

be sure of completing the mission is to bring his own radio. The headset, signed out from the battalion signal platoon, allows him to communicate directly with his people on the ground without interference from prop wash and helicopter noise. He can then relay instructions to the pilots if their FM radio is down.

Codes can be coordinated to tell pilots which CCPs to use, to inform aircraft that the ground element is in contact; to direct them to return at a specified later time, to abort the mission, or to drop supplies at the CCP; and to indicate that the ground unit will attempt to recover when possible. Pyrotechnic signals can be established for the alternate communication plan—for example, a green star cluster could mean “drop LOGPAC at the CCP”.

The Blackstar technique offers both

advantages and disadvantages. It helps prevent enemy units from learning exact unit locations (as the Viet Cong did by tracking the daily logistics helicopter). The exact location of a helicopter at night is hard to spot, because the sounds seem to come from everywhere at once. Unless an aircraft flies directly over his head, the enemy will not be able to zero in on the location of the friendly force that is receiving supplies. For the best security, however, ground units should still plan to move immediately after receiving supplies.

The trade-off for the increase in security and stealth is that this aerial resupply technique is, for the most part, a one-way operation. Back-hauling casualties, still one of the most difficult tasks facing a light infantry battalion, usually requires the use of LZs or vehicular extraction, when the tactical

situation permits. The use of the jungle penetrator, combined with Blackstar, may be an answer.

Despite its disadvantages, the Blackstar technique allows light infantry to prevent commonplace MSR attacks when they use roads and LZ ambushes when they use aircraft. This technique enables a unit to conduct aerial resupply at times and places the enemy does not expect it—at night and in the middle of thick forest and jungle.

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Military Operations on Urban Terrain

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All infantry soldiers should be trained in military operations on urban terrain (MOUT). In recent years, we have seen that, as the world becomes more populated, even more urban areas may become combat zones. For example, during Operation JUST CAUSE in December 1989, a large percentage of the fighting occurred on urban terrain—such as on the military base of Rio Hato and in Panama City. This operation also confirmed that low-intensity as well as high-intensity conflicts can include such operations. More recently, today some of the bitterest fighting in the Balkans is concentrated in towns and cities.

The critical skills in MOUT include

entering urban areas, moving within urban areas, entering buildings, clearing and securing rooms and floors, and detecting and avoiding booby traps. Since soldiers are rarely trained in these skills, I would like to touch on them and also to discuss some techniques that can help during training or during the next MOUT conflict.

MOUT planning revolves around one simple tenet: centralized planning with decentralized execution. Leaders cannot achieve central control during an urban operation, because MOUT warfare often dissolves into many compartmented battles. Leaders must realize this and emphasize a simple mission with a strong commander's intent that

will allow their soldiers to use initiative in executing the mission. If a plan is not central in its development and design, soldiers tend to get caught up in their own battles during the execution phase and forget their commander's intent.

Planning must take into consideration the resupply of such critical items as ammunition, water, and the role of medical evacuation teams, because the tempo of a MOUT operation is much higher than that of a standard operation. Casualties can be two or three times the number leaders may expect. In 20 minutes, casualties or a lack of ammunition can render a platoon incapable of accomplishing its mission. A unit mis-

sion can easily bog down if the commander does not have a good plan for evacuating wounded and resupplying his unit: the enemy can mount a counterattack or regain the initiative.

Entering an Urban Area. Any area that has a concentration of people and the structures to support habitation can be defined as an urban area, whether it is made up of huts or skyscrapers. It is restrictive terrain that has more potential danger areas than a forest, a desert, or an open maneuver battlefield.

The approach to any built-up area must be reconnoitered carefully for the most tactically advantageous entry point. Areas that offer an entry, such as high ground, will also provide overwatch and excellent direct and indirect fire support. Choosing the initial entry to an urban area is a vital decision, because this is the secured passage point that will allow the continued flow of reinforcements and combat service support (CSS) onto the battlefield. It could be essential to enter an urban area during times of limited visibility, or to use smoke. If the point of entry chosen is cut off, the forces sent in may well be encircled.

Movement Techniques. Movement is difficult in cities because the defender has so many places to hide. Piles of rubble or tiny sniper holes in the sides of buildings many blocks away can conceal muzzle flashes. Every building may hold a potential threat. For units conducting offensive missions, the reverse is true. There is little natural concealment during movement. Streets and alleys are perfect kill zones—level, clear, and with little dead space to conceal troops. Movement must therefore be carefully planned, and soldiers must be trained in urban warfare, if possible.

A soldier should watch the muzzle of his weapon during movement, and never let it extend around a corner before he does. This provides a dangerous signature. One man should go ahead to low-crawl up to a corner and peek around at ground level. If he has a survival mirror, he should use it to peek around for him. A soldier who is looking around at ground level is a hard target for the enemy to acquire.

When passing a building, a soldier should never walk in front of an open window; he should crawl under it or, if it is a basement window, jump over it. If he can do neither, someone should cover him as he passes the window and he should pass it facing toward the building with his weapon toward the potential enemy. This at least gives him a fighting chance.

The leader should watch troop dispersion. Although this sounds like common sense, in a city it is easy to bunch ten or 15 people around any object that offers a little cover or con-

cealment. Leaders must control the flow of troops down streets. One enemy machinegun could cause numerous casualties in less time than it takes to tell.

Fighting in Buildings. When entering a building, a soldier should always try to enter at the highest level possible. Using the height of the first secured building, he can then use ropes, poles, or boards to enter other buildings from the top.

Room entry and clearing techniques vary. The technique itself is not as important as making sure it provides



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overwatching fire for the point man, and that the room is thoroughly searched, cleared, and secured.

The same technique applies when securing a room, a floor, and subsequently a building: Gain a foothold and use it as a base from which to extend your operation.

Stairwells are particularly difficult places to fight in. This is one reason for fighting downward instead of upward; it is much easier for a soldier to fight his way down a barricaded staircase than to fight up it. If the enemy holds the high ground, or upper floors, the stairways will probably be booby trapped or barricaded. Stairwells are natural kill zones and should be avoided whenever possible.

A grenade thrown into a room before clearing usually shakes up the enemy enough for a successful room clearing. But a soldier should check the thickness of the walls before he starts tossing grenades. It is of little value for him to toss a grenade into a room if it blows right through the wall that he thinks is protecting him and others. In addition, in cluttered areas a grenade can strike an object and bounce back, especially in stairwells where it could strike a wall and roll back down.

A good technique for gaining entry to second and third floors is for each man to carry a pole section from a camouflage system. A section is about one meter long and weighs about one pound. The sections can be put together in seconds to form poles of varying lengths, and a fire team can elevate a man to a second- or third-story window in a matter of seconds.

Marking Cleared Areas. Marking areas cuts down on the need to tie up radio nets with situation reports on safe rooms, buildings, or areas. There are many techniques for marking cleared areas.

As each room is cleared, chalk symbols or spray paint symbols can be applied to safe rooms. White chalk should be avoided, because the enemy can pick up a rock and start scratching similar white markings. Chemical lights can be useful at night or in dark buildings. After a chemical light is

activated, it can be broken and the luminous liquid applied to the walls in cleared rooms. This way, the enemy cannot remove the symbols. Again, the enemy may also have chemical lights, so designated colors are best.

As each floor is cleared, a distinctive signal should be hung outside a window on that floor on each side of the building so that all friendly forces can see them. Engineer tape, sheets, or VS-17 panels are excellent tools. When an entire building has been cleared, a distinctive symbol or signal will let all friendly troops know.

Booby Traps. Booby traps are among the greatest considerations during MOUT training and combat, but the least trained. Detecting and disarming booby traps are critical tasks, and commanders should train to accomplish them.

A booby trap can be as simple as a hand grenade under a body with the weight of the body holding the spoon down, or a grenade taped to a desk or furniture leg with one end of a string tied to the pin and the other end to a fixed object at ankle level.

More ingenious booby traps include a claymore or any explosive device rigged to an electrical source, such as inside a refrigerator, for example: An enemy soldier opens the door to check for food and becomes a casualty.

All soldiers during MOUT training must be trained not to open or turn on anything, because anything that opens or is a power source can also be a booby trap. If a door, drawer, or anything else must be opened or moved for some reason, a field expedient pole of some type should be used.

Fighting Underground. Fighting in sewers can be difficult because of the danger of electrical and methane gas injuries, but it offers another direction from which to attack the enemy, or from which an attack can be expected. A leader should try to get the plans of any city or town where he is conducting operations. The town hall and library are good places to send a scout patrol to see what plans or designs they can find, or a reconnaissance patrol can be sent to see where the sewers are.

Small patrols should be used, and a rope or 550 cord tied around each person's waist with a snap-link that hooks to a main connecting rope. This can give the patrol quick-release when they need it, but it still keeps the patrol together during movement.

Half of the soldiers should enter the sewer wearing protective masks and the other half wearing night observation devices. The leader should have his AN/PAS-7 hand-held thermal viewer or AN/TAS-5 Dragon thermal sight on and ear plugs in. With half of the patrol masked already, the threat of the entire patrol succumbing to methane gas poisoning is greatly reduced, and the half wearing night observation devices can give the patrol greater initial fighting ability.

In an enclosed area such as a sewer, the shot of a pistol could blow out a soldier's eardrums and render him unconscious, even if the round doesn't hit him. He may want to have ear plugs in, but not so deeply that he can't communicate, and if contact is made, he can push them in deeper for added protection.

As a room is cleared and secured, troops must be left back to make sure the enemy does not reoccupy it. (As these troops come forward later they can bring ammunition or medical supplies.)

Although MOUT training can be rewarding, the challenges of a MOUT environment are unique and frustrating. MOUT warfare requires that soldiers have skills in city fighting; the fighting is often close in, and the first mistake can be the last.

Almost all infantry posts have MOUT training areas, and commanders should get out and use them. In this way, we can ensure that our soldiers can close with and decisively defeat an enemy, even in an urban environment.

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