* APPENDIX J

COUNTERING URBAN SNIPERS

Whether specially trained and equipped expert shots or merely individual riflemen of mediocre marksmanship, snipers have always played a large role in combat in built-up areas. They have been used to disrupt US operations, inflict casualties, and to tie down large numbers of troops searching for them. The lethality and accuracy of modern weapons, the three-dimensional aspect of urban battlefield, and the many alleyways, corridors, and rear exits available for a sniper's use make him a threat that cannot be ignored. Commanders and leaders at all levels must be aware of the threat posed by the urban sniper, the effects he can have on friendly unit operations, and the steps by which he can be countered and his threat minimized. For the purpose of this appendix, the term sniper is used to describe any single rifleman firing carefully aimed shots from medium to long range.

J-1. TYPES OF SNIPERS AND THEIR CAPABILITIES

The three general types of snipers are the specially trained and equipped individual, the trained marksman, and the civilian irregular. Each has different character sties of ope ration and may be used to accomplish different purposes. Countermeasures that are effective against one type may be less effective against another.

a. The most dangerous sniper is the individual who has been specially selected, trained, and equipped with a modem scope-mounted sniper rifle. These individuals are expert shots and are trained to select key individuals as their targets. They can hit at great range (sometimes out to 1,000 meters) and are skilled in avoiding detection. They are normally members of an organized armed force and wear a standard uniform that may be modified to provide better camouflage. Their actions are carefully integrated into the enemy's overall plan of operation. This sniper is the most difficult to counter effectively. Until recently, there were not many potential adversaries of the US that could produce significant numbers of such individuals. However, many armies in the world have a renewed interest in snipers. More and more sniper training is taking place, and excellent 7.62-mm sniper rifles are available at a reasonable cost on the world arms market. US forces can expect to see more and more trained snipers during urban combat operations of the future. Some of these may be equipped with rifles and night observation equipment that are among the best in the world. The US Army and its Western allies already have a relatively large number of this type of sniper, as do several of the states of the former Soviet Union.

b. The trained marksman is a common sniper often found in urban combat. This sniper is a trained soldier, equipped with a standard issue weapon, who is an above-average shot. He normally has fair to good fieldcraft skil1s and is difficult to detect in the urban environment. He may be employed singly or in pairs to create confusion among friendly forces, cause casualties, or harass and disrupt the tempo of operations. He is often used by the enemy in an economy-of-force role or as a rear guard or covering force while the main enemy force withdraws. He may also be placed on the perimeter of a defended urban area to provide early warning of the approach of friendly forces and to disrupt and cause them to deploy early. The trained marksman is a dangerous foe. He can be found in fairly large numbers in the armies of many potential adversaries. He is normally a member of an organized armed force and wears a standard uniform. He may, however, be a guerrilla fighter, in which case he may not wear a recognizable uniform but will normally carry his arms openly.

c. The third general type of sniper is the armed irregular. He may have little or no formal military training but may have much experience in urban combat. He may or may not wear any distinguishing uniform and may even strive to appear to be merely another of the thousands of noncombatants found in a large urban area. He may or may not carry his weapon openly and may go to great lengths to avoid identification as a sniper. His fires are normally not accurate, and he seldom deliberately targets specific individuals. His actions are not normally integrated into an overall enemy plan, although his attacks may be loosely coordinated with others in his general area. Although this type of sniper has the least ability to cause heavy losses among US forces, he has high value as an element of harassment and in some OOTW situations he may achieve results far out of proportion to his actual ability to cause casualties.

d. The typical range for a sniper attack is 300 to 600 meters with medium-caliber rifles. Shots from 800 to 1,000 meters are the exception. However, heavy sniper rifles (.50-caliber, 12.7-mm, 14.5-mm, and 15-mm) with ranges of 1,200 to 1,500 meters are now proliferating around the world. These heavy sniper rifles were originally intended as anti materiel weapons for stand-off attack against high-value targets, such as radar control vans, missiles, parked aircraft, and bulk fuel and ammunition storage sites. Because of this, they are only marginally accurate enough for long-range shots against individual personnel. It is their ability to shoot through all but the heaviest shielding material, and their devastating effects, that make them valuable psychological weapons. The ability to shoot through common urban building materials makes these large weapons valuable as countersniper tools.

e. Several other equipment trends will result in a greater threat to US forces from urban snipers in the future.

(1) The quality and quantity of night observation devices sold on the world market is increasing daily. In the near future, even trained marksmen may be equipped with devices to allow accurate fires at night.

(2) The use of simple, direct-view optical sights on military rifles is increasing. Although not in the accuracy class of true sniper weapons, these sights make the trained marksman a much more dangerous foe. This is especially true within the shorter ranges (less than 200 meters) normally associated with combat in built-up areas.

(3) Many armies are now buying simple, but effective, devices to either completely silence or greatly suppress the muzzle blast of sniper weapons. These devices inhibit the task of determining the location of a sniper. Although many of these devices significantly reduce the maximum effective range of the weapon, they can be very effective at less than 200 meters.

J-2. LAW OF LAND WARFARE APPLIED TO SNIPERS

Historically, units that have suffered heavy and continual casualties from urban sniper fire and that have been frustrated by their inability to strike back effectively often have become enraged. Such units may overreact and violate the laws of land warfare concerning the treatment of captured belligerents. This tendency is magnified if the unit has been under the intense stress of urban combat for an extended time. It is vital that commanders and leaders at all levels understand the law of land warfare and also understand the psychological pressures that come with urban warfare. It requires strong leadership and great moral strength to prevent soldiers from releasing their anger and frustration on captured snipers or civilians suspected of sniping at them.

a. The law of land warfare is not restricted solely to declared wars. It applies in all cases of armed conflict, such as many situations in OOTW. All US soldiers are bound by these laws and the legal orders of their superiors. Under the law, it is forbidden to kill, wound, or harm an enemy who, having laid down his arms or having no means of defense, has surrendered. A sniper who has been captured, or who has surrendered, must not be harmed. It does not matter how many friendly casualties he has caused or how long he waits before he surrenders.

b. Any sniper who wears a uniform of a belligerent, carries his arms openly, and conducts himself in accordance with the law and customs of warfare is automatically y entitled to be treated as a prisoner of war, not a criminal. Even an armed irregular 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 accorded such treatment. A civilian who snipes at US forces without meeting these criteria can be detained by the military and tried by the appropriate court. Under no circumstances should a captured person be mistreated or killed in retaliation for sniping, regardless of how many casualties he may have caused.

c. In some OOTW situations, the rules of engagement and the mandate under which the US forces are operating may severely restrict how much lethal counterforce can be used 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 at hand.

(3) Apply the type and degree of force in accordance with the rule of general proportionality.

d. Rules of engagement result from the law of war stretched over the situational template of a particular mission. It would violate the law of war, as

well as most ROE, to respond to sniper fire with massive, indiscriminant return fire into an urban area if another less destructive tactic or weapon could be employed without greatly increasing the risk to US forces. Whatever the situation, commanders and leaders must understand the rules of engagement and ensure their soldiers follow them.

J-3. SNIPER AWARENESS

The first step toward countering the successful use of snipers against US forces is for commanders, leaders, and staff officers at all levels to be aware of the sniper threat. Although snipers may be more prevalent in some situations than in others, depending on the adversary, a sniper threat always exists in urban areas to some degree. Plans to counter the sniper threat and to protect the friendly force from snipers must be integrated into the operation from the beginning. Tactics and techniques must be taught to soldiers before they are actually faced with sniper fire.

a. A careful METT-T analysis and consultation with personnel familiar with the area may reveal the existence and degree of the sniper threat to US forces. This is especially important during OOTW. Information on the local sniper threat may be obtained from the following sources:

- Host nation military, government, or police officials.
- US Embassy personnel.
- Allied special operations forces (SOF) or other allied forces operating in the area.
- US special operations forces or other US forces in the area.
- UN officials or other UN forces in the area.
- Nongovernment agency officials.
- Local militia members.
- Local civilians, including children.

b. Coordination with expert US snipers can identify specific areas and situations where enemy snipers may be effective and will help the commander decide on the countermeasures to be employed. In addition to the school-trained snipers assigned to the infantry battalion, there are several other sources of sniper expertise, some of which may be available only during domestic OOTW situations. Some examples of expert US snipers are:

- US SOF snipers such as special forces (SF), rangers, or sea-air-land teams (SEALs).
- US law enforcement officials such as police Special Weapons and Tactics (SWAT) teams, the Drug Enforcement Agency (DEA), the Federal Bureau of Investigation (FBI), or the Secret Service.

J-4. PLANNING SNIPER COUNTERMEASURES

When planning sniper countermeasures, the commander and staff must answer three basic questions. The answers to these questions suggest the set of countersniper tactics, techniques, and procedures that will best fit the METT-T condition under which the unit is operating. Consideration of these questions assists the commander and staff in eliminating the TTP that are inappropriate to the situation.

a. The first question is, "What does the US commander want to accomplish, and what rules of engagement govern his operations?" If the commander's intent is to conduct combat operations, and if the rules of engagement allow him to do this with the full force of his available firepower, he can either suppress and bypass the sniper or use the fundamental principle of fix and maneuver. He can use firepower to suppress and fix the sniper in position while maneuvering forces either to avoid the sniper and continue the mission or to close with and eliminate him. However, if the rules of engagement limit the application of force, or the use of such force would create a large number of civilian casualties, he may be limited in his initial response to a sniper attack. In many OOTW situations, the key to success is perseverance, restraint, and the use of minimum or appropriate force. The unlimited use of firepower in an urban area may undermine the legitimacy of the US force and work against the commander's ultimate intent. The right to self-defense is never denied US forces, but it may be limited. This is a difficult concept for soldiers to grasp, especially if they are taking fire from snipers. The time to explain it to a unit is *before* enemy contact, not during. Leaders must keep the commander's ultimate intent in mind when they plan and execute sniper countermeasures.

b. The second question is, "What does the enemy want to accomplish with his snipers, and what capabilities does he have to accomplish it? There are several goals enemy snipers may be striving for. Among them are—

(1) Defeating US forces. At the small-unit tactical level, this is possible for the specially trained sniper and possibly for the marksman.

(2) Forcing US forces to deploy, delaying them, breaking up their tactical tempo, and allowing the enemy to seize the initiative. Unless US forces react aggressively and counter the sniper's effects quickly, this goal is possible for all snipers.

(3) Harassing US forces, exhausting them, and lowering morale. All snipers can do this, but most often the marksman and the irregular are used for this purpose.

(4) Killing a specific individual. This task is almost always assigned to a specially trained sniper. His target may be specific individuals by their function such as military officers, RATELOS, or armored vehicle commanders. In an OOTW situation, his target may be specific individuals, such as political or community leaders, or it may be classes of individuals such as members of the media, international aide workers, policemen, or civilians living in a contested area.

(5) Causing US casualties for political effect. As the information age progresses, potential adversaries will become more and more adept at manipulating the attitudes of the American public to turn them against US efforts in an OOTW situation. This has already occurred and will again. One of the proven ways to do this has been to cause US military casualties, regardless of their tactical effect, knowing that the world media will transmit images that will discourage Americans and lessen their support.

To answer the second part of this question, the commander must determine the level of sniper to be countered. He must also determine the type of weapons, ammunition, tactics, and night vision equipment available to the enemy. This information can be used to assess the expected range and lethality of enemy snipers, and will aid in identifying patterns to counter. It will also be useful to assess passive protective measures such as the likely effectiveness of body armor, light vehicle armor kits, screens, shields, and so forth.

c. The third important question is, "What are the rules of engagement?" There are three basic levels of ROE against snipers, with many variations of each.

(1) US troops can be held to the use of minimum force. This is common in an OOTW situation, especially during—

- Aid to domestic authorities.
- Peacekeeping.
- Noncombatant evacuations.
- Humanitarian relief.

(2) US troops can be allowed equal or reasonable response to force used against them. This may be the situation in the more violent peace enforcement operations.

(3) US troops can be allowed to use overwhelming force. This is the normal situation during combat in built-up areas when the enemy poses a significant threat to US forces.

J-5. COUNTERSNIPER TACTICS, TECHNIQUES, AND PROCEDURES

Countersniper TTP by US forces involve two types of actions: active countermeasures and passive countermeasures. Each has its place, depending on the METT-T conditions under which the unit is operating. Most sniper countermeasures are not new TTP for well-trained combat troops. They are simply common sense actions taken routinely while in a combat area to limit exposure to fire, conceal positions, move tactically, and respond to enemy contact. Some countermeasures are not routine, however, and require additional training emphasis. No matter which TTT are employed, successful countersniper measures present leaders at all levels with a challenge to maintain unit discipline. The sniper has the initiative. Units must not implement countermeasures halfheartedly. To do so invites casualties from snipers who can wait hours for the moment a unit's guard is down.

a. Active countermeasures either detect and destroy the sniper before he can fire, or engage and neutralize him after he fires. Active countermeasures include the use of the following:

(1) **Observation posts and aerial observers.** Observers can maintain a constant surveillance over potential sniper positions and detect snipers as they

attempt to move into a position for a shot. Once detected, snipers are vulnerable to all sorts of fires and can be easily neutralized or forced to withdraw. Observation posts should have access to powerful spotting telescopes, medium-power binoculars, and night observation devices, thermal if possible. Constantly scanning an area for the minute movements made by a well-trained sniper is exhausting. Therefore, personnel on OP duty should rotate often. However, a person who is intimately familiar with the area being scanned is most likely to notice a subtle change. Aerial observers can operate from any of several platforms. The modernized OH-58, with its sophisticated night vision capability, and the AC 130 have excellent capability to detect individual snipers around US positions. Any of several unmanned aerial vehicles (UAVs), with their extended loiter time and video/night vision capability, can also be used effectively. As military and commercial lasers become more and more common, these devices may be used against US forces manning observation posts. Observers should be equipped with laser protective glasses, especially when using direct-view optical devices. Laser protective glasses, binoculars with laser filters, and indirect-view optics protect observers from most laser systems available now around the world.

(2) **Patrols.** Constant reconnaissance and security patrols around a unit's position hinder a sniper's getting into a firing position undetected. Small patrols are the most effective.

(a) Like US sniper teams, enemy sniper teams are small and depend on stealth to approach a target along covered and concealed routes. Normally, they move to a hide or "shoot" position and remain there for long periods. These sniper teams are most effective when they have good fields of fire from 300 to 600 meters. At ranges of less than 300 meters, the sniper's movements and firing signature are easily detected. A moving sniper who has been discovered by a small security patrol is at a great disadvantage. He lacks the firepower to fight a long engagement, and he is normally far from any support or assistance.

(b) Small security patrols at night using night vision devices can be very effective. Reconnaissance patrols should move by covered and concealed routes to good observation points, stop, observe, then move to another position. The patrol routes must vary, and a reaction force or supporting weapons must be ready if the patrol makes contact. If military working dogs and trained handlers are available, they can be useful in detecting enemy snipers. Dogs can quickly search large buildings for hidden enemy and can detect personnel at long range if downwind.

(c) In addition to reconnaissance patrols, small combat patrols are also effective. A variation of the ambush patrol is the stay-behind ambush. A small ambush element moves as part of a larger patrol and occupies its position without being observed. It then observes its kill zone, which may be very large if the element has a sniper team with it, and engages enemy snipers as they attempt to move into position.

(3) **US snipers.** US snipers can be most effective as a counter to enemy snipers. Not only do they have an expert knowledge of sniping and likely enemy hiding places, they can normally engage enemy marksmen and

irregulars at a greater range than the enemy sniper can engage US forces. Their precision fires are also much less likely to cause civilian casualties than fires from other weapons. The commander must carefully consider whether the use of these scarce resources in such a purely defensive, reactive role is the best way to employ them. Often, especially in OOTW, it may be. In other cases, they may be more valuable inflicting casualties on enemy forces. In some OOTW situations, SOF sniper teams may be available. These highly trained teams are often equipped with special, long-range sniper weapons that can be used to dominate large areas around US forces.

(4) **Unit weapons.** If a unit is engaged by an enemy sniper, it may be authorized to respond with fire from all its light weapons. In an urban area, the direction of enemy fire, especially of a single rifle shot, is often difficult to determine. If a unit can determine the general location of a sniper, it should return suppressive fire while maneuvering a subunit to engage the sniper from close range. This is not always successful, because a well-trained sniper often has a route of withdrawal already chosen. Massive return of fire and immediate maneuver can be an effective response to short-range sniper fires if the rules of engagement allow it. In mid- to high-intensity urban combat, they are often the best immediate responses. Exploding fragmentation rounds, such as from the M203 grenade launcher, are the most effective suppressors.

(5) **Overmatching fire from selected weapons.** The use of overmatching return fires against snipers can be very effective in high-intensity urban combat. Even in some OOTW situations this can work. The 25-mm cannon on the BFV is a powerful and accurate weapon that can penetrate deep into buildings with its APDS rounds. Fires from .50-caliber machine guns were effective against snipers during combat in Panama in 1989. Units reported that the snipers seemed to be intimidated into inaction by the immediate return of heavy machine gun fire. In Somalia, immediate heavy fires from MK 19 automatic grenade launchers were often effective at stopping sniper fires from armed irregulars. Light or medium antitank weapons are also effective. Because of their accuracy, guided munitions such as the TOW, Hellfire, Dragon, or Javelin have the added advantage of limiting collateral damage somewhat. Tank cannon can also be used to respond to sniper fire, although the danger of collateral damage is greater because of the extreme penetration of the round. Immediate mortar or artillery fires can be effective in suppressing a sniper and forcing him to move, but they will seldom be effective by themselves.

(6) *Lasers.* The use of lasers to detect and counter enemy snipers is a new application for this technology. The Stingray system mounted on the BFV is effective against snipers who employ telescopes or night vision devices to observe US forces. In the semiautomatic mode, the Stingray can be used to detect possible snipers and alert the gunner to take action. In the automatic mode, it can be set to scan a specific sector and then engage and neutralize all telescopes and night vision devices it detects. The laser countermeasure system (LCMS) is a simpler, handheld version of the Stingray. It is aimed by the gunner and can also detect and neutralize a sniper's optics. To a lesser degree than these two systems, which are designed to engage targets, powerful

laser range finders and target designators can be used to suppress and temporarily disable enemy snipers. Laser range finders and target designators are effective against all who look in their general direction, regardless of whether a telescope is being employed. An enemy sniper looking through a telescope or binoculars, or one scanning a US position at night, is more vulnerable to laser injury. Although laser devices do not damage buildings or penetrate rooms, care must be taken at close ranges to avoid unnecessary civilian casualties from their use in built-up areas.

(7) **Preemptive fires.** In mid- to high-intensity urban combat, preemptive fires can often be used against likely sniper positions. This technique is more often used during offensive operations. It uses large amounts of ammunition but can be very effective for short attacks. Fragmentation fires from artillery, mortars, and grenade launchers are best for suppressing snipers whose position has not yet been detected.

(8) **Projected smoke or riot control agents.** Projected smoke that builds quickly is a good response to protect a unit from further casualties if engaged by an enemy sniper. It greatly limits his ability to acquire targets. The closer the smoke is placed to the sniper's location, the more effective it is. If the location of the sniper is unknown or cannot be reached by projected smoke, a smoke cloud established near the unit is still effective in reducing the sniper's chances of hitting another target. If the rules of engagement permit, and permission has been granted for the use of riot control agents, they can be used effectively to reduce the sniper threat. Projected agents are the only really useful ones due to the tendency of winds in urban areas to swirl and change direction often. Few snipers can deliver long-range, accurate fires while wearing protective masks.

(9) **Helicopter-carried countersniper teams.** Not only can helicopters provide aerial observation and fires or insert additional combat patrols and reaction forces, they can also carry countersniper teams that can engage identified enemy snipers from the air. US snipers can effectively fire from helicopters using low-power optical sights or infrared laser aiming devices and night vision goggles. When a target is detected, the helicopter begins a pylon turn, orbiting the target. The US sniper, firing out of the left side of the aircraft, can easily acquire and hit his target, while the flight path offers the enemy a more difficult deflection shot. Care must be taken, however, to guard against enemy using decoy snipers to lure helicopters into aerial ambushes.

b. Passive countermeasures prevent the sniper from detecting a clear target or prevent his fires from causing casualties. Many of the passive countermeasures are not unique to countering enemy snipers. They are common sense actions taken by all well-trained infantry units in a combat area to limit exposure and minimize casualties. However, passive countersniper measures are rarely successful by themselves. They may be politically and psychologically effective in terms of reducing US casualties and the level of violence, but they are often ultimately counterproductive to the commander's main mission. They tend to isolate US forces, especially during OOTW, when a visible presence is often required. They tend to create a siege mentality, and they pass the initiative over to the sniper. Especially during OOTW, along with the initiative comes the certainty of at least an occasional success in casting doubt on the legitimacy and competency of the US effort. Among the most common passive countermeasures are the following:

(1) *Limit exposure.* Use covered and concealed routes. Avoid open plazas and intersections. Stay away from doorways and windows. Move along the side of the street, not down the center. Move in the shadows. Move dispersed, using traveling or bounding overwatch. Avoid lighted areas at night. Avoid being silhouetted against lights or the skyline. Move quickly across open areas that cannot be avoided. Remain crouched or prone behind cover or concealment whenever possible. If troops are riding in the cargo area of trucks, keep the canvas cargo cover mounted to screen them. (This countermeasure may not be appropriate if there is threat of ambush by enemy forces in addition to snipers.) Avoid gathering together in large groups in the open. Remain dispersed. Avoid wearing obvious badges of rank. Avoid exaggerated saluting or standing at attention for officers while in the open.

(2) Wear protective equipment. The kevlar helmet and the protective vest will not always stop a sniper bullet, but in many cases they will significant y reduce the seventy of wounds. Wear them at any time soldiers are exposed to potential sniper fire. In situations where dismounted movement across country is not required, request and issue soldiers special, heavy protective vests that are actually bullet-proof. All members of units assigned to static positions, such as roadblocks and observation posts, should wear this additional protection.

(3) **Use armored vehicles.** Whenever possible, move around the urban area in a protected vehicle with as little exposure as possible. Avoid open-sided cargo vehicles. Requisition or improvise vehicular armor against small-arms fire for all administrative and logistical vehicles.

(4) **Erect screens and shields.** Use simple canvas or plastic screens to make a dangerous alleyway or street crossing much safer for foot traffic. Adapt screens on windows to allow vision out while hiding personnel inside. Use moveable concrete barriers to provide protection for personnel at static positions. Use common items, such as rubble-filled 55-gallon drums and sandbags, to provide cover where none exists naturally.

(5) **Deny the enemy use of overmatching terrain.** Either occupy such terrain with friendly forces or modify it to make it less useful to an enemy sniper. Pull down likely hiding places (ensure all actions are in accordance with the laws and customs of war). Clear bushes and rubble. Board or brick up windows. Pile up earth and rubble in front of buildings to block lines of sight for snipers.

(6) Use smoke hazes or smoke screens to obscure the sniper's field of view and limit the effectiveness of his fires. A clear atmosphere is required for accurate long-range sniping. Smoke hazes can be maintained over broad areas for long periods without significantly hindering friendly operations. Smoke screens can be created quickly and sustained for short periods, often long enough for US forces to accomplish a short-term objective free of sniper fires.