

## APPENDIX C

## HAND GRENADE SAFETY CONSIDERATIONS

This appendix lists precautions and other considerations to be followed by hand grenade users. It should be used with Appendix B, Live Hand Grenade Range Operations Checklist, to educate leaders to safely conduct hand grenade training.

## C-1. GENERAL PRECAUTIONS

Observe general precautions applicable to the use of any ammunition. More specific instructions to grenade users include --

- a. Do not open grenade containers or remove protective devices until just before use.
- b. Never make unauthorized modifications to hand grenades.
- c. Do not remove the safety clip or the safety pin until the grenade is to be thrown.

(1) A safety clip can be removed and reattached to a hand grenade if the safety pin is still in place.

(2) Never attempt to reinsert a safety pin. Once the safety pin has been pulled, the grenade must be thrown.

## C-2. TRAINING PRECAUTIONS

Treat any thrown grenade that fails to detonate as a dud, regardless of safety pin, safety clip, or safety lever status.

- a. Know a grenade's status. It may be --
  - o Safe -- a grenade with all safety devices intact.
  - o Live -- a thrown grenade from the instant it is released until the expected fuze time has elapsed.
  - o A dud -- any thrown grenade that failed to detonate after the expected fuze time has elapsed.
- b. During training, the pit NCO determines a dropped grenade's status (safe/live/dud).

c. Throwers must consider the flight of the grenade to make sure no obstacle will alter the flight of the grenade or cause it to bounce back toward them.

d. Make sure that the impact area is level and free of debris before throwing the casualty-producing hand grenade in training.

e. Do not handle, approach, recover, or otherwise tamper with dud live grenades. These will be taken care of by explosive ordnance disposal personnel.

f. Observe caution when using hand grenades with igniting type fuzes (M14 TH3, AN-M18, M7A3, and AN-M8). These grenades ignite with a flash and should be thrown at least 10 meters from all personnel to avoid hazardous conditions.

### C-3. DUDS

Duds must be regarded as dangerous. The following procedures must be followed if a grenade does not detonate.

a. M69 Practice Grenade. Wait 5 minutes before defuzing. Keep the bottom of the grenade oriented in a safe area. Place the dud fuze in a sand-filled container and return it to issuing facility.

b. Fragmentation Grenade. The thrower and supervisor wait in the throwing pit for 5 minutes before returning to a covered area. Notify EOD immediately. Do not throw any hand grenades into the area of the dud until it has been neutralized. If range facilities provide, continue training on adjacent impact areas separated by berms.

### C-4. DROPPED LIVE HAND GRENADES

In the event a casualty-producing grenade is dropped accidentally after the safety pin has been removed, the throwing pit safety NCO is responsible for reacting accordingly. He is responsible for the safety of the thrower, and he decides what actions are most appropriate. His actions are dependent upon many factors, such as the safety design of the throwing pit, the location of the dropped grenade, the location of the thrower, and possibly his ability to physically move the thrower. All of these factors need to be considered before the safety pin is pulled.

a. Throwing Pit With Knee Wall. It is recommended that all throwing pits for live grenade training have knee walls (Figure C-1). Knee walls provide the quickest and safest means of reacting to a dropped grenade. In most

instances, the throwing pit safety NCO would react to a dropped live grenade by yelling GRENADE (to alert all other personnel in the area) and by physically pushing the thrower over the knee wall, falling on top of him. If the hand grenade were dropped over the knee wall, the throwing pit safety NCO would yell GRENADE and force the thrower to the ground inside the throwing pit.

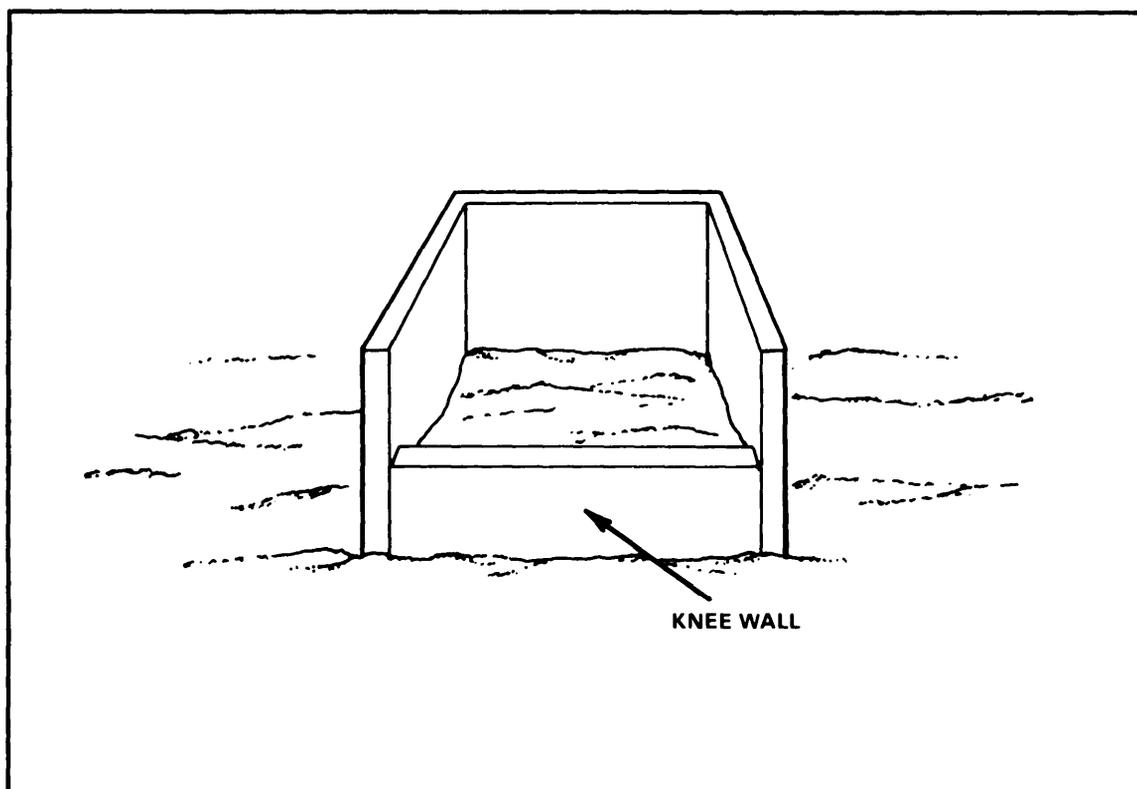


Figure C-1. Throwing pit with knee wall.

b. Throwing Pit Without Knee Wall. Throwing pits that do not have knee walls must have safety pits attached to both sides (Figure C-2). In most instances, the throwing pit safety NCO would react to a dropped live grenade by yelling GRENADE (to alert other personnel in the area) and by physically moving the thrower out of the throwing pit and into a safety pit. If the hand grenade were dropped to the rear of the throwing pit, the throwing pit safety NCO would yell GRENADE, and force the thrower over the front of the throwing pit. He would follow him over. Any attempt by the throwing pit safety NCO to throw the dropped grenade out of the throwing pit is discouraged. The safety NCO's first responsibility is the thrower's safety. His immediate actions must be to remove the thrower from the danger area.

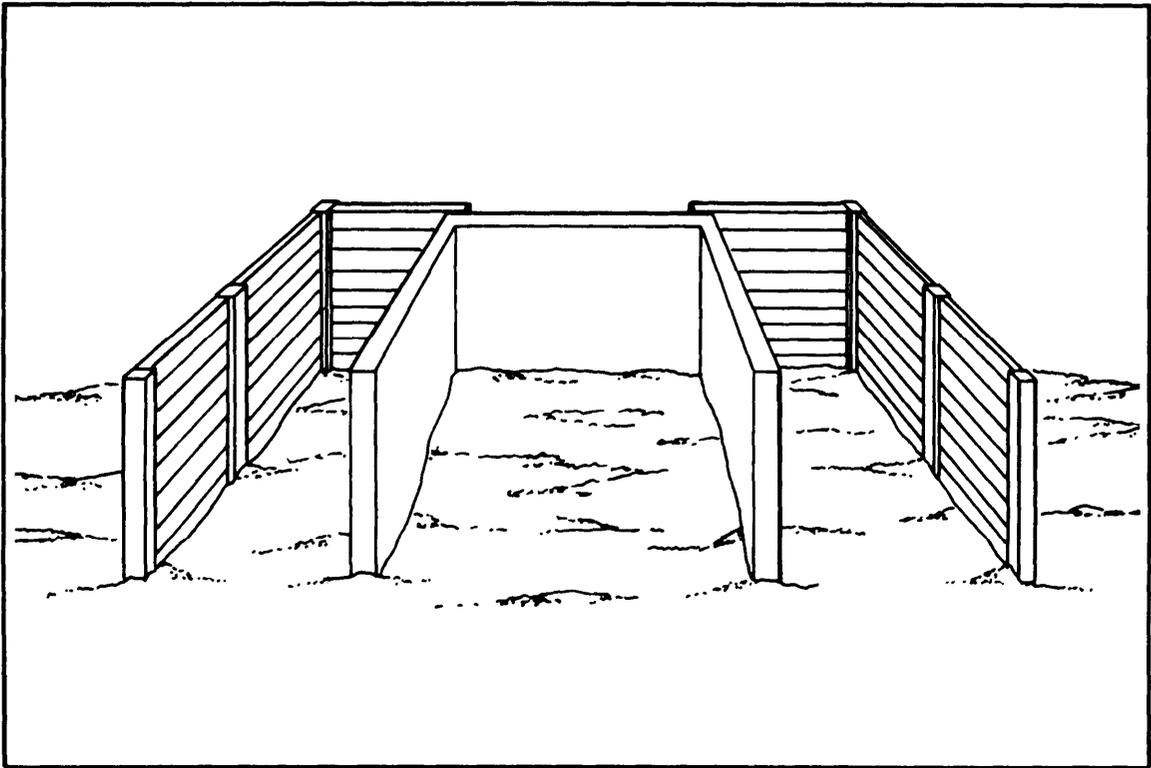


Figure C-2. Throwing pit with safety pits.

c. Sumps. Grenades will not be kicked or thrown into sumps. Soldiers will move from the danger area and drop to the prone position with helmets facing the direction of the grenade. This minimizes the soldier's exposure and maximizes the protection of the helmet.

#### C-5. GRIP

Hold the safety lever firmly. An insufficient grip on the safety lever could result in the striker rotating and striking the primer that ignites the delay element. This can occur on most grenades without the safety lever being detached from the grenade.

#### C-6. HELICOPTERS

Do not throw fragmentation or white phosphorous grenades from low-flying or hovering helicopters. The fragments present a hazard to the aircraft and its passengers. The burst of white phosphorous chemical may be brought into the helicopter by the rotor wash, creating significant safety hazards. As a general rule, throwing hand grenades from medium- or high-level flying helicopters should be limited to mission-critical situations.

## C-7. AIRBORNE

Do not attach hand grenades on ammunition pouches during airborne operations; carry them in the main body of the rucksack instead. The following are suggested techniques:

- a. Remove grenades from canisters and tape the safety pin and safety lever to the grenade. (Fold back the end of the tape for a quick release.)
- b. Return grenades to the canisters for carrying after opening them to inspect each grenade.