

CHAPTER FOURTEEN

RANGER URBAN OPERATIONS

14-1. GENERAL. Urban operations are defined as all military actions that are planned and conducted on terrain where man-made construction affects the tactical options available. Urban terrain is likely to be one of the most significant future areas of operations for American forces throughout the world. Expanding urban development affects military operations as the terrain is altered. The increasing focus on stability and support operations, urban terrorism, and civil disorder emphasizes that combat in urbanized areas is unavoidable. Urban areas are the power centers, the centers of gravity, and thus the future battlefield. References for further study are: FM 90-10-1, FM 90-10, FM 90-1, FM 7-8, 75th Ranger Regiment Advanced MOUT SOP, Ranger Training Circular 350-1-2.

14-2. TYPES OF URBAN OPERATIONS

- (a) High-Intensity Conditions of Urban Combat. Infantry units must be trained to conduct urban combat under high-intensity conditions. High-intensity urban combat requires the employment of combat power of the joint combined arms team. An Infantry unit's mission is normally to recon, isolate, penetrate, systematically clear, defend the urban area, and engaging and defeating the enemy with decisive combat power. Although the changing world situation may have made urban combat under high-intensity conditions less likely for US forces, it represents the high end of the combat spectrum, and units must be trained for it. High-intensity urban operations can be casualty-intensive for both sides. With the integrated firepower of the joint, combined arms team, leaders must make every attempt to limit unnecessary destruction of critical infrastructure and casualties among noncombatants.
- (b) Precision Conditions of Urban Combat. Infantry units train to defeat an enemy that is mixed with non-combatants in precision urban combat. Leaders plan to limit civilian casualties and collateral damage through the establishment of strict rules of engagement (ROE) and the employment of precision weapons and munitions. The ROE provides the focus for the use and restraint of combat power. The ROE may be significantly more restrictive than under high-intensity conditions.
- (c) Surgical Conditions of Urban Combat. Operations conducted under surgical conditions include special-purpose raids, small precision strikes, or small-scale personnel seizure or recovery operations in an urban environment (for example, hostage rescue). Joint special operation forces usually conduct these operations. They may closely resemble US police operations performed by Special Weapons and Tactics (SWAT) teams. They may even involve cooperation between US forces and host nation police. Though regular units may not usually be involved in the actual surgical operation, they may support it by isolating the area, by providing security or crowd control, or providing search and rescue teams.
- (d) Leaders must always be prepared to transition rapidly from one type of urban combat to another, and back. Lessons learned from combat demonstrate that urban operations can rapidly deteriorate with little or no forewarning to combatants. It is quite possible for a force involved in stability and support operations, to suddenly find themselves in a high-intensity combat situation.

14-3. PRINCIPLES OF MOUT.

- (a) Surprise. Strike the enemy at a time or place or in a manner for which he is unprepared.
Key to success: gives the assaulting element the advantage.
- (b) Security. Never permit the enemy to acquire unexpected advantage.
 - (1) Maintain during all phases of the operation.
 - (2) Four-dimensional battlefield (height, depth, width, subterranean).
 - (3) Always maintain 360 degree security (include elevated and subterranean areas).
 - (4) Mission is never complete as long as you remain in the urban environment. The status of actors in the urban environment does not afford the sense of security offered by "open" terrain. The key to survivability is a constant state of situational awareness.
- (c) Simplicity. Prepare clear, uncomplicated plans, and provide subordinates with concise orders to ensure thorough understanding.
 - (1) Always keep plans simple.
 - (2) Ensure everyone understands the mission and the commander's intent.
 - (3) Plan and prepare for the worst.
- (d) Speed. Rate of military action.
 - (1) Acts as security.
 - (2) Move in a careful hurry.
 - (3) Smooth is fast and fast is smooth.
 - (4) Never move faster than you can accurately engage targets.
 - (5) Exercise tactical patience.
- (e) Violence of Action. Eliminate the enemy with sudden, explosive force.
 - (1) Combined with speed gives surprise.
 - (2) Prevents enemy reaction.
 - (3) Both physical and mental.

14-4. METT-TC CONSIDERATIONS. To effectively plan combat operations in urban environments, leaders must utilize Troop Leading Procedures and conduct a thorough analysis utilizing METT-TC factors. The following lists specific planning guidance that must be incorporated when planning for urban operations. For more specifics on mission planning, refer to Chapter 2, Ranger Handbook.

- a. Mission: Know correct Task Organization to accomplish the mission (Offense, Defense, or Stability and Support Operations).
- b. Enemy.
 - (1) Disposition. Analyze the arrayal of enemy forces in and around your objective, known and suspected. Example: Known or suspected locations of minefields, obstacles, and strong points.
 - (2) Composition and Strength. Analyze the enemy's task organization, troops available, suspected strength, and amount of support from local civilian populace based on intelligence estimates. Is the enemy a conventional or unconventional force?
 - (3) Morale. Analyze the enemy's current operational status based on friendly intelligence estimates. Example: Is the enemy well supplied, have they had recent success against friendly forces, taken many casualties, current weather?
 - (4) Capabilities. Determine what the enemy can employ against your forces. Example: Enemy's weapons, artillery assets, engineer assets, air defense assets, NBC threats, thermal/NVG capabilities, close air support, armor threat, etc.
 - (5) Probable Course(s) of Action. Based on friendly intelligence estimates, determine how the enemy will fight within his area of operation (in and around your area of operation).
- c. Terrain.

- (1) Leaders conduct a detailed terrain analysis of each urban setting, considering the types of built-up areas and composition of existing structures
- (2) Utilize OCOKA when analyzing terrain, in and around the area of operation.
 - (a) Observation and Fields of Fire: Always be prepared to conduct urban operations under limited visibility conditions. This includes the effects of reduced illumination, as well as natural and manmade obscuration. Leaders should ensure that soldiers are equipped with adequate resources, which allow them to successfully operate in the urban environment under these types of conditions.
 - (b) Cover and Concealment: Leaders must perform a thorough analysis of peripheral as well as intra-urban areas. Leaders should identify routes to objectives, which afford assault forces with the best possible cover and concealment. Additionally, leaders should take advantage of limited visibility conditions, which would allow for forces to move undetected to their final assault / breaching positions. When in the final assault position, forces should move as rapidly as tactically possible to access structures, which afford additional cover and concealment. Leaders must learn to properly employ obscurants and exercise “tactical patience” to fully take advantage of these effects. Finally, all members of the urban force must practice noise and light discipline. Soldiers must avoid unnecessary voice communications, learn the proper use of white light, and limit contact with surfaces that may alert the enemy of their presence.
 - (c) Obstacles: There are many manmade and natural obstacles on the periphery, as well as within the urban environment. Leaders should conduct a detailed reconnaissance of routes and objectives (this must include subterranean complexes), taking into consideration route adjustments and special equipment needs.
 - (d) Key Terrain: Analyze which buildings, intersections, bridges, LZ/PZ, airports, and elevated areas that provide a tactical advantage to you or the enemy. Additionally, the leader must identify critical infrastructure within his area of operations, which would provide the enemy with a tactical advantage on the battlefield. These may include, but are not limited to, communication centers, medical facilities, governmental facilities, and facilities that are of psychological significance.
 - (e) Avenues of Approach: Consider roads, intersections, inland waterways, and subterranean constructions (subways, sewers, and basements). Leaders should classify areas as go, slow go, or no-go based on the navigability of the approach.

NOTE: Military maps may not provide enough detail for urban terrain analysis or reflect the underground sewer systems, subways, water systems, or mass transit routes.

- (d) Troops: Analyze your forces utilizing their disposition, composition, strength, morale, capabilities, etc. Leaders must also consider the type and size of the objective to plan effective use of troops available.
- (e) Time: Operations in an urban environment have a slower pace and tempo. Leaders must consider the amount of time required to secure, clear, or seize the urban objective and stress and fatigue soldiers will encounter. Additional time must also be allowed for area analysis efforts, these may include, but are not limited to:
 - Maps and urban plans Recon and analysis
 - Hydrological data analysis
 - Line-of-sight surveys
 - Long Range Surveillance and Scout reconnaissance

Similar to the conduct of other military operations, leaders need to designate time for rehearsals. Urban operations require a variety of individual, collective, and special tasks, which are not associated with operations on less complex terrain. These tasks require additional rehearsal time for clearing, breaching, obstacle reduction, casualty evacuation, and support teams. Additionally, rehearsal time must be identified for rehearsals with combined arms elements. These may include, but are not limited to:

- Artillery
- Armor
- Aviation
- Armor
- Engineers

- (f) Civilians: Authorities such as the National Command will establish the Rules of Engagement. Commanders at all levels, may provide further guidance regarding civilians occupying the area of operations (AO). Leaders must daily reiterate the ROE to subordinates, and immediately inform them of any changes to the ROE. Rangers must have the discipline to identify the enemy from noncombatants and ensure civilians understand and follow all directed commands.

NOTE: Civilians may not speak English, may be hiding (especially small children), or dazed from a breach. Civilians must not be given the means to resist. Rehearse how clearing/search teams will react to these variables. Never compromise the safety of your Rangers.

14-5. CLOSE QUARTERS COMBAT (CQC).

- a. Due to the very nature of a CQC encounter, engagements will be very close (within 10 meters) and very fast (targets exposed for only a few seconds). Most close quarters engagements are won by who hits first and puts the enemy down. It is more important to knock a man down as soon as possible than it is to kill him. In order to win a close quarters engagement, Rangers must make quick, accurate shots by mere reflex. This is accomplished by reflexive fire training. Remember, no matter how proficient you are, always fire until the enemy goes down. All reflexive fire training is conducted with the eyes open.

Note: Research has determined, that on average, only three individuals out of ten actually fire their weapons when confronted by an enemy during room clearing operations. Close quarters combat success for the Ranger begins with the Ranger being psychologically prepared for the close quarters battle. The foundation for this preparedness begins with the Ranger's proficiency in basic rifle marksmanship. Survival in the urban environment does not depend on advanced skills and technologies. Rangers must be proficient in the basics.

- b. Stance. Feet are shoulder width apart, toes pointed straight to the front (direction of movement). The firing side foot is slightly staggered to the rear of the non-firing foot. Knees are slightly bent and the upper body leans slightly forward. Shoulders are not rolled or slouched. Weapon is held with the butt stock in the pocket of the shoulder. The firing side elbow is kept in against the body. The stance should be modified to ensure the Ranger maintains a comfortable boxer stance.

- (1) Low Carry Technique. The butt stock of the weapon is placed in the pocket of the shoulder. The barrel is pointed down so the front sight post and day optic is just out of the field of vision. The head is always up identifying targets. This technique is safest and is recommended for use by the clearing team once inside the room.
- (2) High Carry Technique. The butt stock of the weapon is held in the armpit. The barrel is pointed slightly up with the front sight post in the peripheral vision of the individual. Push out on the pistol grip and thrust the weapon forward and pull straight back into the pocket of the shoulder to assume the proper firing position. This technique is best suited for the line-up outside the door. Exercise caution with this technique always maintaining situational awareness, particularly in a multi-floored building.

NOTE: Muzzle awareness is critical to the successful execution of close quarter's operations. Rangers must never point their weapons or cross the bodies of their fellow Rangers at any time. Additionally Rangers should always avoid exposing the muzzle of their weapons around corners; this is referred to as "flagging".

- c. Malfunction. If a Ranger has a malfunction with his weapon during any CQC training, he will take a knee to conduct immediate action. Once the malfunction is cleared there is no need to immediately stand up to engage targets. Rangers can save precious seconds by continuing to engage from one knee. Whenever other members of the team see a Ranger down, they must automatically clear his sector of fire. Before rising to his feet, the Ranger warns his team members of his movement and only rises after they acknowledge him. If a malfunction occurs once committed to a doorway, the Ranger must enter the room far enough to allow those following him to enter and move away from the door. This drill must be continually practiced until it is second nature.
- d. Approaching the Building or Breach Point. One of the trademarks of ranger operations is the use of limited visibility conditions. Whenever possible, breaching and entry operations should be executed during hours and conditions of limited visibility. Rangers should always take advantage of all available cover and concealment when approaching breach and entry points. When natural or manmade cover and concealment is not available, Rangers should employ obscurants to conceal their approach. There are times when Rangers will want to employ obscurants to enhance existing cover and concealment. Members of the breach / entry team should be numbered for identification, communication, and control purposes.
 - (1) The number one man should always be the most experienced / mature member of the team, next to the team leader. The number one man is responsible for frontal and entry / breach point security.
 - (2) The number two man is directly behind the number one man in the order of movement and is normally responsible as an entry or clearing team member.
 - (3) The number three man is normally the team leader and is responsible for initiating all voice and physical commands. The team leader must exercise situational awareness at all time with respect to the task, friendly force, and enemy activity. One technique would be to use the number three man as the breach man. The breach man may employ one of the three breaching techniques, which are:
 - Ballistic (Shotgun, Rifle, etc...)
 - Mechanical (Hooligan Tool, Prybar, Sledge Hammer, etc...)
 - Explosive (Door Knob Charge, Chain-link Ladder Charge, E-Silhouette Charge, etc...)
 - (4) The number four man is normally the automatic rifleman and is usually equipped with an M249 Squad Automatic Weapon. He is responsible for rear security and is normally

the last man into the room and can respond with a tremendous amount of firepower, should the team leader require him to do so. Another technique is to utilize the number four man as the breach man.

- e. **Actions Outside the Point of Entry.** Entry point position and individual weapon positions are important. The clearing team members should stand as close to the entry point as possible, ready to enter. Weapons are oriented in such a manner that the team provides itself with 360 degree security at all times. Team members must signal to one another that they are ready at the point of entry. This is best accomplished by sending up a "squeeze". If a tap method is used, an inadvertent bump may be misunderstood as a tap.
- f. **Actions Upon Entry.** Non-lethal grenades can be used prior to entering any type of structure. If an enemy force is known to occupy a room, fragmentation grenades can be used if the walls and foundations are suitable. A fragmentation grenade has tremendous overpressure and missile hazard and may severely damage lightly constructed buildings. Team members must exercise fire control and discriminate between enemy and noncombatant targets. Rooms are never entered with less than two men. The #1 or #2 man may shout "Short Room" if the room is too small for the whole team.
- g. **Clearing the Entry Point.** Team members must clear the point of entry to eliminate the enemy threat and allow remaining team members to move into the room. An entry point acts as a fatal funnel since it is the focal point for enemy weapon acquisition.
- h. **Clear the Room.** Team members move away from the entry point and assume positions within the room where the threat can be best eliminated. Any threat is eliminated or neutralized as individual team members move to their points of domination, not once you get there. Never move faster than you can accurately engage targets.
- (i) **Four-Man Stack: example (Figures 14-5-1 through 14-5-9).** To be effective, team members are numbered #1 through #4. The #1 man must act the quickest and make immediate decisions. The #1 Man enters the room eliminating the immediate threat and has the option of moving left or right, moving to one of two corners. His ability to move to a corner will be determined by obstacles, size of the room, and the enemy situation. As he enters through the entry point, he can visually check one of the corners and determine if there is an immediate threat. If there is a threat he moves to the threat, eliminating it as he moves to the corner. If no immediate threat exists in the first corner, he should consider "button-hooking" to the other corner to avoid being shot in the back. The #2 Man moves along the wall in the opposite direction of the #1 Man. Both the #1 and #2 Man clear the breach point, their immediate threat areas all while moving to their dominating corner in the room. The #3 Man goes the opposite direction of the #2 Man inside the room and at least one meter from the door. The #4 Man moves in the opposite direction of the #3 Man. All team members stop when they have cleared the door and have reached their point of domination within the room. NOTE: All team members must be prepared to perform the duties of all positions (#1-4) after initial room is cleared. All team members must be cross trained in each position.

NOTE: Room clearing procedures are techniques or SOPs and not doctrine. Rangers are encouraged to establish SOPs when they get to their units. However, SOPs for the urban environment need to be well thought out, and may not fit all conditions that the force may encounter. For example, ROE will impact the munitions employed and techniques utilized during urban clearing operations.

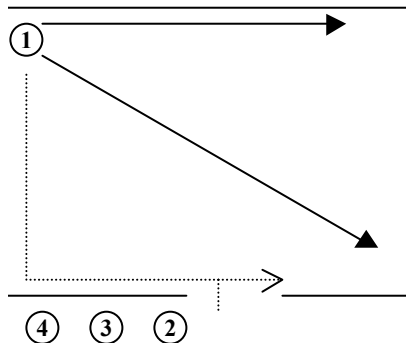
- (j) Sectors of Fire. The number one man enters and goes left or right based on immediate threat location. The number two man goes the opposite direction of the number one man and engages all targets of opportunity in his sector. These actions normally result in the room being “divided” in half and 100% of the room being scanned except for the upper levels. The number three man enters, clears the fatal funnel to the left or the right, and primarily scans overhead areas. The number four man enters and goes opposite the number three man and continues to provide rear security as the situation dictates.
- (k) Locking Down the Room.
- (1) Control the situation within the room.
 - (2) Use clear, concise arm and hand signals. Voice commands should be kept to a minimum to reduce the amount of confusion and to prevent the enemy (which may be in the next room) from discerning what is going on. This enhances the opportunity for surprise and allows the assault force the opportunity to detect any approaching force.
 - (3) Physically and psychologically dominate.
 - (4) Establish security / report status.
 - (5) cursory search of the room to include the ceiling (3 Dimensional Fight).
 - (6) Identify the dead using reflexive response techniques (Eye thump method).
 - (7) Search the room for PIR, precious cargo as per the mission and time available.
 - (8) Evacuate personnel.
 - (9) Mark room clear (chemlights, engineer tape, chalk, paint, VS-17 panels, etc.).

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SINGLE TEAM CENTER-FED ROOM

Figures 14-5-1a - d

Figure 14-5-1a, #1 Man

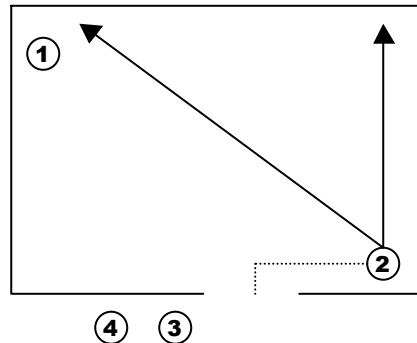


1: Visually clear immediate threat, retreat, buttonhook.

2: Visually clear far corner before going at corner.

The #1 man makes a decision on which to go based on enemy, obstacles, and his own.

Figure 14-5-1b, #2 Man

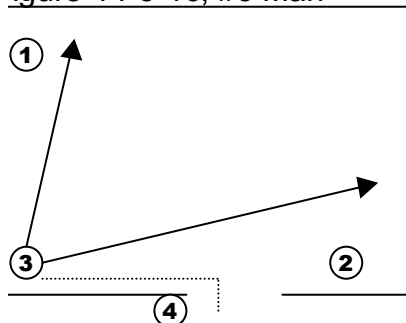


STEP 1: #2 man goes opposite #1 man.

STEP 2: Visually clear near corner, clearing to the left. Clear far corner before arriving at near corner. (Point of Domination)

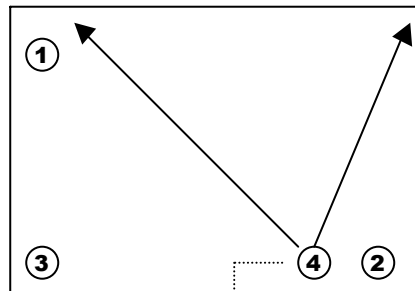
STEP 3: Move to point of domination, clearing to the left. Sector is one meter off the #1 man.

Figure 14-5-1c, #3 Man



1: #3 man clears the immediate threat, opposite #2 man, clears doorway, and moves to his point of domination.

Figure 14-5-1d, #4 Man

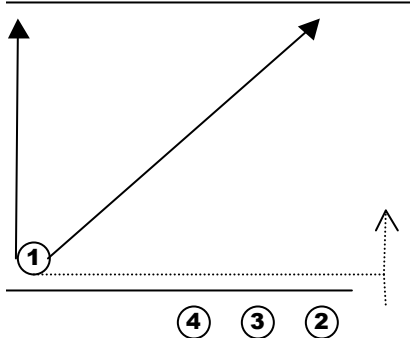


STEP 1: #4 man clears immediate threat, moves opposite #3 man, stops at his point of Domination.

SINGLE TEAM CORNER-FED ROOM

Figures 14-5-2a-d

Figure 14-5-2a, #1 Man

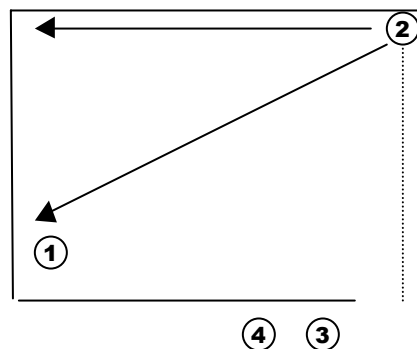


1: Visually clear immediate threat right corner, no threat, buttonhook.

Visually clear left corner.

clear far corner before arriving at corner. The #1 man makes a decision on which to go based on enemy, obstacles, and his own.

Figure 14-5-2b, #2 Man

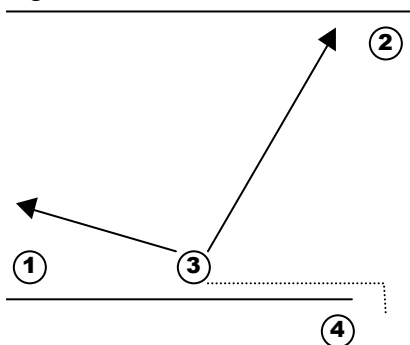


STEP 1: #2 man goes opposite #1 man.

STEP 2: Visually clears near corner, clearing to the left. Clears far corner before arriving at near corner. (Point of Domination)

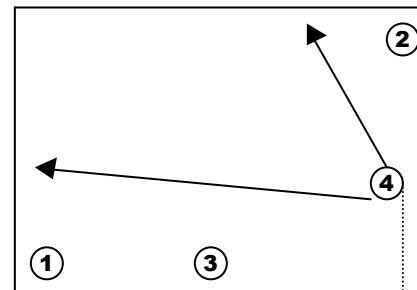
STEP 3: Move to Point of Domination, clearing to the left. Sector is one meter off the #1 man.

Figure 14-5-2c, #3 Man



1: #3 man clears the immediate threat, moves opposite #2 man, clears doorway, and stops at his point of domination.

Figure 14-5-2d, #4 Man



STEP 1: #4 man clears immediate threat, moves opposite #3 man, stops at his point of Domination.

MULTIPLE TEAM / MULTIPLE ROOM

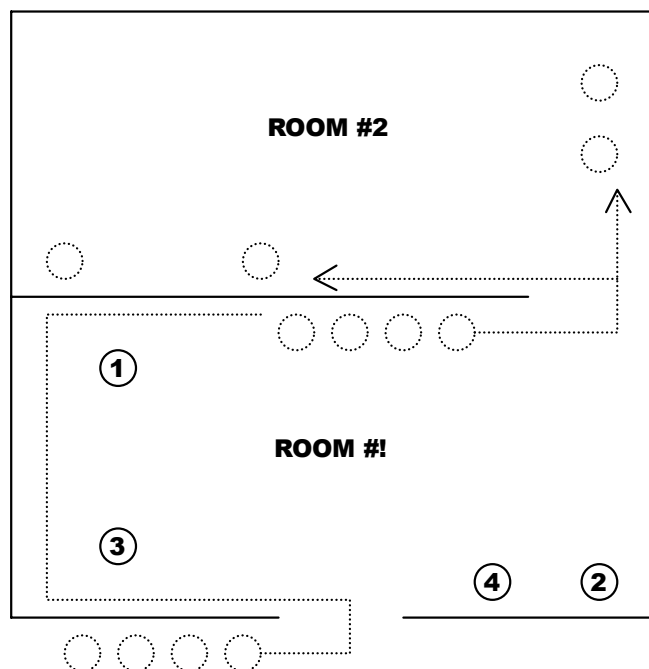


Figure 14-5-3

STEP 1: First team enters and clears Room #1.

STEP 2: Squad Leader determines direction the second clearing team must enter Room #1 based on location of Room #2 entry point.

STEP 3: First team collapses inward to allow the second team to move into the room.

STEP 4: Second team “stacks left” and prepares to enter Room #2.

OPEN STAIRWELL

Open Stairwell: Gap between flights of stairs that allows a person to visibly look up / down between flights of stairs. Figure 14-5-4 depicts an open stairwell.

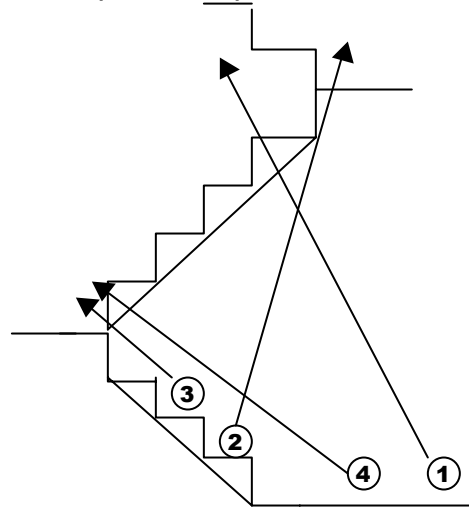
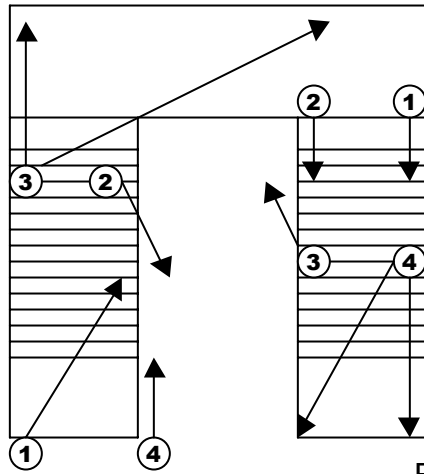


Figure 14-5-4

STEP 1: The #1 man pulls security on the highest point he can see / engage.

STEP 2: The #2 man moves up the stairs on the inside with the #3 man to a point that he can see / engage the next landing, where he turns around and continues to move up to the next landing.

STEP 3: The #3 man moves up the stairs with the #2 man on the outside and engages the threat on the immediate landing.

STEP 4: The #4 man moves up the stairs with the #1 man, on the squeeze, the #2 man turns around to engage the next landing.

STEP 5: The flow continues with the #2 man picking up the sector of the #1 man had. The #3 man picks up where the #2 man was. The #4 man picks up where the #3 man was. The #1 man picks up where the #4 man was.

NOTE: Most stairwells will require a second team.

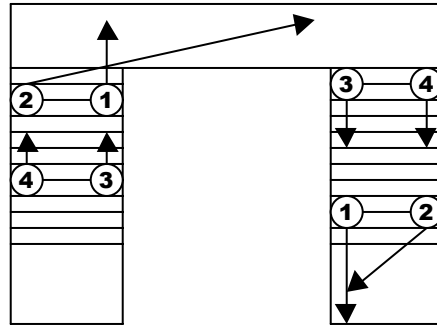


Figure 14-5-5

The #1 man checks high to insure there is no opening on the landing or between the stairs.

The #2 man pulls long security to the next bend or landing.

The #1 man or #3 man with the #2 man move up the steps. As they approach the corner they will tap the #1 man on the shoulder signaling that he is with him.

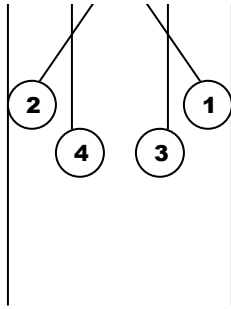
Keying off the #1 man's movement, they will both simultaneously break around the corner.

If no fire is received #2 man will move to the opposite wall and continue to move up until they reach objective.

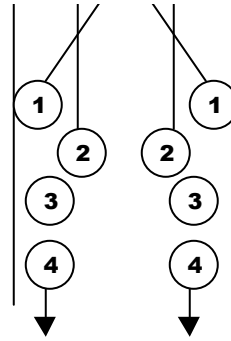
The #3 and #4 men will continue to move 3 to 4 steps behind.

Do not get locked into security position. (e.g. Inside stairwell)

Do not get spread out thin or separated by more than one floor of stairs.



Single Team Hallway Movement



Multiple Team Hallway Movement

Figure 14-5-6



STEP 1

STEP 2

Figure 14-5-7

STEP 1: Each #1 man goes to a knee covering his sector.

STEP 2: On a predetermined signal each two man team will break the corner picking up their sectors of fire.

NOTE: This technique can incorporate the Dynamic Corner Clear.



Figure 14-5-8

- P 1:** The #1 and #2 man as they approach the corner they have to clear do not slow down.
- P 2:** The #2 man will tap the #1 man on the shoulder about 2 - 3 meters away from the corner letting the #1 man know the #2 man is with him.
- P 3:** Keying off the #1 man's movement they both break the corner simultaneously.
- P 4:** The #1 man goes to low to a knee, the #2 man stays high.
- P 5:** If the Rangers are not receiving fire the #2 man rabbits / moves to the far side.
- P 5:** The #1 and #2 man take up sectors of fire.
- P 6:** The #3 and #4 man take long security in the direction of movement.

y II entering more hallway.

e #1 and #2 man will provide security where needed unless they are needed in the room.

nore hallway the #1 man will become center ling security and the #2 man will become rear or floater.

URBAN ASSAULT BREACHING

14-6. GENERAL. Understanding how to employ and incorporate breaching as part of a leader's planning process is an important part of urban operations. It is imperative that elements of your patrol be skilled in the art of breaching. Whether infiltrating or exfiltrating from an objective, leaders must plan for either option. One constant disadvantage with the employment of explosives is that placement requires soldiers to expose themselves to possible enemy fires. Breach teams need to be supported by fires or obscurants and breaching operations should be performed during hours of limited visibility whenever possible.

14-7. CLASSIFICATIONS OF BREACHING

- a. Mechanical. Mechanical Breaching should be an important part of a leader's breaching training program because it is almost always an option. Mechanical Breaching is best described as gaining access by the use of tools or saws. Although most tools and saws used are recognizable and self explanatory to the individual Ranger, one must practice on various techniques to increase speed and effectiveness. This reduces fatigue and expedites the actual assault.
 - (1) Mechanical Breaching Tools.
 - (a) Hooligan Tools (Doors/windows of all types).
 - (b) Sledge Hammer (Heavy Duty Doors, Locks, and Window Frames).
 - (c) Picket Pounder (Doors of all types, Light Walls).
 - (d) Bolt Cutters (Chain Link Fence, Locks, and Wire Obstacles).
 - (e) Pick Ax (Lightweight Doors and Locks).
 - (f) Saws (Fences, Light Doors, Locks).
- b. Ballistic. Ballistic Breaching is defined as a forced entry or exit by the use of weapons. Whether using shotguns, M16A2/M4, M249 SAW, specific considerations must be addressed.

- (1) Ballistic Breaching Considerations.
 - (a) Type of round and ricochet factor.
 - (b) Composition of the breaching point.
 - (c) Composition of the floor beyond the door.
 - (d) Personnel behind the door (Friendly/Enemy).
 - (e) Always shoot at a 45 degree angle.

- c. Explosive. Explosive Breaching is the most viable because it is the most effective. When employing explosives during breaching operations, leaders must consider three major factors.
 - (1) Overpressure. The amount of PSI released from the concussion of the blast.
 - (2) Missile Hazard. Fragmentation or projectiles sent at tremendous speed from the explosion area. This occurs from either the charge or target being breached.
 - (3) Minimum safe distance requirements (MSDs). Use of explosives in the urban environment must consider the presence of noncombatants and friendly forces. Additionally, the are many hazardous materials located in the urban environment, these may include chemicals as well as construction materials. There is always a risk of secondary explosions and fires, when employing explosive breaching techniques.
 - (4) Charges. Various charges can be utilized for explosive breaching. Leaders must conduct extensive training on the use of the charges to get proper target feedback. Listed are examples of charges used for explosive breaching.
 - (a) Water Impulse (Steel/Wood Doors).
 - (b) Flexible Linear (Wood Doors).
 - (c) Ranger Wall Breach (Masonry/Brick Walls)
 - (d) Chain Link Ladder (Chain Link Fence)
 - (e) E-Type Silhouette (Wood Doors)
 - (f) Brashier Breacher (Concertina Wire)

ge	Obstacle	Explosives Needed	Advantages	Disadvantages
le r ge	Wooden Doors, cuts door lengthwise	Detonation Cord	- Small, lightweight - Quick to place on target - Several can be carried by one man - Will defeat most doors regardless of locking system	
ge	Obstacle	Explosives Needed	Advantages	Disadvantages
i-link r e	Rapidly creates hole in chain-link fence large enough to run	C-4; Detaprime Booster; Detonation Cord	- Quick - Effective	

	through			
Breach je	Breaches through wood, Masonry, or Brick Walls	C-4; Detaprime Booster; Detonation Cord	<ul style="list-style-type: none"> - Easy and quick to make - Quick to place on target 	<ul style="list-style-type: none"> - Will cause shrapnel - Does not destroy rebar - High over-pressure
ier h je	Creates hole in triple-standard concertina wire and chain-link fence large enough to drive a vehicle through	C-4; Detaprime Booster; Detonation Cord	<ul style="list-style-type: none"> - Easy to make - Easy to emplace 	<ul style="list-style-type: none"> - Only 50% chance of completely cutting reinforced triple strand wire
r se je	Opens light metal doors and wooden doors	Detaprime Booster; Detonation Cord	<ul style="list-style-type: none"> - Easily constructed - Low fragmentation <u>if prop stick is</u> <u>Not used</u> 	<ul style="list-style-type: none"> - Missile hazard if prop stick is used - Attachment method is to be carefully considered - Likely that liquids could spill or leak during transportation