

APPENDIX I
**PLATOON URBAN OPERATIONS KIT AND
 TACTICS, TECHNIQUES, AND PROCEDURES
 FOR MARKING BUILDINGS AND ROOMS**

Urban operations present many unique challenges for the infantry platoon and squad. They face obstacles and hazards not found in any other environment. The infantry platoon/squads are required to breach obstacles, enter and clear buildings, and cross streets and open areas when conducting urban operations. To increase effectiveness of the unit and decrease risk to individuals, the infantry platoon/squad uses special equipment in the urban environment.

I-1. EXAMPLE PLATOON URBAN OPERATIONS KIT

When developing an urban operations kit SOP, brigades and battalions must consider their METL and the unit tactical SOP. Input from platoon and squad leadership is vital when identifying the proper equipment for the urban operations kit. These leaders know best what equipment is needed for closing with and destroying the enemy and facilitating consolidation and reorganization actions. Once this task is accomplished, the commander ensures that the contents of the platoon kit are standardized. This standardization allows the command to develop an effective training program keying on the proper uses, storage, and accountability of all items listed in the urban operations kit.

Breaching Items:

Axes.....	1
Bolt cutters	2
Crowbars	1
Sledgehammers	1
Grappling hooks	2
120' nylon ropes.....	2
12' sling ropes.....	4
Snap links	1 per man
Lineman's pliers w/cutter.....	6
Wire-handling gloves	3 pair
Fireman's tool (hand pick-ax).....	3
Ladders (folding, collapsible, lightweight)	1

Signaling and Marking Items:

Chalk (large, sidewalk)	2 boxes
Spray Paint (assorted colors).....	5 cans
Chemlites (assorted colors).....	3 boxes
IR Chemlites.....	3 boxes
Signaling mirrors (can be used for observing around corners).....	6

Signaling and Marking Items (continued):

Cone flashlights w/extra batteries	12
Flashlights (Magnum and Mini-Mag) w/extra batteries	1 per man
NATO marking squares	200
100mph tape	5 rolls
Masking tape	2 rolls
2 sided tape.....	3 rolls
Engineer tape.....	2 rolls

Other Items:

Urban-specific sand table kit	
Hammers	2
Saws	2
Nails (various sizes)	4,000
Steel wire (16 gauge).....	1,000ft
Hose clamps (6 inch).....	300
Extra batteries (various sizes)	3 additional for every one in use

NOTE: The preceding list of items and quantities is not all inclusive or exclusive to urban operations. It is merely a guide to aid commanders in developing a standard platoon UO kit for their unit.

I-2. INDIVIDUAL PROTECTIVE EQUIPMENT

When planning for urban operations leaders must ensure that each soldier receives the following protective equipment in addition to standard TA-50 or unit issue items.

- Knee pads.
- Elbow pads.
- Eye protection.
- Hearing protection.

I-3. TACTICS, TECHNIQUES, AND PROCEDURES FOR MARKING BUILDINGS AND ROOMS

Units have long identified a need to mark specific buildings and rooms during UO. Sometimes rooms need to be marked as having been cleared, or buildings need to be marked as containing friendly forces. The US Army Infantry School is currently testing a remote marking device that can be used to mark doors from as far away as across a wide street. In the past, units have tried several different field-expedient marking devices; some with more success than others. Chalk has been the most common. It is light and easily obtained but not as visible as other markings. Some of the other techniques have been to use spray paint, and paintball guns.

a. **Spray Paint.** Canned spray paint is easily obtained and comes in a wide assortment of colors including florescent shades that are highly visible in daylight. It cannot be removed once used. Cans of spray paint are bulky and hard to carry with other

combat equipment. Paint is not visible during darkness nor does it show up well through thermal sights.

b. **Paintball Guns.** Commercial paintball guns have been purchased by some units and issued to small unit leaders. Some models can be carried in standard military holsters. They can mark a building or door from about 30 meters. The ammunition and propellant gas is not easily obtainable. The ammunition is fragile and often jams the gun if it gets wet. The available colors are not very bright, and just like spray paint, cannot be seen at night or through thermal sights.

c. **Wolf Tail.** A simple, effective, easy-to-make, lightweight device called a “wolf tail” can be fabricated to mark buildings, doorways, and windows (Figure I-1, page I-4). A unit has changed its tactical TSOP to require that each Infantryman carry one of these devices in his BDU cargo pocket. Wolf tails, when used IAW a simple signaling plan understood by all members of the unit, can aid in command and control, reduce the chances of fratricide, and speed up casualty collection during urban combat.

(1) The wolf tail marking device is simple to make and versatile. It can be used together with the NATO marking scheme. Rolled up, it makes a small, easily accessible package that can be carried in the cargo pocket of the BDUs. It can be recovered easily and used again if the situation changes. All its components can be easily obtained through unit supply. It combines a variety of visual signals (colored strapping and one or more chemlites of varying colors) with a distinctive heat signature that is easily identified through a thermal weapon sight. An infrared chemlite can be used either as a substitute for the colored chemlite(s) or in addition to them.

(2) Constructing the wolf tail marking device requires the following material:

- A 2-foot length of nylon strap (the type used for cargo tie-downs) (engineer tape can be substituted).
- About 5 feet of 550 cord.
- A small weight such as a bolt or similar object.
- Duct tape.
- Chemlites (colored and or IR).
- Two 9-volt batteries.

(3) Assemble the items by tying or taping the cord to the small weight. Attach the other end of the cord to the nylon strapping, securing it with duct tape. Attach the 9-volt batteries in pairs to the lower end of the strapping with several wraps of duct tape, making sure that the negative terminals are opposite the positive, but not actually touching. Use more duct tape to attach the chemlites, approximately 2 inches above the batteries, to the strapping.

(4) When you want to mark your position, push the batteries together firmly until the male and female plugs lock. This shorts out the battery, causing it to heat up rapidly. The hot battery is easily identified through the thermal sights of tanks or BFVs. The batteries will remain visible for about 45 minutes. Activating the chemlites provides an easily identified light source visible to the naked eye. You can use infrared chemlites if you want them to be seen through night vision devices but not with the naked eye.

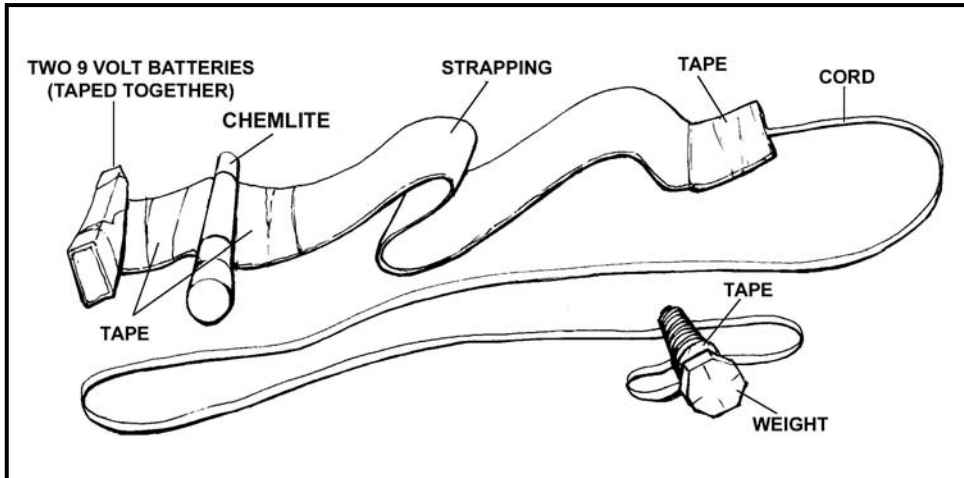


Figure I-1. Example of a wolf tail marking device.

NOTE: An option is to place chemlites and batteries at both ends of the wolf tail to mark the inside and outside of a building or room.

(5) Use the cord and the small weight to hold the wolf tail in position by tying or draping it out a window or hanging it on a door, wherever it is best seen by other friendly troops. Squads or platoons can vary the numbers and colors of chemlites, or use multiple battery sets to identify precisely what unit is in which building.

(6) Medics and combat lifesavers can carry a standardized variation that can be used to clearly identify a building as containing wounded personnel needing evacuation. This could be a white strap with multiple red chemlites, or any other easily identified combination.

I-4. NATO STANDARD MARKING SOP

The North Atlantic Treaty Organization (NATO) has developed a standard marking SOP for use during urban combat. It uses a combination of colors, shapes, and symbols. These markings can be fabricated from any material available. (Figure I-2 shows examples.)

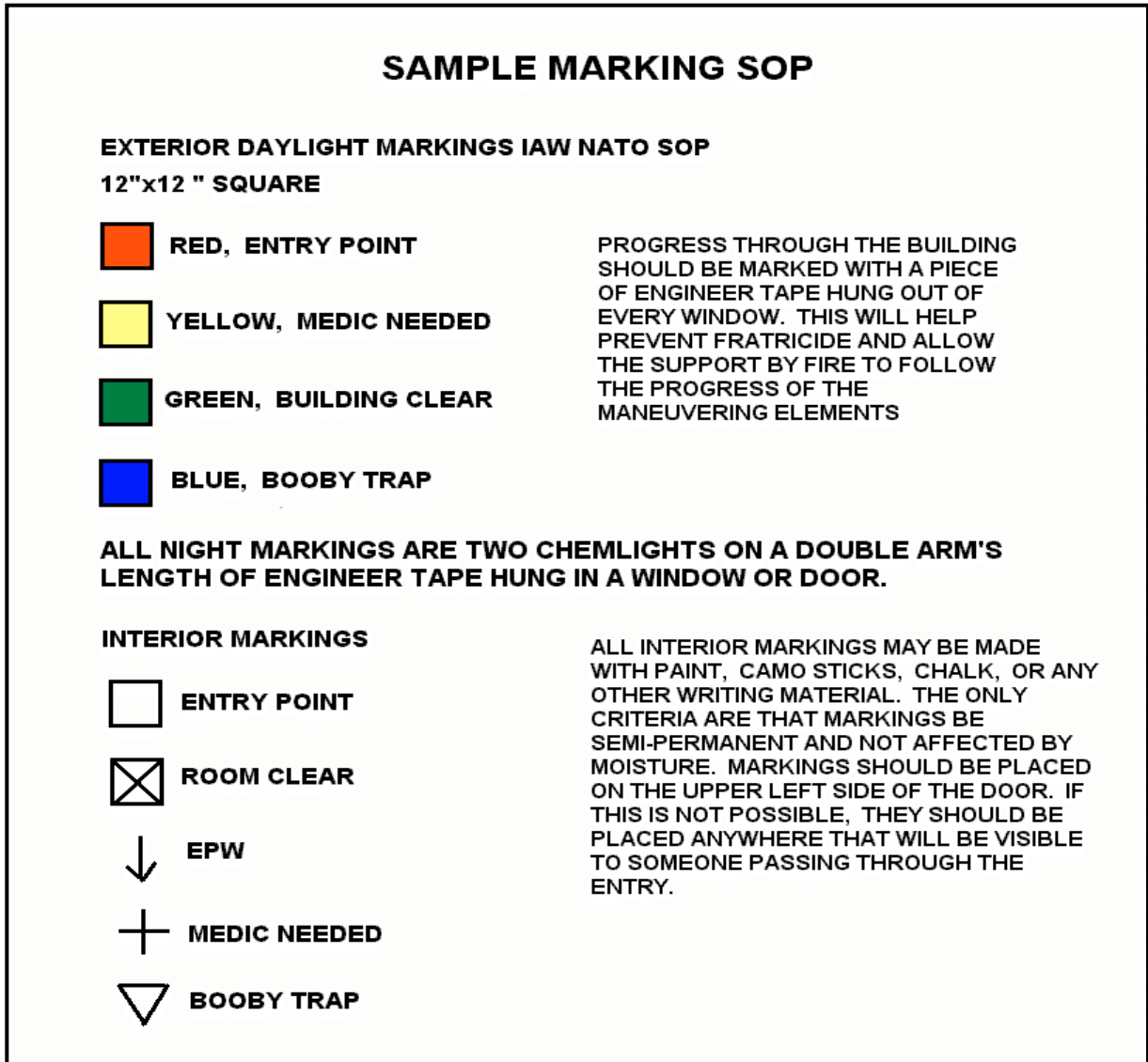


Figure I-2. Sample marking SOP.