method along selected streets already protected and cleared of obstacles. The helicopter takes troops to the last concealed position before the front line and then returns, avoiding enemy fire. A similar method of piloting can be used for air supply and for medical evacuation.

d. Air assault. Air assault in enemy-occupied territory is extremely difficult (Figure 6-1). One method is to fly around obstacles in wide streets or commercial areas while attack helicopters and machine gunners in the doorways of utility helicopters suppress the enemy in buildings on both sides of the street. The air assault plan may include artillery preparation with strikes through the H-hour sequence. Maneuvers and demonstrations in the form of false landings may mislead the enemy as to the actual landing.



Figure 6-1. Воздушный штурм в населённом пункте

The engineer team supports the division commander by conducting specialized landscape surveys, supplying the commander with all necessary information for combat in the built-up area. During combat in a built-up area, engineer teams should be divided and assigned to dispersed maneuver groups; for example, one engineer company to each brigade, one platoon to each battalion or battalion task force, and a squad to each company or company team. Most engineering tasks, however, will have to be accomplished by infantry groups reinforced with heavy engineering equipment and supervised by engineers.

a. Tasks during offensive operations. During offensive operations, engineers may perform the following tasks:

- (1) Conduct technical reconnaissance to determine the location and type of enemy obstacles, minefields, and make recommendations for their removal.
- (2) Clearance of obstacles and extensive debris with earthmoving and transportation equipment to keep traffic moving.
- (3) Use of CEV engineer vehicle fire or mounted demolition equipment to destroy fortifications and that cannot be

destroyed by the group's regular assets or bypassed by maneuver.

- (4) Using CEV to destroy buildings or clear debris.
- (5) Installing mines to protect the flanks and rear.
- (6) Performing mobility operations (crossing the gap).

b. Tasks in defense. During the defense of a settlement, engineers may perform the following tasks:

- (1) Installation of complex fence systems.
- (2) Ensuring technical council for the commander.
- (3) Destruction of buildings.
- (4) Installing min.
- (5) Assist in the preparation of .
- (6) Maintaining counterattack routes, supplies, and communications in a serviceable condition.
- (7) Widening passageways between buildings, bridges and so on.
- (8) Engage in combat as infantry when necessary.

d. Antitank Defense. In defensive actions where the enemy has armored forces, priority should be given to the construction of antitank barriers throughout the locality. The use of local materials, where possible, makes the construction of barrages simpler and reduces materiel requirements. Streets along the front of defense positions should be barricaded to the effective range of fire of antitank weapons. These weapons are used to separate rushing enemy infantry from tanks and to help delay and destroy attackers. Anti-tank mines with non-retrievable devices, mixed with anti-personnel mines in and around barricades and covered by fire, are of considerable help in stopping enemy attacks.

Military Police (MP) operations play an essential role in helping the tactical commander meet the challenges of combat in the built environment. By accomplishing its four normal missions (battlefield traffic control, area security, prisoner of war operations, and public order), the MP provides a wide range of diverse support in the urban landscape. ER operations require continuous coordination with the civilian police of the host nation,

to administer the civilian population and protect public order.

- a. ER teams perform operations to secure the support zone, which is often available in populated areas. As destruction increases, ER teams report debris to command, isolate these areas, and direct traffic to an alternate route.
- b. The ER teams also provide security for important facilities such as the communications center, water and power supply. They are responsible for securing important command assets within the corps and personnel at the main CP, which often utilize suitably located, solid buildings.
- c. ER teams conduct POW collection operations. They use collection points and holding areas, placing them as close to the front line as possible for the quickest interviewing of detained prisoners and civilian internees. These operations are of great importance in populated areas because the speed of data collection depends on it.
- d. Commanders must realize that VP support cannot always be available and infantrymen will probably have to perform some VP tasks at times:
 - (1) Reconnaissance of routes, selection of main and alternate routes, escorting convoys, guarding communications.
 - (2) Control of roads, waterways, and railroad terminals that are critical to essential supply.
 - (3) Securing important locations and facilities, including communications centers, government buildings, water and power supplies, nuclear or chemical facilities, warehouses, etc.
 - (4) Managing refugees in close coordination with the civilian authorities of the host country.
 - (4) Refugee management in close coordination with the civil authorities of the organizing country. (See chapter 7 for more information.)
 - (5) Collection and escort of prisoners.

6-10. LIAISON

Buildings and power lines reduce the range of the FM radio. To overcome this problem, battalions install repeater stations or radio relay stations, which are most effective when placed at sufficient height. Antennas should

can be camouflaged by placing them near tall buildings. Moving the radio outside or placing antennas on rooftops can also solve the range problem.

- a. Wired means. Wired means of communication are safer and more effective in populated areas. Wires should be laid on existing poles or underground to prevent them from being cut by vehicles.
- b. Messenger and visible signals. Messengers and visible signals can also be used in populated areas. Messengers should plan their routes to avoid pockets of resistance. Routes and travel schedules should vary. Visible signals should be planned so that they can be seen from buildings.
- c. Sound. Sound signals are usually not effective in populated areas because the ambient noise is too loud.
- d. Existing Systems. When existing civilian or military communications systems are captured intact, they can also be used by an infantry battalion. A civilian telephone system, for example, can provide reliable, secure communications if codes and identification tables are used. Other civilian systems can also be used to radio messages to the public.
 - (1) Evacuation methods, evacuation routes, and other emergency notifications designed to warn or notify the civilian population should be coordinated with civil affairs officers. Such notifications should be made to the local civilian government through print or electronic media.
 - (2) The use of media channels in the combat area for other needs should also be coordinated with the civil affairs officers. A copy of this communication system should be sent to the first civil affairs office for subordination.

Chapter 12. UNDERGROUND OPERATIONS

Knowledge of the nature and location of underground systems is of great importance to both attackers and defenders. The use of underground systems requires full exploration of them. This appendix describes the methods of traversing underground systems, their tactical significance, and the psychological aspects of sustained operations in underground systems, as well as the methods used to interdict enemy use of these systems.

In large cities, underground systems include underground parking garages, underground passageways, subway lines, service tunnels (Figure D-1), collectors, and storm drains. Most of these systems allow the movement of many troops. Even in small European townships, collectors and rain drains allow soldiers to move under the battlefield and behind the enemy.

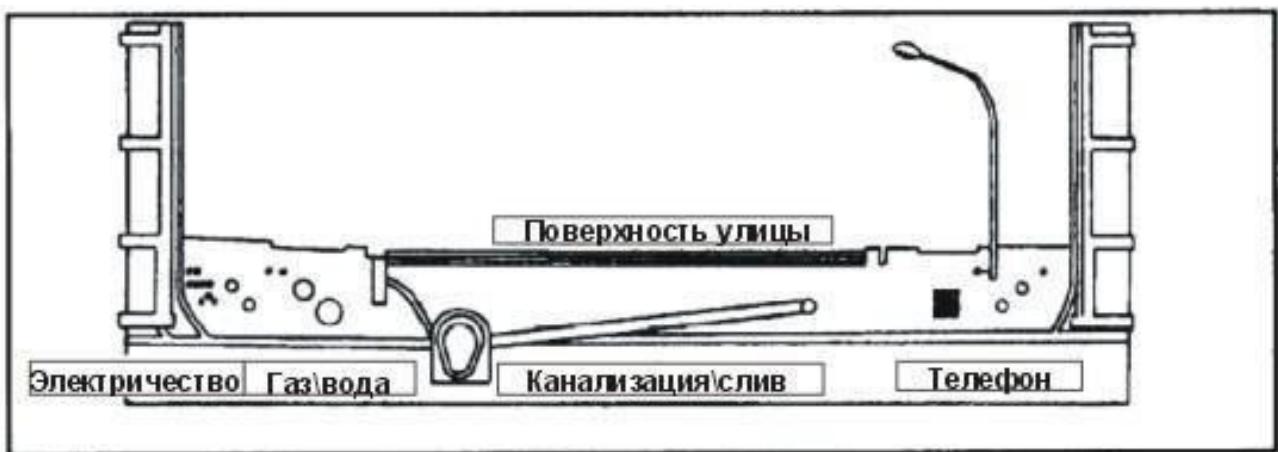


Figure D-1. Туннели

- a. Underground passages provide the attacker with covered and concealed routes into and through a populated area. They allow the enemy to launch his attack along roads that lead into the town at the same time as a smaller force penetrates the rear of the defenders. The purpose of this attack is to bring the group quickly to the rear of the defender, thus interrupting the cohesion of his defenses and making it difficult for his forward forces to withdraw.
- b. Depending on the strength and depth of the defense, an underground penetration attack can easily become the main attack. Even if the underground penetration is not immediately successful, it will force the defender to fight on two levels and spread his resources.
- c. The existence of underground passageways forces the defender to defend the settlement above ground level and underground. To the defender, the passageways cause

more inconvenience than the attacker. However, underground passages also offer him some advantages. When fully scouted and controlled by the defender, they provide excellent covered and concealed routes for the movement of reinforcements or for counterattacks. They also provide ready lines of communication for supply, casualty evacuation, and supply points for forward companies. Underground passages also offer the defender ready conduits for communications wires that will be protected from damage by vehicles and mounted fire. Underground passages will only give the defender an advantage if the attacker cannot use them. The defender has the advantage that by exploiting the limitations and darkness of these passageways, a small group of soldiers in a prepared position can defeat superior enemy forces.

- a. Tunnels offer the attacker little cover and concealment, unless you count darkness and artificial barriers. Passageways are narrow sectors of fire and enhance the effect of grenades. Barriers at tunnel intersections are excellent ambush points and turn underground passageways into a deadly maze. These obstacles can be quickly created using building rubble, furniture, vehicle parts, and M18A1 Claymore mines.
- b. A full reconnaissance of the underground systems must first be conducted. To be effective, barriers must be located at critical intersections of the passage network so that they block the path of attackers in the kill zone and give the defender freedom of movement (Figure D-2).

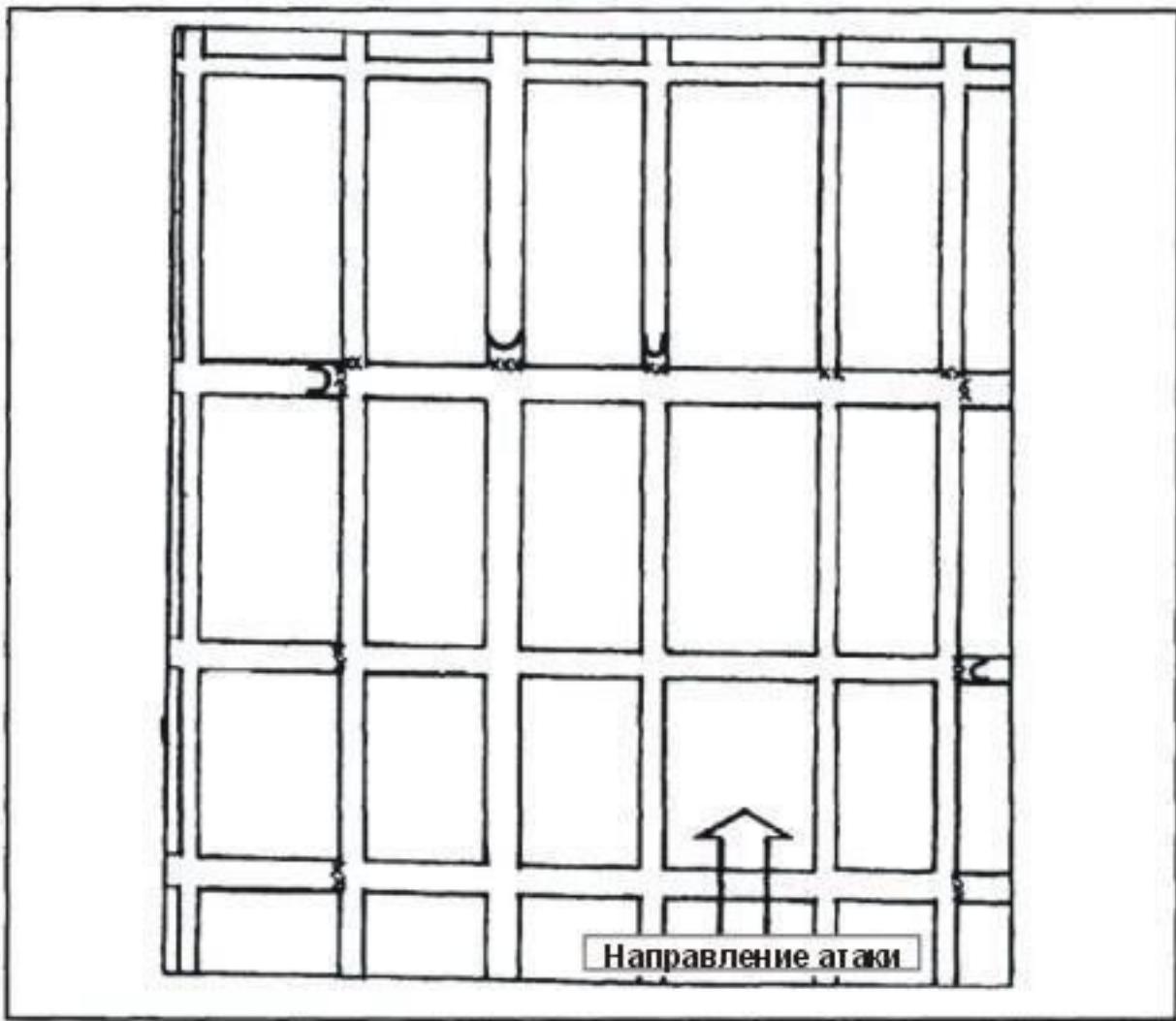


Figure D-2. Оборона систем коллекторов

The task of local reconnaissance (in the platoon or company area of responsibility) should be given to a squad (six or seven soldiers). The squad has enough soldiers to collect the necessary data within the boundaries of a single tunnel without branches. In large underground systems, the patrol size should be increased.

- a. The patrol leader should organize the patrol as follows: one gunner controls the front (lead) and another gunner covers the rear (Figure D-3). The patrol commander moves directly behind the lead patrol leader, controls orientation, and records information about the underground system. The grenade launcher should follow the patrol leader and the bomber should follow the grenade launcher. Two gunners should be left in a security position at the point of entry. They cover the rear of the patrol team and maintain communication between the patrol leader and higher headquarters.

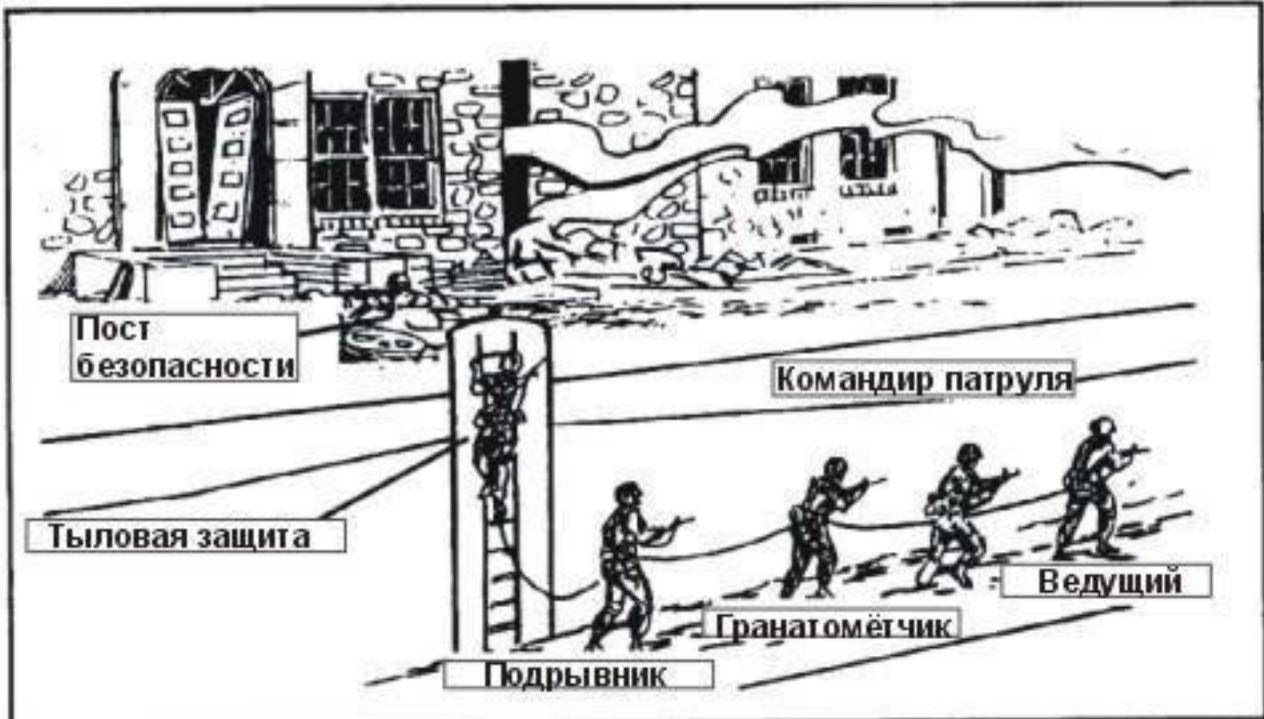


Figure D-3. Организация патрульной группы

b. The patrol commander should carry a map, compass, street plan, and a notebook in which he writes information for the platoon leadership. The grenade launcher must carry the tools necessary to open hatches. If the patrol must scout more than 300 meters or if the platoon leader gives a special order, the grenade thrower must also carry a telephone (TA-1) and a reel of wire (XM-306A) for communication. (Radio is unreliable in this environment). The leader must be equipped with night vision goggles to keep watch.

c. All Soldiers entering the collector must have a diagram of the collector's systems, labeled with sides of the world, azimuths, distances, and hatches. They must also have gas masks, searchlights, gloves and chalk to mark the route. The patrol must be equipped with a 40-meter rope to which each soldier is tied. To improve stability in slippery sewers and rain drains, patrol team members should wrap their boots with shielded wire.

d. Chemical threats are a constant concern for troops conducting underground patrols. Poisonous substances used in tunnels in high concentrations do not disperse. The M8 automatic chemical contamination alarm system carried by the lead provides a warning of

the presence of harmful chemicals. M8 indicator paper can also be used to detect them. At the first indication of the presence of harmful gases, the patrol must wear gas masks.

e. In addition to enemy agents, harmful gases from decomposition of sewage can also pose a threat. These gases are not detected by the M8 alarm system and are not fully filtered by gas masks. Physical signs of the presence of noxious gases are nausea and dizziness. The patrol commander must constantly monitor himself and his subordinates for these signs and know the shortest route to the surface or fresh air.

f. Once the patrol is organized and equipped, it moves to the tunnel entrance, usually a manhole. After removing the manhole cover, the patrol waits 15 minutes in front of the entrance to allow any accumulated gas to dissipate. The leader then moves into the tunnel to determine if the air is safe to breathe and if there are no obstructions to movement. The lead remains in the tunnel for 10 minutes before the rest of the patrol enters. If he or she becomes unwell or is in danger, he or she may be pulled out with a rope.

g. When a patrol moves through a tunnel, the lead moves approximately 10 meters away from the patrol leader. Other members of the patrol maintain 5-meter intervals. If the water in the tunnel flows faster than 2.5 meters per second or if the collector contains slippery obstacles, these intervals should be increased to prevent all members of the patrol from falling if one of them slips. All members of the patrol should be tied to a rope so that they can be easily located for assistance in case of danger. The covering rear guard marks the route with chalk so that other troops can find the patrol.

h. The patrol leader shall control the azimuth of each turn in the tunnel. When the lead patrol leader discovers a manhole to the surface, he should open it and locate it, and the patrol leader marks it on the diagram and makes an entry in the book. The use of identification signals (passwords) (Figure D-4) prevents fire contact between the patrol leader and his troops on the surface.

- i. When the patrol returns and reports, the platoon leader must decide how to use the tunnel. In the offensive, the tunnel can provide a concealed route to move troops behind the enemy defense line. In defense, the tunnel may provide a concealed passage between positions. In either case, patrol members must direct the movement of other forces along the route.
- j. If the tunnel is to be blocked, the platoon must install wire spirals, long-range detection devices, and anti-personnel mines. The position established at the entrance to the collector (Figure D-5) provides security against the enemy attempting to approach the platoon's defense positions and must be abandoned immediately if the water level begins to rise. It must be equipped with command detonation devices. Soldiers in this position must not insert earplugs when conducting observation (they must be inserted immediately before firing). The confined space amplifies the sound of weapons. The shock wave from exploding grenades, mines, and booby-traps in a collector or tunnel can have adverse effects on friendly troops, such as ruptured eardrums and structural shrapnel wounds. Also, the gases in the can be ignited by the shockwave of these munitions. For these reasons, small arms should be used in tunnels and collectors. When mines are triggered or detonated, friendly forces must stay out of tunnels or out of range of their effects. Soldiers must wear gas masks at the first sign of a chemical threat.

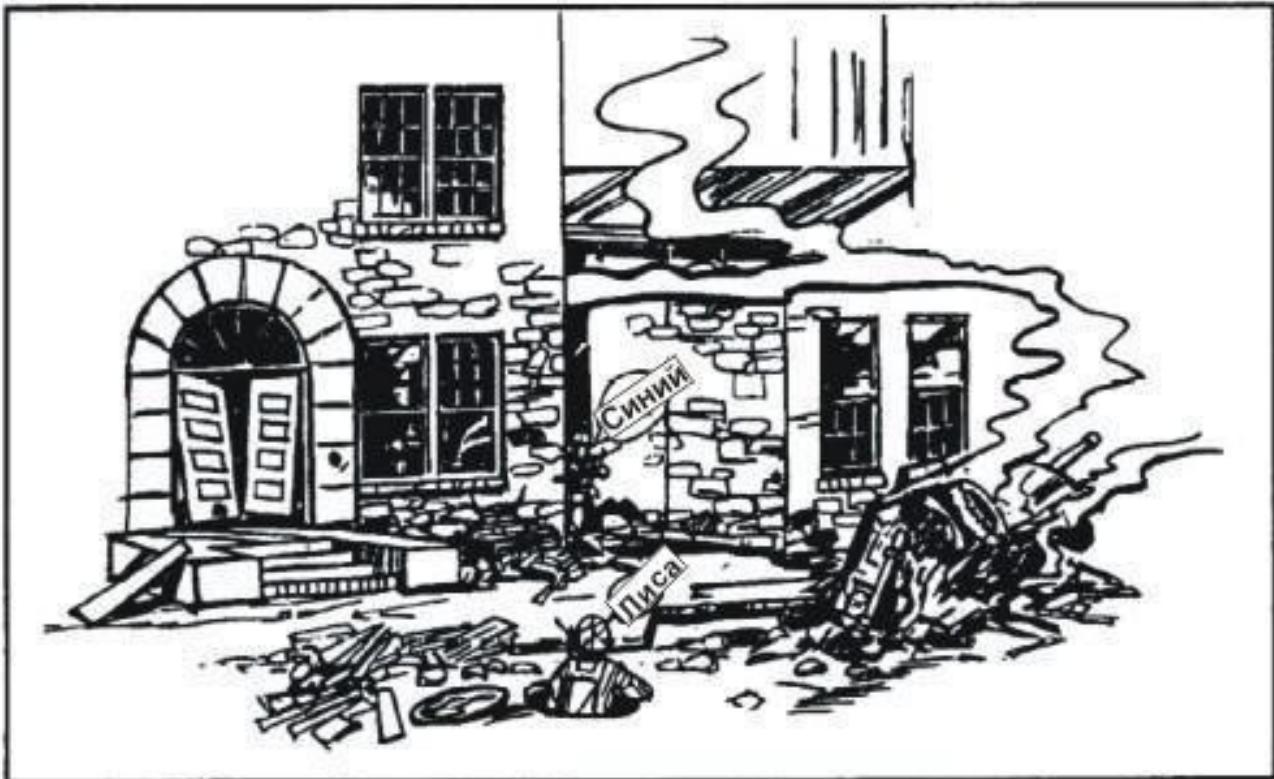


Figure D-4. Использование пароля

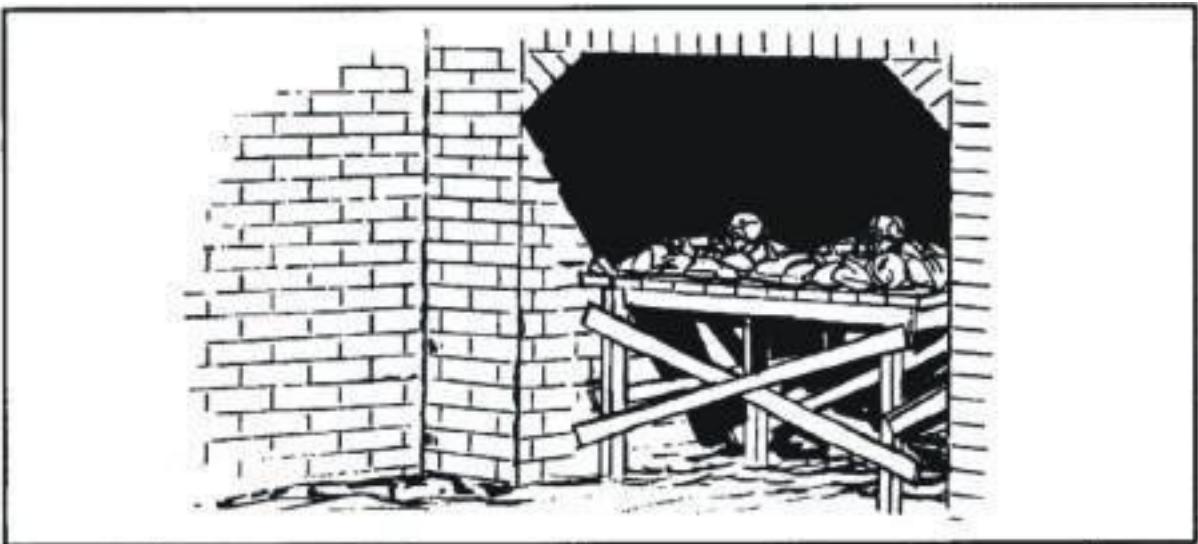


Figure D-5. Позиция для двух солдат, установленная на входе в систему коллекторов

Combat in underground passageways is much like night fighting. The psychological factors that affect soldiers in night operations reduce stealth, induce fear, and increase the sense of isolation. This sense of isolation is further increased by the compressed space of the tunnels. The tunnel layout may require less distance between positions than is typical for operations in a wooded landscape.

- a. Commanders must take steps to dispel the feelings of apprehension and isolation experienced by soldiers in the tunnels. These

measures include instructional guidance, physical and psychological , and adequate and regular sleep and rest.

b. Commanders communicate with positions in tunnels or personal visits or by using the field telephone. Through communication channels, commanders receive information about the combat situation and the status of their soldiers. Training during combat operations is limited; however, Soldiers in positions underground should be given as much information as possible about the tunnel systems, the environment, and importance of the mission. They should be briefed on contingency operations and additional positions if their primary positions become unsuitable for defense.

c. Physical and psychological fitness can be maintained by periodically rotating soldiers in the tunnels so that they can all be exposed to fresh air and sunlight from time to time. Rest and sleep are also important factors in tunnel operations. Historically, combat in a populated area has been one of the most strenuous forms of combat. And continuous darkness and limited maneuvering space cause more stress than street combat.

Chapter 13. SURGICAL PRECISION MILITARY OPERATIONS IN THE CITY

During military operations in the urbanized landscape, and especially during OOTW, commanders may face limitations in the employment of their firepower. The basic principles of operations remain the same, but tactics, techniques, and procedures may have to be modified to stay within the limits of established rules of engagement and avoid increased collateral damage.

Infantrymen conduct military operations in an urbanized landscape under frequently changing conditions. These environments can range from large-scale, high-intensity combat, to isolated actions against armed guerrillas mixed with civilians, to peaceful operations that may resemble more dangerous police work than traditional combat in a populated . Changes from high

intensive operations to precision or surgical operations are the result of significant differences in available conditions and the imposition of inhibitions by strategic political considerations. These differences usually require changes in the way combat is conducted in urban areas. Unfortunately, there is no clear boundary defining the difference between high-intensity operations and precision or surgical operations. These terms are simply expressions that describe the degree to which U.S. forces are sensitive to political considerations during an operation.

- a. High-intensity operations. Infantry teams must always be prepared to conduct intense combat in high-intensity operations. These environments involve fighting against a defined enemy in prepared positions or conducting planned attacks. High-intensity operations require a coordinated program to employ the full combat power of combined arms teams. The mission of an infantry team is usually to capture, clear, or defend an urban area, overwhelming and destroying the enemy by any means necessary. While the changing world situation may have made high-intensity operations less likely, they still have a place in the battle spectrum and teams must be trained for these operations. High-intensity operations are the most stressful of all operations in urban areas and can be intense in terms of casualties for both sides. Even when utilizing the full integrated firepower of the combined arms, commanders must still strive to limit unnecessary destruction and reduce civilian casualties.
- b. Precision Operations. Infantry groups of all types must be prepared for precision operations, especially during OOTW. In precision operations, the enemy may be completely mixed with civilians, and political considerations may require that rules of engagement be significantly restricted, unlike in high-intensity operations. Infantry operations in precision operations environments usually involve combat actions. Some of these combat actions may be very intense for short periods of time. Nevertheless, U.S. forces must be cognizant of the need to concentrate and limit the

the combat power used. The commander may also use crushing force, but only in certain parts of the urban area occupied by the enemy. He may choose a variety of methods to stay within the limited rules of engagement. More restrictive rules of engagement require strict accountability on individual and collective actions. In preparing for precision operations, the commander must realize that not only do the rules of change, but also the methods. These changes require Soldiers to be trained and prepared for these special operations. For example, when clearing a room, teams may not use the procedure of pre-throwing a grenade into the room before entering. This may be done to reduce possible casualties among civilians mixed in with the enemy. And in this case, additional training of soldiers in close urban combat may be necessary before certain tasks are assigned.

c. Surgical Operations. Surgical operations include special operations raids, small precision strikes, capturing specific individuals, or evacuation operations in an urban environment. They can resemble police operations by Special Weapons and Tactics (SWAT) teams and are usually conducted by special operations forces. They may even involve cooperation between U.S. forces and the police of the organizing country. While regular units may not participate in surgical operations, they may support them by isolating an area, providing security, or controlling the population.

The Unified Commander determines the rules of engagement for operational troops. The rules of engagement are based on the commander's analysis of the National Command Circular, the mission, the current threat, the law of land warfare, and the constraints of the host nation or Third World country.

a. Political considerations used in developing rules of engagement may conflict with the actual security needs of the force. Political constraints must be weighed against the potential risk to the mission. Rules of engagement must be practical, realistic, understandable, and enforceable. Rules of engagement affect commanders at all levels,

who may propose changes to them, require clarification, or modify them. Like tasks, rules of engagement must adapt to daily changing conditions.

b. Regardless of the situation, which requires restricted rules of , infantry forces will operate in a dangerous and yet highly restricted environment. This requires the highest degree of patience, training, and discipline of the troops involved. An example of the rules of engagement used during Operation Just Cause is shown in figure G-1. This is **not** intended to be used as a basis for developing rules of engagement, but is presented as an example of a commander developing rules of engagement based on political considerations during OOTW.

Figure G-1. Example of the rules of engagement in Operation Just Cause:

FIRE MAY BE OPENED ON ALL ENEMY SOLDIERS AND VEHICLES TRANSPORTING OR SUPPLYING ENEMY SOLDIERS, SUBJECT TO THE FOLLOWING RESTRICTIONS:

- A. Military force is the last argument
- B. Whenever possible, the enemy should first be warned and given an opportunity to surrender.
- C. Armed civilians may be fired upon only in self-defense.
- D. Fire on civil aviation should not be opened without the approval of the division command, except for self-defense purposes.
- E. Avoid harming civilians unless the lives of U.S. soldiers and citizens are at risk. If possible, try to arrange for evacuation of civilians before attacking.
- F. If there are civilians in the area, do not use artillery, mortars, attack helicopters, AC-130 aircraft, MLRS, or the M-551 main gun on known and suspected targets without authorization from the tactical commander.
- G. If there are in the area, all air strikes must be to be monitored by forward aerial correctors or forward observers.

H. If there are civilians in the area, close air support is prohibited unless authorized by division command.

i. If there are civilians in the area, fire should be opened only on known enemy locations.

J. If there are no civilians in the area, fire may also be opened on suspected enemy locations.

K. It is prohibited to fire on life-supporting assets such as power plants, water intakes, and dams without the approval of divisional command.

L. It is prohibited to fire on hospitals, churches, shrines, museums, schools, and other historical and cultural sites except in self-defense.

M. All air strikes and mounted fire must be observed.

N. Pilots must be briefed on civilian and enemy locations prior to each mission.

O. The use of booby traps is prohibited. The use of mines without divisional command authorization is prohibited. The use of chemical agents without divisional command authorization is prohibited.

Q. Treat civilians and their property with respect and dignity. Do not seize the property of civilians without authorization from the company commander and without giving the civilian a receipt. Do not kick down doors unnecessarily.

R. Treat all prisoners with respect and dignity.

Dissemination: to every soldier and every officer.

ADDITIONAL RULES FOR FIREMAINTAINING CERTAIN

REPETITIVE OPERATIONS:

1. CRACKDOWN ON LOOTING

- a. The team leader may fire warning shots to stop looting.
 - b. Use minimal but non-lethal force to apprehend looters.
 - c. Protect the lives of Panamanian citizens (and other nationals) with minimum force, including lethal force if necessary.

2. *BLOCKING ROADS, BLOCK POSTS AND SECURITY OF DEFENSE POSITIONS.*

- a. Designate all barriers of the perimeter, wire and restraints. Post warning signs.
- b. Establish secondary positions for quickly to block fleeing fighters.
- c. The team leader may fire warning shots to thwart attempts to overcome or dismantle barricades.
- d. Control exfiltration civilians persons c the minimum force necessary.
- e. Utilize necessary force to disarming soldiers and paramilitary units during exfiltration.
 - f. Take steps to immobilize, but not destroy, all vehicles attempting to avoid the barriers or escape.
 - g. Cars, of from which are opening of fire, are a threat. Threats shall be fired upon with deadly force.
- h. Cars that continue to attempt a detour are a suspected threat.

3. *CLEARING BUILDINGS WHEN THERE IS NO INFORMATION ABOUT ENEMY PRESENCE IN THEM.*

- a. Have everyone exit the building.
- b. The senior of the team may fire warning shots to encourage an exit.
- c. Do not attack hospitals, churches, schools, museums, or other historical or cultural sites except for self-defense purposes.
- d. Minimize damage to private property.
- e. Use the minimum force necessary to control the situation and clear the area of the enemy.

G-3. IMPACT OF THE PRESENCE OF CIVILIANS

The presence of large numbers of civilians limits the use of combat power during tactical operations.

- a. Mobility. Civilians may block military traffic by entering roads. Commanders must plan routes along which civilians can move and coordinate with military and civilian police to control traffic.
- b. Firepower. The presence of civilians and the desire to reduce collateral damage may limit the use of fire and reduce firepower. Certain areas may be designated as "prohibited

to fire on them" to prevent civilian casualties, the destruction of important urban structures, or for other reasons. In some areas, the use of small arms and grenades may be restricted to small arms and grenades only, while air, artillery and mortar strikes are prohibited. Reconnaissance of targets and the use of mounted fire may be complicated by the requirement to carefully identify targets. Detailed guidance on the use of firepower in the presence of civilian populations will normally be provided by the division G3. When such guidance is not feasible, the general rules of the law of ground warfare apply.

c. Logistics and Civil Order. Commanders at all levels automatically assume the task of providing for the living needs of all civilians who come under their control during an operation. Depending on the situation, protective equipment, food, water, and medical care may be concentrated in special shelters established for this purpose, or they may be located on the premises of an organization. U.S. commanders must be prepared to monitor and support the civilian population prior to long-term deployment.

G-4. IMPACT CITIZENSHIP POPULATION ON FRIENDLY AND ENEMY OPERATIONS

Civilians in an urban environment and their political attitudes affect both friendly and enemy operations.

a. Enemy Operations. These operations cover the spectrum from terrorist actions to well-organized military operations. The adversary may be special forces or insurgents who are free to operate anywhere in the city because of their similarity to civilians. Enemy forces may occupy certain urban areas from which civilians are unable to evacuate. If a city is quickly occupied, the civilians may be caught between opposing forces. This increases the 's defenses. b. Friendly Operations. A critical aspect of friendly operations is rules of engagement. Examples of the various rules of engagement used by U.S. forces during urban combat include Aachen (World War II 1944) and Panama (Operation Just Cause 1990). At Aachen, the rules of engagement used were those that authorized

the free use of most munitions to eliminate the enemy. In Panama, on the other hand, U.S. forces operated under very limited rules of engagement.

(1) Offensive operations by friendly forces should include the use of guided munitions to engage identified targets while avoiding collateral damage. Precision operations also include sniper and counter-sniper actions conducted by Special Operations Forces personnel and conventional forces.

(2) When civilians are present in the target area or their is suspected, the rules of engagement must be known to all personnel before opening fire, before entering the building, or before clearing rooms.

(3) Psychological operations or civil affairs teams can assist in removing civilians before combat. Once the target area is isolated, psychological operations teams can be used to force enemy surrender.

G-5. USE OF NON-LETHAL WEAPONS

Non-lethal weapons are weapons that are designed and used to incapacitate materiel or people without harming people and avoiding undesirable damage to materiel and the environment. However, the use of non-lethal weapons can still, in some cases, result in casualties. Use of term "non-lethal" is not meant to mislead anyone, but to refer to means that help achieve military objectives while reducing casualties.

a. Unlike weapons that destroy targets by explosion or penetration, non-lethal weapons have the following characteristics:

(1) It does not use means of physical destruction to incapacitate the target.

(2) It has relatively reversible effects. Even if it harms people, that harm is temporary.

b. The infantry has had some types of non-lethal weapons for the last few years. Other types of weapons are new developments. Examples of non-lethal weapons:

(1) CS or CN tear gas.

- (2) Disabling sprays, like Mace (Mace) and pepper spray.
- (3) Kinetic stunning projectiles like rubber bullets.
- (4) Hardening, sticky or disorienting foam.
- (5) Super grease.
- (6) Light and Sound Devices.
- (7) Acoustic devices.

c. Higher military leadership has shown increased attention to non-lethal weapons for the following reasons:

- (1) A growing conviction of their potential military necessity.
- (2) Political sensitivities.
- (3) New restrictions imposed by gun control.
- (4) The increasing interest of U.S. allies and outside organizations in international security.
- (5) Recent advances in technology related to non-lethal weapons.
- (6) The emergence of tasks that require non-lethal means, like crowd control and OOTW in urban areas.

d. Nonlethal weapons provide commanders with additional capabilities that can bridge the gap between not using military force at all and using lethal force. They may be better suited to some tasks than lethal weapons. Non-lethal weapons allow for more humane, selective and reversible neutralization.

e. Unless specifically authorized by higher headquarters directives, U.S. commanders are not required in any military operation to always use only nonlethal weapons, or to use nonlethal weapons before using lethal weapons. Appropriate use of nonlethal weapons is normally authorized at the sole discretion of the commander. While U.S. forces may endeavor to avoid civilian casualties, many situations are

require overwhelming lethal force as the most effective means of accomplishing the mission. Ultimately, a quick victory by overwhelming force can reduce casualties on both sides.

f. If a commander chooses to use non-lethal force, it must be used in a manner that reduces additional risk to friendly forces. The right to use lethal force in self-defense against a lethal threat is retained at all times and in all places, even if an earlier choice was made in favor of non-lethal weapons.

Chapter 14. URBAN OPERATIONS IN LIMITED VISIBILITY CONDITIONS

Because of the rapid proliferation of night vision devices around the world and in accordance with air-ground combat doctrine, which implies continuity of operations, U.S. forces must continue to fight in populated areas regardless of weather or visibility conditions. To succeed, commanders must be aware of the effects of limited visibility and its impact on operations and Soldiers.

When fighting in a populated area with limited visibility, attacking or defending troops have several advantages.

a. In most cases, U.S. forces have a technological advantage over the enemy in thermal imaging and light amplification devices. This allows U.S. forces to identify, , and destroy targets before they are detected by the enemy.

b. Air-ground doctrine emphasizes the need for continuity of operations, day and night. This allows the attacking force to complete the battle in a shorter time and to retain the initiative.

c. Direct fire ranges in urban environments are very reduced. In limited visibility conditions, the effective range of target detection is also reduced. This allows attacking forces to approach at short ranges, which increases the and accuracy of the weapon. Attacking forces can also make use of

take advantage of the enemy's reduced visibility and, using night vision devices, attack them before they can detect them.

- d. Air-attack operations are better conducted in conditions of limited visibility, when the enemy's air defense capabilities deteriorate.
- e. Attacking in limited visibility gives attackers the advantage of surprise. I-2.

When fighting in a populated area with limited visibility, attackers and defenders also face some disadvantages.

- a. In any operation in a populated area, command and control is difficult, and conditions of limited visibility increase this difficulty.
- b. Soldiers have an instinctive tendency to form groups when operating in limited visibility. Soldiers must be constantly monitored to ensure that they do not bunch up.
- c. Due to poor visibility and the characteristics of populated areas, soldiers can easily lose their bearings.
- d. Target identification becomes difficult in conditions of limited visibility. A soldier may shoot at everything he sees, or he may hesitate too long before opening fire. This is one of the main causes of friendly fire casualties, so commanders must emphasize to Soldiers that they should open fire carefully.

In limited visibility conditions there is a much greater risk of casualties from friendly fire.

The way to avoid these losses is for commanders and soldiers to understand the situation and to be properly trained. Other measures include:

- a. Graphic management measures should be clearly defined and obvious. Examples:

designated prominent buildings, large boulevards, rivers, etc.

- b. Commanders must exercise firm control of fire and movement.
- c. Cleared rooms and buildings should be clearly marked for identification of cleared areas and friendly forces by any fire teams supporting maneuver.
- d. Visible

markers (e.g., reflective tape or heat tape) must be attached to Soldiers' uniforms.

- e. Far and near passwords should be used properly.
- f. Groups using close air support must carefully control their fire and maintain its direction. Failure to do so may cause the pilot to lose his bearings and fire on his own.

The characteristics of populated areas affect the operation and use of standard U.S. night vision devices differently than open areas. This can cause some confusion for soldiers when operating in limited visibility conditions, as the images in their devices will be unusual.

- a. As long as the locality has electrical service, street lights and \ or building lights will illuminate any light amplification devices.
- b. There is a good chance that lights in the area of operation will be burning. This will cause problems not only for light amplification devices but also possibly for thermal imaging devices.
- c. Underground areas and building rooms will not be illuminated if the electricity is cut off. Passive night vision devices must have artificial infrared light sources to operate in these conditions.
- d. The many reflective surfaces present in populated areas can create false reflections, especially for laser rangefinders and laser designators.
- e. The large amount of dust in the air makes it impossible to use thermal imaging devices to see through dust clouds.
- f. Smoke, as well as dust, affects night vision devices.

- g. Fog impairs long-range observation by thermal imaging devices, which can cause problems for support elements.
- h. Flashes of gunfire within built-up areas appear much brighter. This causes soldiers to temporarily lose visibility and illuminates light amplification devices. I-5. Fighting in a populated area with limited visibility presents special considerations.
 - a. The use of reflective tape, heat tape, infrared flashing beacons, or chemical glow sticks are important. They can be used to mark the front line, dead and wounded, cleared buildings and rooms, weapons and soldier positions. Their use must be carefully defined in the group's TACSOP. When these markers are used over a long period of time, their values must change because the enemy can identify them and exploit them.
 - b. The use of tracer and incendiary ammunition may be limited to prevent fire. The light of fires also illuminates light-enhanced night vision devices and can degrade the performance of thermal imaging devices.
 - c. Control of power plants may be necessary for operations in low visibility environments. This provides the ability to control the degree of illumination. Turning off street lights is preferable to firing on streetlights. Commanders must balance force safety with maintaining public order after combat, as civilians depend on power plant control in cold weather.
 - d. Limited visibility makes it difficult to identify friendly soldiers, civilians, and enemy troops.
- e. Locating the sound source becomes more difficult in populated areas because of echoes and because of the tendency of sounds to travel farther at night than during the day.

f. Detecting booby traps and obstacles at night also becomes more difficult. The speed of movement is slower than in normal visibility conditions. Combat in limited visibility conditions requires specialized equipment for maneuvering and firing.

a. As a rule, thermal imaging devices, such as

AN/PAS-7 - IR optical observation device (LIN Y03104) and AN/TAS-5 infrared sight for Dragon ATGMs (LIN N23721) are better suited for operations in low visibility environments than light amplifiers such as AN/PVS-7 (LIN N05482). Light amplifiers are easily obscured by background lighting, gunfire flashes and fires. Thermal imaging devices are also sensitive to fires, but are much more difficult to illuminate.

b. AN/PAQ-4 - infrared sighting device (LIN A34938) is similar to its civilian counterpart,

for except that its laser beam is not visible to the unaided eye. by the unarmed eye. Flashlights can also be attached

to the weapon, to allow for quick aiming, room and hallway lighting, identification barricades, mines - traps и of friendly forces.

c. Other night sights include: AN/TVS-5 (LIN N04596) - sight

night vision for heavy weapon

s,

AN/PVS-4 (LIN

N04734) - night vision

sight for small arms and

AN/UAS-11 (LIN

N05050) - night

night

vision. AN/UAS-11,

although

although

heavy, has

the advantage

because of its

built-in laser

rangefinder. It is also

a thermal

imaging scope, similar

to a

to the night TOW-2

AN/TAS-4 night sight.

d. In order to

light up the night

vision devices

enemy or

artificially illuminate

the battlefield, hand-

held flare cartridges and

candles, rocket

launchers, flare guns,

flare

mortar and artillery

ammunition, searchlights

(visible or infrared)

(Figure I-1). (See FM 7-

90 for

information regarding

lights battlefield

battlefield

by mortar and artillery fire).

e. Necessary to have a supply of batteries for night vision devices night vision devices so that they are not inoperable at a critical time. Clean cloths should be used to clean the lenses.

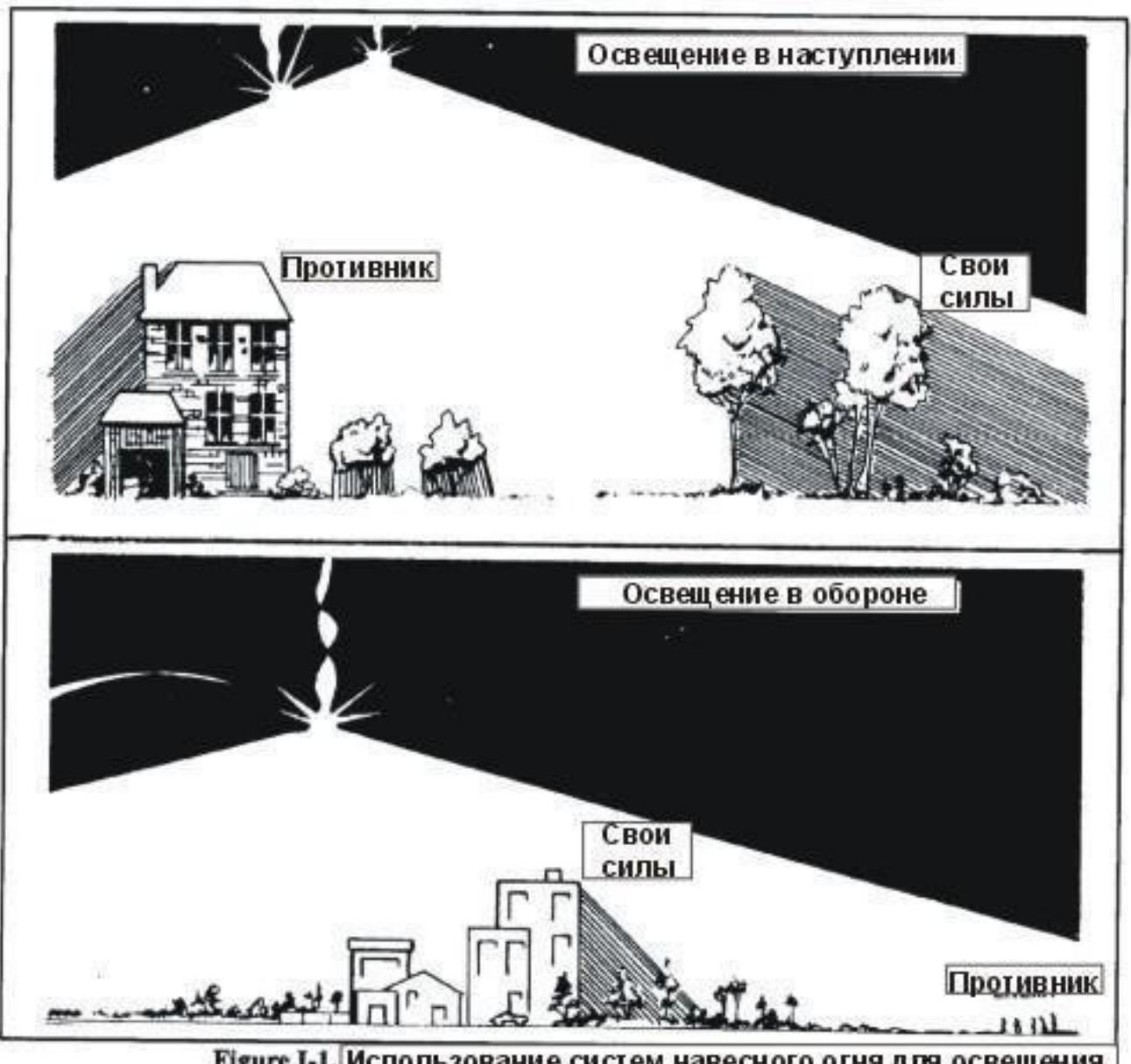


Figure I-1. Использование систем навесного огня для освещения

Loss of synchronization is one of the primary concerns of commanders and commanders during operations with limited visibility. Concentrating forces and fire at a decisive point is made easier for U.S. forces through technological advances and clear orders.

a. Any artillery fire will limit the ability to find and identify targets because of its noise. While field artillery adjusters and Combat Observation and Targeting Teams (COLTs) have thermal imaging sights and laser rangefinders, most soldiers on the battlefield do not have devices that would allow them to call in and correct accurate fire.

Some devices and methods for correcting mounted fire:

- (1) The AN/UAS-11, with its thermal imaging channel and laser rangefinder, determines the exact coordinates of the target.

To obtain accurate coordinates with the AN/UAS-11, the unit must first know its exact location. The same technique can be used by any attached armored vehicle group. It can also be used if the BMP is equipped with a laser rangefinder.

(2) The use of predetermined landmarks is effective as long as the landmarks are clearly visible and the observer has good communication with the firing team.

(3) Reflective surfaces present in populated areas can affect the performance of laser designators.

(4) Counterbattery radar should be used to cover areas where the enemy may be positioning his mortar or artillery units. Because of the camouflage effect of built-up areas, counter-battery radar usually cannot locate enemy artillery within a populated area.

b. Under conditions of limited visibility, aircraft are less vulnerable to enemy air defense systems. However, under these conditions, there is an increased need for command and control to prevent losses from friendly fire. The best aircraft for fire support is the AC-130, because of its ability to detect and identify targets, destroy them with powerful and accurate fire, and stay in the target area for long periods of time.

c. Army aviation operates under similar constraints and considerations. Most U.S. Army attack helicopters have a night vision infrared system (FLIR - Forward Infrared System).

Due to their slow speed and hovering capability, helicopters can provide highly accurate and corrected fire. However, helicopters are more vulnerable to enemy air defense artillery and should therefore be used only where there is little air defense threat. Commanders should identify clear points on the ground for pilots to navigate to and from the target.

d. Air defense capabilities are significantly degraded in conditions of limited visibility. Visual detection, identification and range estimation are very difficult, if not impossible.

Radar guidance systems have difficulty selecting targets and ground jammers.

e. The lack of thermal imaging devices can be an obstacle for engineering teams. The location and clearance of mines and booby traps will also become more dangerous and difficult. The method of marking cleared routes (areas) should be determined and coordinated in advance to avoid confusion with other markings in low visibility conditions (reflective tape, infrared flashing beacons, chemical glow beacons, etc.).

f. To gather information about the enemy in populated areas, military intelligence relies primarily on scouting reports.

(1) Ground target radars and BERs have restrictions on use in the center of population centers.

They are best used in suburbs to control traffic into and out of a settlement. If necessary, radars can be used to cover large open areas, such as parks and public squares. BERs can be used in underground areas like sewers and service tunnels.

(2) Military reconnaissance teams equipped with the AN/UAS-11 can use the device in a variety of situations to find and identify targets.

(3) Depending on the time available, satellite photos of the locality may be available, either pre-operational or urgent.

(4) Military intelligence officers at brigade level and below should be provided with urban maps of the area of operations. Conventional 1:50,000 scale maps are virtually useless in combat in a populated area. The Defense Agency produces a variety of 1:10,000 and 1:12,500 scale urban maps. These maps are created for contingency operations and for civilian evacuation operations (NEO). If no maps are available for an area, the S2 at the battalion level may request the division topographic unit to produce them based on database earth and on satellite imagery. If the

division topographic unit cannot produce a map, the request must be referred to the corps.

Combatant commanders and their Soldiers are not the only warfighters who must make adjustments for limited visibility in operations in an urbanized landscape. Sustainment professionals at all levels should expect special requirements for this unique environment.

a. Teams conducting low visibility supply operations should remember the following:

(1) Drivers and vehicle commanders must have night vision devices so that they do not need any illumination when moving. This will prevent the enemy from being able to determine the location of supply points.

(2) Strict sound and light masking must be maintained.

(3) Vehicles should follow clearly marked routes to avoid any obstructions and stay oriented.

(4) Radios should be fitted to vehicles whenever possible in case new commands are received on the road.

(5) Each vehicle should have a map of the action area (preferably a city map with street names).

b. Combat teams operating for extended periods of time in limited visibility must have sufficient batteries for night vision devices.

c. Continuous combat duty should be supported by the use of night vision devices, especially thermal imaging sights such as AN/TAS-4 or AN/UAS-11.

d. Collecting and evacuating casualties in conditions of limited visibility are much more difficult tasks. A clear method of marking any casualties must be established before the operation begins.

e. Material and technical support operations in buildings should not be visible at night. This is achieved by limiting the movement of vehicles to the necessary

minimum, sealing doors and windows to prevent light from being seen from the outside, and dispersing supply forces as far as possible.

U.S. forces conduct attacks in limited visibility to accelerate or maintain the tempo of the attack. Before conducting an attack in limited visibility, the commander must balance risk and ensure that each Soldier understands control measures and intent. Training and firm command and control reduces casualties and greatly enhances the ability to accomplish the mission.

a. Soldiers must sweep buildings and rooms using the same techniques they use in unrestricted visibility to reduce confusion. Soldiers are well trained in these techniques and therefore apply them with confidence. The only difference is in the equipment used. (See the special equipment paragraph in this appendix.)

b. The norms of movement must be slower. Every soldier must be prepared to detect mines, booby traps, and enemy positions. Although thermal imaging devices can detect differences in ground temperature, light amplifiers are usually better for detecting recently disturbed ground. Thermal imaging devices are better for detecting people; however, light amplifiers are better at identifying friendly soldiers, civilians, and enemy soldiers than thermal imaging devices.

c. Squads and fire teams should be equipped with both thermal imagers and light amplification devices whenever possible. This allows squads and firing teams to get the best view of the environment and allows soldiers to balance the advantages and disadvantages of each type of night vision device.

d. When moving through buildings, assault teams should mark cleared rooms and buildings and communicate with the support team(s). This is all the more important if two or more assault teams are in the same building.

e. Soldiers should maximize the use of available ambient light whenever possible for two reasons: preserving night vision device batteries and making it more difficult for the enemy to detect an attack.

f. If flashlights or chemical light sources are used, they should be kept away from the head or chest.

In this case, an enemy soldier firing at a light source will not be able to destroy a soldier holding a flashlight or chemical illuminator.

- g. The assault team must have good communications with all support elements, regular, DS, operationally subordinate, or attached. Support teams should not fire unless they have good communications with the assault elements and are certain that the targets they are about to destroy or suppress are enemy.
- h. Groups must know where other groups are during offensive operations. This not only reduces the risk of casualties from friendly fire, but also reduces the time to search for, identify, and assist the wounded. It also greatly reduces the possibility of soldiers losing their bearings and becoming separated from the group.
- i. Assault teams must consider adjacent fires that will reduce the effectiveness of their night vision devices. Flashes of gunfire inside small rooms will blind soldiers and light amplification devices. Enemy soldiers may also use flares inside and outside buildings to reduce the effectiveness of night vision devices.
- j. Commanders must control that all soldiers follow the rules of engagement and the laws of ground warfare. This is especially important if the enemy is mixed with local civilians. Soldiers and commanders must also follow all control measures, especially graphic measures. Enemy forces are likely to utilize limited visibility conditions for the same reasons as U.S. forces. (See the paragraph on advantages in this appendix.) Enemy forces may have access to the most advanced night vision equipment manufactured in Europe, the United States, Japan, Korea, and the former Soviet Union. (See Chapter 4 for more information on defensive techniques.)

Chapter 15. COUNTERING SNIPERS IN THE CITY

Specially trained and equipped experienced marksmen or just individual shooters with mediocre marksmanship performing the tasks of snipers have always played a major role in combat in a populated area. They have been used to counter U.S. Army operations, inflict casualties, and tie up large numbers of troops to find them. The impact and accuracy of modern weapons, the three-tiered urban battlefield, and the numerous alleys, corridors, and rear exits available to snipers make them a threat that cannot be ignored. Commanders and leaders at all levels must be aware of the threat presented by snipers in the city, how snipers can affect their operations, and what steps must be taken to counter snipers and mitigate their threat. In this annex, the term "sniper" is used to describe any single shooter who takes aimed fire at medium to long ranges.

The three basic types of snipers are: specially trained and equipped soldiers, trained marksmen, and civilians in irregular formations. Each type can be used to accomplish different objectives. Countermeasures that are effective against one type may be less effective against another.

- a. The most dangerous sniper is a soldier who has been specially selected, trained and equipped with modern sniper weapons with telescopic sights. These soldiers are expert marksmen and are trained to select the most important targets for destruction. They can fire at long range (sometimes over 1,000 meters) and are skilled at evading detection. They are usually career soldiers and wear standard uniforms that can be modified to provide better camouflage. Their actions are carefully integrated into the enemy's overall plan of operation. These snipers are difficult to counter. Until recently, the U.S. had few potential adversaries that had substantial numbers of these specialists. Now, however, many armies around the world are showing renewed interest in snipers. Sniper training is expanding and excellent 7.62mm sniper rifles are available on the world arms market at reasonable cost. U.S. armed forces can expect to encounter more snipers and more trained snipers during urban combat operations in the

future. Some may be equipped with the world's best rifles and night vision equipment. The U.S. Army and its Western allies already have relatively large numbers of this type of snipers, as do several states of the former Soviet Union.

b. A trained marksman is a sniper often available in urban combat. This sniper is a trained soldier equipped with a standardized weapon and able to shoot accurately. He usually has good field training, experience, skills and is difficult to spot in an urban environment. He can be used alone or in pairs to create disorder among friendly forces, inflict casualties, harass or reduce the tempo of operations. He is often used by the enemy to conserve forces or as rear defense or combat cover while the enemy main force withdraws. It may also be placed on the perimeter of a defended urban area to provide long-range detection of enemy approach, long-range fire on the enemy, premature deployment, and warning to friendly forces. The trained marksman is a dangerous adversary. He is available in many armies of potential adversaries. This type of sniper is usually a soldier and wears a standard uniform. He may, however, be part of a counter-guerrilla force, in which case he may not wear a recognizable uniform, but will usually carry his weapon openly.

c. The third basic type of sniper is the armed civilian. He may have little or no formal military training, but may have extensive experience in urban combat. He may wear any uniform or civilian clothing, and may even aspire to be one of thousands of locals in a large urban area. He may carry his weapon openly or concealed, and may fire at long ranges to avoid being identified as a sniper. His fire is usually not accurate and he rarely fires at specific targets. His actions are usually not integrated into an overall defense plan, although his attacks may be loosely coordinated with others in the general area. Although this type of sniper has the least ability to inflict heavy casualties on U.S. forces, he is of great value as a pursuit element and in some OOTW situations he can

achieve actionable results that far exceed its actual ability to cause loss.

d. The typical range for a sniper attack is 300 to 600 meters with a medium caliber rifle. Shots at ranges between 800 and 1,000 meters represent the exception. However, heavy sniper rifles (.50 caliber, 12.7mm, 14.5mm, and 15mm) with ranges of 1,200 to 1,500 meters are now being distributed worldwide. These heavy sniper rifles were originally designed as anti-materiel weapons to destroy important targets such as radar installations, missiles, parked aircraft, fuel tanks and ammunition storage areas. Therefore, they are not very accurate for firing at extreme ranges at individual soldiers. The ability of their bullets to penetrate all but the heaviest defensive materials and their destructive effects make them a valuable psychological weapon. The ability to penetrate ordinary building materials make these weapons valuable for anti-sniper combat.

e. The proliferation of other equipment will also be a factor in increasing the urban sniper threat to U.S. forces in the future.

(1) the quality and quantity of night vision devices sold on the world market is increasing daily. In the near future, even trained shooters may be equipped with devices that allow them to fire accurately at night.

(2) The use of simple telescopic sights on military rifles is becoming more and more common. Although this does not put them in the class of true sniper weapons in terms of accuracy, their sights make the trained shooter a much more dangerous opponent. This is especially true at close ranges (less than 200 meters), which usually occurs in combat in populated areas. (3) Many armies purchase simple but effective silent firing or muzzle flash suppression devices for sniper weapons. These devices make it impossible or difficult to locate the sniper. Although many of these devices significantly reduce the effective range of fire, they can be very effective at ranges up to 200 meters.

(3) Historically, groups that have suffered heavy and continuous casualties from sniper fire in a city and have been morally depressed by their inability to retaliate have often become intemperate. Such groups may make rash decisions and violate the laws of ground warfare regarding prisoners. This tendency increases if the group has been in the intense tension of urban combat for a long period of time. It is important that commanders and commanders at all levels understand the law of land warfare and also understand the psychological pressures that urban warfare brings with it. This requires strong leadership and great moral strength to prevent soldiers from acting rashly and hastily, out of anger and frustration, against captured snipers or civilians suspected of firing at them from cover.

a. The law of land warfare is not limited exclusively to declared wars. It applies in all cases of armed combat, like many situations in OOTW. All U.S. Army soldiers are subject to these laws and legal aspects. The law prohibits destroying, wounding, or harming an enemy who has laid down his arms or, having no means of defense, has surrendered.

An enemy sniper who has been captured or surrendered may not be wounded. It does not matter how many friendly soldiers he incapacitated or how long he waited before surrendering.

b. Any sniper who wears a military uniform, carries his weapon openly, and behaves in accordance with the laws and customs of war is automatically entitled to be treated as a prisoner of war, not a criminal. Even an armed civilian who is part of an organized resistance movement, obeys the orders of a designated commander, carries his weapon openly,~~and~~obeys the laws and customs of war, is entitled to such treatment. A civilian who fires from cover at U.S. armed forces without the above criteria should be detained by the military and brought before the appropriate court. Under no circumstances should a prisoner be or destroyed in response to firing from cover, no matter how many casualties he has inflicted.

c. In some situations, OOTW rules of engagement and the mandate under which U.S. forces operate may very well limit the use of lethal counterforce against snipers. Three principles govern the legal use of lethal force. The commander must:

- (1) Make every effort to avoid causing unnecessary suffering.
- (2) Use the minimum force necessary to accomplish the task.
- (3) Apply the type and degree of force in accordance with the rule of overall proportionality.

d. The rules of engagement follow from the law of war and the type of situation in a particular mission. Responding to sniper fire with massive, indiscriminate return fire on an urban area would violate the law of war if other, less destructive tactics or weapons could be used without increasing the risk to U.S. forces. Regardless of the situation, commanders and commanders must know and understand the rules of engagement and ensure that their soldiers follow them.

Being aware of and taking into account the sniper threat by commanders and staff officers at all levels is the first step in successfully combating snipers. Although snipers may be more prevalent in some situations than others, the sniper threat in urban areas is always present. Planning to counter the sniper threat and planning to protect your forces from sniper fire must be integrated into the operation from the beginning. Tactics and techniques must be taught to soldiers before they actually encounter sniper fire.

a. Careful analysis of factors and consultation with personnel familiar with the area can determine the extent of the sniper threat to U.S. forces. This is especially important during **OOTW**. Information regarding the localized sniper threat can be obtained from the following sources:

Local military, government, or police . U.S. Embassy personnel.

Friendly forces special friendly forces (SDF) or
others

friendly forces operating in the area.

U.S. Special Operations Forces or other U.S. in the field. UN officials or UN forces in the field.

Officials of agencies outside the government. Local police officers.

Local civilians, including children.

b. Coordination with experienced U.S. force snipers can assist in identifying certain areas and situations where enemy snipers may be effective, and snipers can assist the commander in selecting countermeasures use. In addition to snipers trained in a specialized school and assigned to an infantry battalion, there are several other sources of sniper expertise, some of which may only be available during internal OOTW situations. Some examples of experienced U.S. Forces snipers are:

U.S. special operations forces snipers, like special forces, rangers, or sea-air-ground teams ("seals" of the Navy).

Law enforcement officers like police officers from the Special Weapons and Tactics (SWAT), Drug Enforcement Agency (DEA), Federal Bureau of Investigation (FBI) or Secret Service teams.

In planning countersniper measures, the commander and his staff must answer three basic questions. The answers to these questions suggest a set of countersniper tactics, techniques, and procedures that will be best suited to the environment in which the group is operating. Consideration of these questions assists the commander and his staff in eliminating those techniques and procedures that are inappropriate for the situation.

a. The first question is, "what does the U.S. commander want to accomplish, and what rules of engagement should be used in his operations?" If the commander's intent is conduct combat operations, and if the rules of engagement allow him to do so with full available , he can either suppress and bypass sniper positions or use the fundamental principle of constraint and maneuver. He can use firepower to suppress snipers and constrain their positions while the maneuver force avoids sniper fire and continues the mission or approaches and eliminates sniper positions. However, if the rules of engagement restrict the use of force, or the use of such force would cause a large number of civilian casualties, the commander may be constrained in his initial response to the sniper attack. In many OOTW situations, the key to success is persistence and the use of appropriate force

or minimum forces. Unrestricted use of firepower in an urban area can undermine the legitimacy of U.S. forces and work against the commander's ultimate intent. U.S. forces have never disregarded the right to self-defense, but the degree of self-defense can be limited. This concept is difficult for soldiers in a combat environment to understand, especially if they are under sniper fire. It should be explained to the group *before* contact with the enemy, not during combat. Commanders must keep the commander's final intent in mind when planning and executing counter-sniper measures.

b. The second question is, "what does the enemy want to accomplish by using his snipers and what capabilities does he have to accomplish it?" There are several objectives of the enemy's use of snipers. Among them:

(1) Defeating U.S. forces. This is feasible for specially trained snipers and trained riflemen used against small tactical-level U.S. units. (2) Forcing U.S. forces to deploy, delaying their movement, slowing their advance, and seizing the initiative. If U.S. forces react aggressively and achieve rapid effect against snipers, these objectives can be accomplished with all types of snipers.

(3) Exhausting U.S. forces, depleting them, and lowering morale. All types of snipers can be used to accomplish these objectives, but the most common are trained marksmen and armed civilians.

(4) Eliminating certain individuals. This task is almost always assigned to specially trained snipers. The target may be a specific individual, such as officers, radiotelephone operators, or armored vehicle crews. In an OOTW situation, the target may be a specific individual, such as a political or community leader, or it may be members of the media, international organizations, police officers, or civilians living in the combat zone.

(5) Causing losses to U.S. forces for political effect. As information capabilities develop, potential adversaries will become increasingly adept at managing public opinion of the U.S. public,

to turn them against US efforts in an OOTW situation. This has happened before, and will happen again. The infliction of casualties on U.S. forces publicized by the world media, regardless of their tactical effect, will hinder U.S. forces and reduce their support.

To answer the second part of this question, the commander must determine the level of the opposing sniper. He must also determine the type of weapons, ammunition, tactics, and night vision equipment available to the enemy. This information can be used to estimate the expected range and striking power of the enemy sniper's ammunition and will help in determining how to counter. It will also be useful for evaluating passive protective measures such as the effectiveness of body armor, light armor for vehicles, shields, etc.

c. The third important question is "what are the rules of engagement?" The rules of engagement have three basic levels for dealing with snipers, each with many varieties.

(1) US forces may adhere to the use of minimum force. This is common in OOTW situations, especially during:

Assisting the internal authorities. Keeping the peace.
Evacuation of . Humanitarian assistance.

(2) U.S. forces may be forced to resort to an equal or reasonable response to an adversary's actions. This may be in situations where stronger peace enforcement is used. (3) U.S. forces may use overwhelming force. This is a common situation during combat in a populated area when the adversary poses a significant threat to U.S. forces.

U.S. forces' counter-sniper tactics, techniques, and procedures include two types of actions: active countermeasures and passive countermeasures. Each type of action has its place and depends on the factors under which the team is operating. Most counter-sniper measures are not new techniques and procedures for well-trained troops. They are simply common sense actions taken normally in the area to limit the effectiveness of enemy fire, conceal positions, move tactically intelligently, and react quickly to contact with the enemy.

by the adversary. However, some countermeasures are not conventional and require additional training. Regardless of what techniques and procedures are used, successful countermeasures depend on the maintenance of group discipline by commanders at all levels. The sniper has the initiative. Teams must employ countermeasures decisively and consistently. Failure to do so will almost guarantee casualties from sniper fire, which can wait for hours to fire on an unprotected group.

a. Active countermeasures consist of finding and destroying the sniper before he opens fire, or suppressing and neutralizing him after he opens fire. Active countermeasures include the use of the following:

(1) Observation posts and aerial observers. Observers can maintain constant surveillance of potential sniper positions and detect snipers when they attempt to move into position for a shot. Once detected, snipers are vulnerable to fire from all weapons and can be easily neutralized or forced to withdraw. Observation posts should have high-powered telescopes, binoculars with medium magnification, night vision devices, and, if possible, thermal imaging devices. Constant inspection of the area to look for minor movements by a well-trained sniper exhausts personnel. Therefore, personnel at the NP should be rotated more frequently. However, a soldier who has studied the area well is more likely to spot the smallest change. Air observers can operate from a variety of air assets.

The modernized OH-58 helicopter, with its sophisticated night vision system, and the AC-130 aircraft have an excellent ability to detect snipers around U.S. force positions. Any of several types of unmanned reconnaissance drones, with their advanced real-time imaging, video, and night vision capabilities, can also be used effectively. With the increasing proliferation of military and commercial lasers, these devices can be used against U.S. forces' observation post equipment. Observers should be equipped with laser protection filters, especially when using optical devices with direct image transmission. Laser protection filters, binoculars with laser filters and optics with indirect transmission image transmission

protect observers from most of the laser systems available today around the world.

(2) Patrols. Constant reconnaissance and security measures implemented by patrols around the team's positions prevent a sniper from stealthily taking a firing position. Small patrols are most effective.

(A) Like U.S. Forces sniper teams, enemy sniper teams are small and depend on clandestine approaches to targets via and concealed routes. They usually move to concealed or firing positions and remain there for extended periods. These sniper teams are most effective when they have good sectors of fire at ranges of 300 to 600 meters. At ranges shorter than 300 meters, the sniper's movements, flash, and the sound of his weapon firing are easily detected. A moving sniper detected by a security patrol is virtually doomed. He does not have sufficient firepower to fire at long range, and he is usually far from any support or assistance.

(B) Small security patrols operating at night use night vision devices and can be very effective. Reconnaissance patrols should move along covered and concealed routes to a good observation position, stop, observe, and then move to another position. Patrol routes should be varied and a pre-prepared response or support force should be used if the patrol comes into contact with the enemy. If military service dogs are available, they can be useful in detecting enemy snipers. Dogs can quickly search large buildings and locate a hidden enemy within them, and can detect people at long range if they are downwind.

(C) In addition to reconnaissance patrols, small combat patrols are also effective. A type of ambush can be used - an ambush after the patrol has passed. A small ambush element moves as part of a larger patrol and takes its position without conducting observation. The element then surveys its kill zone, which can be very large if the element has a sniper team, and destroys enemy snipers as soon as they attempt to move into position.

(3) U.S. Forces Snipers. U.S. Forces Snipers may be the most effective means of countering enemy snipers. Not only do they have knowledge and experience in sniping and can quickly identify likely

places of enemy snipers, they can also take out trained shooters and armed enemy civilians at a greater range than these types of snipers can target U.S. snipers. Their accurate fire is also far less dangerous to civilians than the fire of other weapons. The commander must carefully consider how to use these few resources, either in defense only or in a reaction force. In another case, they may be a more valuable asset for inflicting casualties on enemy forces. Special Forces sniper teams may be available in some situations. They are highly trained teams and are often equipped with specialized long-range sniper weapons. Therefore, they can be used to dominate large areas around US forces.

(4) Group Weapons. If the team is under fire from an enemy sniper, the soldiers in the team may return fire with all their weapons. In an urban area, it is often difficult to determine the direction of enemy fire, especially the direction of a single rifle shot. If the team is able to determine the general location of the sniper, suppressive fire should be used to ensure that the maneuvers to take out the sniper at close range. This is not always successful because a well-trained sniper always has a safe escape route. Massive return fire and immediate maneuver can be an effective response to close-range sniper fire if the rules of engagement allow it. In medium to high intensity urban combat, this is often the best immediate response. The most effective suppression ammunition is the fragmentation grenades of the M203 underbarrel grenade launcher.

(5) Expedient fire from a variety of weapons. Using expedient return fire against snipers can be very effective in high-intensity urban combat. It can even work in some situations. The 25 millimeter BMP cannon is a powerful and accurate weapon whose projectiles can penetrate deep into building walls. .50-caliber machine gun fire was effective against snipers during combat in Panama in 1989. Teams reported that

The snipers seemed intimidated into inaction by the immediate return fire of large-caliber machine guns. In Somalia, MK automatic grenade launchers immediately returned fire.

19 has often been effective in stopping sniper fire from armed civilians. Light or medium anti-tank weapons are also effective. TOW, Hellfire, Dragon, Javelin guided munitions, because of their accuracy, have the added advantage of limiting collateral damage. The tank gun can also be used to counter sniper fire, but there is a greater risk of collateral damage due to the sheer penetrating power of the projectile. Immediate mortar or artillery fire may be effective in suppressing snipers and forcing them to move, but it will rarely be effective in destroying them.

(6) Lasers. The use of lasers to detect and counter enemy snipers is a new technology for this purpose. The BMP-mounted Stingray system is effective against snipers who use telescopes or night vision devices to observe U.S. forces. In semi-automatic mode, Stingray can be used to detect snipers and alert the gunner. In automatic mode, the system views a specific sector and then neutralizes all detected telescopes and night vision devices. The Laser Countermeasure System (LCMS) is a simpler, pocket-sized version of the Stingray. It is designed for machine gunners and can also detect and neutralize sniper optics. Unlike these two systems, which are designed to neutralize targets, powerful laser rangefinders and designators can only be used to temporarily suppress enemy snipers. Laser rangefinders and designators are effective against those enemy soldiers who are looking in their direction, whether they are using telescopes or not. An enemy sniper observing through a telescope or binoculars, or viewing U.S. force positions at night, is more vulnerable to laser damage. Although laser units do not damage buildings or penetrate rooms, precautions must be taken at the

at close ranges to avoid civilian casualties.

(7) Pre-emptive fire. In medium to high intensity urban combat, preemptive fire can often be used against likely sniper positions. This technique is most often used during offensive operations. It involves the expenditure of large amounts of ammunition, but can be very effective in short attacks. Artillery, mortar and grenade fire with fragmentation ammunition

- the best means of suppressing snipers whose positions have not yet been discovered.

(8) Setting up a smoke screen and using tear gas. A quickly placed smoke screen is a good way to protect a group from further casualties if they come under sniper fire. Smoke is very limiting to the snipers' ability to engage targets. The closer the smoke is to the sniper's location, the more effective it is. If the sniper's location is unknown and cannot be covered by a smoke screen, a cloud of smoke must be placed near the group, which will also reduce the sniper's ability to engage. If the rules of engagement authorize the use of tear gas, it can be used to effectively reduce the sniper threat. Because of the tendency of winds to swirl and change direction frequently in urban areas, tear gas is really only useful in some cases. Few snipers can make long-range, accurate fire while wearing gas masks.

(9) Helicopter transported anti-sniper teams. Helicopters can provide not only aerial surveillance and fire or delivery of additional combat patrols and response forces, they are also used to transport anti-sniper teams that can participate in the

in identifying enemy snipers from the air. U.S. snipers can effectively fire from helicopters using low-power optical sights or infrared laser designators with night vision goggles. When a target is detected, the helicopter begins a smooth turn, orbiting the target centered on it. A U.S. Forces sniper firing from the left side of the helicopter can easily aim and hit his target, while the changing course of flight makes it difficult for the enemy to aim. Care should be taken and to take into account

the possibility that the enemy could use snipers as decoys to attack helicopters from prepared anti-helicopter ambushes.

b. Passive countermeasures are designed to reduce the enemy sniper's ability to detect targets or to reduce the effectiveness of his fire. Many of the passive countermeasures are not unique and are not only used against snipers. They are common sense actions used by all well-trained infantry groups in a combat area to avoid casualties. However, passive countersniper measures are rarely successful. They may be effective politically and psychologically in reducing U.S. force casualties and reducing violence, but ultimately they are often counterproductive to the commander's primary mission. They tend to isolate U.S. forces, especially during OOTW when a visible presence is required. They tend to create a siege mentality and hand the initiative to the enemy sniper. The most common passive countermeasures are as follows:

(1) Keep your head down. Use covered and concealed routes. Avoid open areas and intersections. Stay some distance from doorways and windows. Walk along the side of the street, not in the center. Move in the shade, spread out, using "moving" or "limited movement with observation" methods. Avoid lighted areas at night. Avoid showing your silhouette against lights or the horizon. Move through open areas quickly if they cannot be avoided. Position yourself crouched or ducked behind cover or concealment whenever possible. If troops are traveling in trucks, provide a tarpaulin to cover the body. (This measure cannot be used if there is a threat of enemy ambush in addition to snipers.) Avoid gathering together in large groups in open terrain. Avoid wearing obvious insignia. Avoid military salutes and "stand at attention" for officers while out in the open.

(2) Wear protective equipment. A Kevlar helmet and body armor will not always stop a sniper bullet, but in many cases they will greatly reduce the severity of the injury. Wear them at all times if there is a potential sniper threat. In situations that do not require hasty movement through rugged terrain, you should

obtain through supply channels and issue to soldiers special, heavy body armor that is actually bulletproof. All soldiers assigned to fixed positions, such as roadblocks and observation posts, must also wear these body armor.

(3) Use Armored Vehicles. Whenever possible, move into an urban area in an armored vehicle and avoid sticking out of it. Avoid an open truck bed. Use light vehicle armor kits or improvised armor that can withstand small arms bullets to protect the body. Increase the protection of all administrative and rear vehicles in this manner. (4) Construct cover and concealment. Use simple canvas or plastic screens to cover dangerous passageways or intersections, making them much safer for foot traffic. Create protection on windows so that you can see in from the inside while not being visible from the outside. Use concrete slabs and structures to provide protection for personnel in fixed positions. Use improvised objects such as 55-gallon drums and sandbags filled with rocks or sand.

(5) Prevent the enemy from using suitable terrain. Any such terrain must be occupied by friendly forces or modified so that it is unsuitable for use by an enemy sniper. Destroy likely hiding places (ensure that all actions are conducted in accordance with the laws and customs of war). Clear brush and ruins. Block windows with brick, concrete, or boards. Pile earth and debris in front of buildings to block snipers' sight lines.

(6) Use smoke screens and smoke cover to block the sniper's sectors of vision and reduce the effectiveness of his fire. A clear atmosphere is required for accurate long-range firing from cover. Smokescreens can be maintained over wide areas for extended periods without impeding friendly operations. Smoke cover can be established quickly and maintained for a short period of time sufficient to

forces U.S.A., to reach the nearest shelter from sniper fire.

Chapter 16. USE OF ATTACK HELICOPTERS OVER BUILT-UP AREAS

Wherever infantry forces are used, either in combat operations or in low-intensity conflicts, they will operate part of the time in populated areas. Next to them, providing their support, will be helicopters flown by technically qualified and tactically experienced U.S. pilots. The unit commander on the ground is responsible for liaising with them and integrating them into the overall . Combined operations mean that air support for ground forces may be provided by an Army or Marine Corps. During combined and coalition operations, especially, it is likely that U.S. forces will be supported by helicopters from other nations. In these cases, detailed information regarding their capabilities and methods of employment must be obtained through communications channels.

Infantry teams can be supported by a variety of attack helicopters, from the modernized

AH-64 or the somewhat less effective AH-1 to the lightly armed but maneuverable OH-58D and AH6. Regardless of what types of armed helicopters a commander has at his disposal, Army aviation can accomplish a variety of missions because of its inherent flexibility.

a. The most common missions assigned to attack helicopters during military operations in the urbanized landscape are as follows:

- (1) Escort of transport and airborne helicopters during the air assault.
- (2) Observe and support attacks in coordination with the commander's maneuver on the ground.
- (3) Interdiction of movement and destruction of enemy armored vehicles.
- (4) Accurate defeat of enemy fortified points.

b. B in addition to the tasks listed In addition to the tasks listed above, attack helicopters during operations in urbanized

Some additional, non-traditional tasks may be assigned to the landscape. Especially during an operation in urban areas. Additional tasks may include:

- (1) Assist in directing and coordinating fire with ground troop maneuver.
- (2) Provide message relaying for communication of isolated ground groups.
- (3) Marking or identifying specific buildings and areas with smoke, fire, or laser. (4) Videotaping routes or objects for later analysis by the ground commander.
- (5) Provide navigation and directional assistance to ground teams.
- (6) Provide illumination of a limited area with infrared or visible light using on-board sources or flares.
- (7) Provisioning anti-sniper and anti-artillery reconnaissance patrols around friendly group locations.

While attack helicopters offer maximum flexibility and the fastest response time compared to any other fire support assets, detailed planning is required to effectively integrate them with ground operations. The following points should be considered when planning the use of attack helicopters:

- a. Increased vulnerability to fire. The threat of ground fire increases during operations in an urbanized landscape. Urban areas force forces to concentrate and provide superior cover and concealment for enemy spotters. In order to reduce their time in the area of possible heavy anti-aircraft weapons, helicopters may have to move low and fast. This, however, increases their vulnerability to small arms fire.
- b. Obstacles to flight. Obstacles within urban areas are more numerous and dangerous than in any other environment. These obstacles include:
 - (1) Power Lines.
 - (2) Hard to see phone lines, street car wires.

(3) Wires and antennas on rooftops, telecommunication towers.

(4) Tall buildings that may impede rapid vertical maneuvering of heavily loaded helicopters.

c. Navigational difficulties. Even though pilots have increased visibility compared to observers on the ground, they can still be temporarily disoriented because most maps do not show the vertical development of the urban landscape. Navigation systems such as GPS have reduced but not eliminated this problem. Rapid movement from position to position can sometimes create contradictions between aerial and ground observers as to cardinal directions or locations. Planning for the task should include the use of fresh photographs whenever possible. Newly established areas or buildings may not be shown on older maps. Some modern computer simulators now provide the ability to generate a three-dimensional view of the terrain, which can be very useful, especially during OOTW. The difference in data between ground group maps and air group GPS can cause considerable confusion if there is little interaction and communication between these groups.

d. Restrictions on weapon use. Many characteristics of operations in the urban area limit the use of weapons.

(1) Weapon use may be limited to a short range for cocking/stabilization within an urban area. Precision weapons, such as TOW and Hellfire ATGMs, require a minimum range of 500 meters for reliable cocking and stabilization. Longer range fire is often more accurate.

(2) Extensive use of precision weapons by multiple groups at close range can cause problems with coordination, target identification, and target designation.

(3) The effectiveness of laser illumination by ground and airborne systems can be degraded by the large expanses of smooth, flat, and reflective surfaces common in many urban areas.

(4) With the exception of high-precision TOW and Hellfire ATGM strikes, aerial fire can rarely destroy targets or large numbers of enemy forces within buildings. This fire provides superior suppression, can force enemy forces to abandon their positions, or hold the enemy in place for destruction by ground attack groups. Enemy positions abandoned by the enemy under fire are usually reoccupied by him immediately after ceasing fire. (5) Target identification and marking may be difficult because of heavy smoke and dust from urban fires and explosions. Smoke from fires in industrialized areas may be highly toxic or may cause irritation. Pilots may have to wear chemical protective equipment, which will make it difficult to detect targets and destroy them. Locations of friendly groups may be marked with colored shields, glowing tape, flashing lights, and colored smoke. Targets may be marked with infrared laser pointers such as the GCP-1 Ground Commander's pointer/illuminator, M203 grenades with colored smoke, M203 grenade launchers or mortar flares burning on the ground or tracer fire. Improvised searchlights may also be used in some situations.

(6) If the combat situation permits, pilots should first perform the following approach a target without opening fire. Although fire from fixed positions is more accurate, fire on the move is usually safer for the helicopter since the accuracy of enemy fire from the ground will be greatly reduced. If possible, ground commanders should avoid directing pilots along a weapon-target line that passes over friendly troops. A weapon-target line starting from the front of friendly groups is best.

e. Limitations of helicopter loading. The need to fire from temporary fixed battle positions, constantly changing altitude, may require less ammunition or fuel loading of the helicopter. This is especially true for older model helicopters in hot, humid climates. Reduced loading will result in more frequent flights to forward refueling and reloading points and reduced time in position.

f. Level of command and support. Attack helicopters are most effective when they operate under the authoritative control of the group commander closest to the enemy. The lowest level unit that is usually given formal command and control of attack helicopters is the infantry battalion. However, in an urban area, the battalion commander is rarely able to determine the exact location of the enemy or coordinate air fire with his squads and platoons. He will often have to delegate responsibility for close-in coordination of attack helicopter fire to small unit commanders or the battlefield commander. This commander may direct the efforts of only a few helicopters at a time, usually a reconnaissance strike team consisting of an unarmed observation helicopter and one or two attack helicopters. This method is usually more effective for an air group because it allows each helicopter to retain control and continuously replace elements of the attack helicopters on the battlefield, where they coordinate their attacks with the ground commander's maneuver. In general, isolated and decentralized combat requires attack helicopters to coordinate directly with small unit commanders on the ground. Larger, more centralized engagements require that attack helicopters remain under the control of the air headquarters. Regardless of which level of command and support is selected, both ground and aviation headquarters must continuous coordination. Therefore, clear verbal communication between the two is essential.

g. Although U.S. helicopters are equipped with the world's most advanced night vision equipment, attack helicopter operations in limited visibility are difficult and require extra caution.

- a. Extensive use of GPS and handheld laser pointers or laser illumination devices alleviate problems associated with nighttime navigation, orientation, and target identification.
- b. Operations that are conducted at dusk, dawn, or fog present special problems for helicopter crews using image-enhancing night vision devices. Rapid changes in light intensity make it difficult for pilots to see the ground and other helicopters. B

limited airspace low over the urban area, close proximity of friendly and enemy forces, presence of dangerous and

Helicopter flights are difficult and dangerous when obstacles such as antennas are difficult to see. Infantry teams should consult with experienced pilots when planning night operations, especially when planning operations that take place at dusk.

c. Artificially illuminated urban areas pose a hazard to pilots when using image-enhancing night vision devices. One way to avoid bright city lights is to use the infrared illuminator found on most U.S. helicopters. This makes it easier to detect and avoid obstacles, especially rooftop antennas, which are highly visible in infrared light.

d. The infrared forward-looking devices on the OH-58D, AH-64, and some Special Operations Forces helicopters are not susceptible to artificial light and are generally effective sighting systems in urban areas. Depending on the equipment used by the ground commander, these helicopters can detect the laser of his designator. Close communication with the aviation team prevents misunderstandings and increases the combat effectiveness of attack helicopters supporting infantry maneuver in urban combat.

Chapter 17. ACTION OF SMALL UNITS OF TANK AND MOTORIZED RIFLE TROOPS IN THE CITY

The first and foremost fundamental lesson learned from recent U.S. and allied operations in populated areas is the importance of fully integrated allied formations. The role of light infantry in urbanized terrain operations remains dominant. However, combat or OOTW in an urban area should never be conducted by infantry forces alone. An infantry-only force conducting operations in urbanized terrain is a historical anomaly. When fighting in an urban area, combined teams of different branches of the military achieve the best results. The actual composition of these teams must be determined by careful analysis by commanders

at all levels. Light infantry teams operating without other branches of the military have disadvantages and limitations that can only be compensated for by an appropriate operational organization with mechanized infantry, armored forces, and engineers. These teams must be provided with close air support, fire support, communications, and logistics.

Because of the decentralized, isolated nature and OOTW situations and conventional combat in urban areas, sped infantry will always represent the majority of any force. In a small tactical-level unit, a light infantry force has some disadvantages that can be offset by mechanized infantry or armored groups. In contrast, tanks and mechanized forces have problems within urban areas when operating without infantry support. These forces can accomplish their missions with minimal casualties and minimal destruction only when operating together.

- a. Light infantry forces lack heavy firepower, protection, and long-range mobility. Armored forces, on the other hand, can provide devastating fire, are fully protected from anti-personnel mines, shrapnel, small arms fire, and have superior mobility along unblocked routes.
- b. Armored vehicle crews have insufficient all-round visibility through their sight gauges; they are easily blinded by smoke or dust. Tanks cannot raise or lower their guns sufficiently to fire at targets very close to the tank or high in high-rise buildings. Specialized infantrymen have excellent all-around vision and can engage small arms targets in almost any environment.
- c. Infantry small arms fire within a building can eliminate enemy resistance without seriously damaging that building. Heavy armored vehicle fire causes unwanted collateral damage or may destroy major structures.
- d. Armored vehicles, if isolated or unsupported by hasty infantry, are vulnerable to light and medium anti-tank weapons fire (except for the main battle tank when attacking from the front hemisphere). The armored vehicle gunner cannot accurately and quickly identify targets,

if the armored vehicle commander will not assist him in doing so by leaning out of the hatch and exposing himself to danger, or if the hastening infantry will not provide target designation to the gunner.

e. Armored vehicles make a lot of noise. Therefore, there is little chance that they will arrive in the area undetected. Infantrymen can move into position stealthily, appearing in the area unexpectedly to the enemy. Armored vehicles can be blocked by improvised barricades, narrow streets and passages, or large amounts of rubble. Infantry may move through or around the urban area, regardless of the extent of damage to buildings.

f. Thermal imaging sights on armored vehicles can detect the enemy in darkness and smoke, conditions that limit the capabilities of even the best infantry equipment, although they have limited sectors of view at the short ranges common in urban environments.

g. In some OOTW situations, the presence of armored vehicles creates a psychological effect, an aura of invulnerability that assists friendly forces in stopping violence. Infantry patrols with armored vehicles can control large areas of a city, making their presence known to locals, both friendly and unfriendly.

h. During barrier and search operations, armored vehicles can quickly transport infantrymen to points where they, along with armored vehicles, can isolate the barricaded area. Armored vehicles, with their long-range weapons, can control large expanses of open area, while hastened infantry block closer terrain and dead space not viewable from armored vehicles.

i. The mobility, protection, and firepower of armored vehicles can be used to escort convoys and to evacuate wounded from under fire. This and other operations can be aided by the ability of armored vehicles to generate smoke.

There are many ways to use armored vehicles effectively in most combat situations. Armored groups operating as platoon, company, and battalion formations use mobility, protection, and firepower to seize the initiative. However, combat in some localities is so decentralized, and routes for transporting

assets are so limited that armored vehicles in large units cannot be used. In such cases, the heavy firepower, mobility and armor protection of a tank or BMP are still necessary; however, these situations require fewer armored vehicles to be used. The decision to disperse the use of armored vehicles should be made by the command only after careful consideration of the situation by factors and depending on expected operations in the near future. Decentralized armor support greatly increases the combat power of small groups of infantry. However, dispersed armored vehicles cannot be easily and quickly concentrated. Their removal from an engaged battle somewhere that requires the participation of concentrated armored forces would require a tactical pause to reorganize and change tactical tempo, which could interrupt a combat operation at a crucial moment.

a. Traditionally, armored vehicles participating as part of a small unit of an all-armor team were tanks operating in conjunction with small groups of rushed infantrymen. However, the advent of BMPs (especially the heavily armored variants) has made it possible to create infantry-tank type teams, but based on a few BMPs and some rushed infantry. The BMP gun is weaker than the main gun of a tank, but the BMP has a powerful combination of weapons - TOW APC, 25 mm cannon and a twin 7.62 mm machine gun. Therefore, further in the text the term

The "Infantry Tank Team" will also include the Infantry Armored Personnel Carrier and the Infantry Sheridan Team (unless otherwise). When the Armored Gun System (AGS) begins to arrive, it will replace the Sheridan armored vehicle in this role. Designed to operate with light infantry, the AGS will be an effective and powerful complement to the small unit of the combined arms team. b. The most common operational organization of dispersed armor involves the attachment of a platoon of tanks to an infantry company, followed by a tank section of two tanks to each of the leading rifle platoons. Individual tanks may also be used, but two armored vehicle sections are preferable. A particular rifle squad is usually assigned a particular tank.

c. Infantry and tank teams work together to concentrate maximum combat power on the enemy. The hastened infantry provides the eyes and ears of the team. Infantry locates targets, identifies them, and informs the tank crew to destroy them. Infantry forces maneuver along covered and concealed routes to assault elements

the enemy, constrained and suppressed by the tank's fire. This method provides protection for the tank from attacks of hasty enemy infantry. The tank, in turn, provides continuous fire support for the infantry, destroying enemy strongholds.

d. In built-up areas, hastened infantry usually move ahead. Tanks follow and provide close observation and cover. If the infantry detects enemy positions or encounters resistance, the tank immediately supports it with fire to confine or suppress the enemy in place and allow the infantry to ascertain the situation. Once the situation has been clarified or a close reconnaissance has been carried out, the infantry squad leader tasks his subordinates to identify targets and, if necessary, directs the tank's movement to destroy them.

e. Coordination between the tank commander and squad leader must be continuous and they must understand each other half a word. The tank commander or driver may move on foot, accompanied by the squad leader, to a position from which there is a better view of the route or target. Signals to start, move or lift, and cease fire must be understood by all. One of the greatest problems in coordination, command and control in urban combat is intense noise. Verbal commands must be duplicated by simple hand signals.

f. A tank smoke generation system and smoke grenade launchers may be used to evacuate the tank from enemy fire, as well as to cover infantry movement through an open area or to evacuate wounded. The use of smoke must be carefully coordinated. Although the tank sight provides visibility through smoke, infantrymen in dense clouds of smoke are blinded. Smoke grenade launchers on the tank provide a rapidly forming localized cloud of smoke, but the grenades leave burning fragments that are dangerous to infantrymen near the tank and can also start fires in urban areas.

g. Tanks and BMPs are valuable assets to assist the assault force in isolating the objective area and capturing a supporting beachhead. Once these tasks are accomplished, the infantry moves to mop up the

positions and deploys in a supporting bridgehead, with the tanks remaining behind. If this is not possible because of enemy fire, the tanks must move into positions where their fire can be used to prevent the enemy from pulling up reinforcements and destroying his forces withdrawing from the position. In doing so, however, the tank crew must be very careful. Because of the non-linear nature of urban combat, enemy forces can infiltrate to the rear or flanks of tank units, isolate them, and destroy them. If even a minimal infantry element cannot be left with the tanks, both tanks in section should move to sheltered positions with mutual support. Loaders and tank commanders should prepare their turret mounted machine guns and be ready to repel the enemy, especially infantry approaching from above, from the rear or from the flanks.

Chapter 18. INFANTRY FIGHTING VEHICLE

Bradley BMP platoons and squads rarely fight alone in populated areas. They usually operate as part of their company or as part of a company team.

Combat in a populated area is organized around prepared positions in buildings. These positions cover street approaches and are protected by mines, barriers and booby traps. Bridges, spans, and buildings must therefore be inspected and cleared of mines before they are used. Reconnaissance units should ascertain the load capacity of roads, bridges and first floor floors to determine if they can support the weight of BMPs and tanks.

Streets and alleys are ready sectors of fire and kill zones. Therefore, all vehicle movement is very restricted to these routes and is susceptible to ambushes and short-range attacks. The main guns of tanks cannot be elevated enough to fire at the upper floors of tall buildings. The BMP, with elevation angles of +60 to 10 degrees for the 25mm cannon and 7.62mm twin machine gun, has a much greater capability. The BMP can also provide suppressive fire from buildings,

using windows to flank and rear enemy vehicles. The tank is limited in providing such support.

BMPs and tanks are not used separately. They work as a team in providing security for the rushed infantry (rifle team). In turn, BMPs and tanks provide critical fire support for rifle teams.

a. When moving, BMPs should be close to the building on both sides of the street. This allows each BMP to cover the opposite side of the street. BMP hatches may be closed for protection, but the crew must keep an eye out for signals from rushing infantry at all times. Interaction between the rifle team and the BMP crew in a built-up environment is particularly important. Visual signals should be identified, telephones should be used where possible, and interaction tasks should be thought out and practiced.

b. Commanders should consider the use of long-range tank fire from cover positions. The BMP, with its ability to lower and elevate the 25mm gun, can provide the kind of support that tanks cannot provide within a populated area.

c. Since the Bradley BMP, while having better armor protection than the M113 APC, lacks adequate armor protection against medium and heavy APC fire, it is normally used only after area has been cleared of APC positions or in a landscape dominated by urban areas to provide long-range antitank support. Most of the anti-tank platoon's close-range fire is provided by the LAW and Dragon. The 25mm BMP cannon and machine gun are used to provide direct fire support.

Because of the nature of the terrain, combat in a populated area is usually conducted by a rushed force. BMPs are used as much possible to provide close support to hastened teams. Tanks follow forward squads into positions defended by those squads to provide heavy direct fire support (Figure B-1 shows the organization of the units

BMP.)