

APPENDIX B

LIVE HAND GRENADE RANGE OPERATIONS CHECKLIST

This appendix is designed to assist leaders in the safe operation of a basic live hand grenade range. As a checklist, it does not provide the answers, it asks the questions for leaders to answer. Modification of the checklist for other types of live hand grenade training (collective training, STX, and so forth) is expected.

SUGGESTED CHECKLIST

I. BECOME AN EXPERT.

A. Review Written Material.

1. Review AR 385-63.
2. Review FM 23-30 and TM 9-1330-200-12 w/ch 1-10.

B. Check Out the Range.

1. Visit range control and read installation range instructions.
2. Recon the range, preferably while in use.

II. DETERMINE REQUIREMENTS.

A. Personnel.

1. OIC.
2. Safety officer.
3. Assistant safety officer.
4. NCOIC .
5. Ammunition NCO.
6. Ammunition personnel.
7. Target detail.
8. Tower operator.
9. Assistant instructors.
10. RATELOs.

11. Guards, as required.
12. Medics, with required medical supplies.
13. Truck driver.

B. Equipment.

1. Equipment for safety personnel and trainees is Kevlar or steel helmet, flak vest, LBE, and ear plugs.
2. Range packet and clearance form.
3. Safety fan and diagram.
4. Appropriate publications pertaining to training that will be conducted (FM 23-30 and TM 9-1330-200-12 w/ch 1-10) .
5. Lesson plans, status reports, and reporting folders.
6. Range flag.
7. Communications.
 - a. Commercial phones.
 - b. Mounted courier.
 - c. FM radios and RC-292, if necessary.
 - d. Field telephones and wire.

NOTE: Two means of communication are required.

8. PA set with backup bullhorns.
9. Marked helmets for control personnel.
10. Ambulance or required dedicated evacuation vehicle; the driver must have knowledge of the route to the hospital.
11. Ear plugs for all personnel; have extras on hand.
12. Water for drinking and cleaning.
13. Qualification scorecards.
14. Tables and chair, if needed.

15. Targets should be required for operation of range. (Bunkers or personnel target 1/4-inch steel E-type silhouette.)

III. OCCUPY THE RANGE.

A. Set Up.

1. Request range control permission to occupy the range.
2. Establish good communications.
3. Have the following designated areas prepared:
 - a. Parking.
 - b. Ammunition point.
 - c. Medical station.
 - d. Water point.
 - e. Mess.
 - f. Helipad.

B. Inspection.

1. Inspect range for operational condition:
 - a. Make sure the impact area is raked and clear of debris.
 - b. Check all throwing pits for sharp edges or unlevel throwing surfaces.
 - c. Check to see if the knee walls meet standards.
2. Raise the flag when occupying or firing, according to local SOP.
3. Ensure range personnel are in proper uniform and the equipment is in position.

C. Preparation.

1. Conduct safety briefing to include admin personnel on range.
2. Organize personnel into throwing orders.

3. Receive permission to commence firing from range control.

IV. CONDUCT PRE-THROW (TRAINING).

A. Teach the Soldiers.

1. To attach grenades to ammunition pouches.
2. The proper grip.
3. The proper throwing techniques.
4. The throwing commands.

B. Execute Practice Throws (10 or more as required).

V. INSPECT GRENADES.

A. Open Canister and Visually Inspect.

1. If grenade is packed upside down, turn in grenade. (See page 2-2, TM 9-1330-200-12.)
2. If safety pin or safety clip is missing, turn in grenade.

B. Remove Grenade from Canister and Inspect.

1. If grenade body is cracked, turn in grenade.
2. If fuze lugs are broken, turn in grenade.
3. If safety lever is bent or broken, turn in grenade.
4. The safety pin must have either a diamond crimp or a 45-degree spread; if not, turn in grenade. (See page 3-5, TM 9-1330-200-12.)
5. If pull ring is cracked, turn in grenade.
6. If fuze is loose, turn in grenade.

VI. ISSUE GRENADES.

NOTE: Issue grenades to soldiers and secure them to ammo pouches under supervision of safety NCO. The safety NCO at the live grenade issue point will physically inspect each soldier as the live grenades are being attached.

A. Old-Type Ammo Pouches.

1. Ensure safety lever is placed in the carrying sleeve.
2. Ensure pull ring on safety pin is in a downward position.
3. Ensure that carrying strap is wrapped around the fuze, safety lever, and pull ring.
4. Ensure that carrying strap is snapped and secure.

B. New-Type Ammo Pouches.

1. Ensure grenade is positioned in grenade pocket with the safety lever inside the pocket.
2. Ensure pull ring on safety pin is in a downward position.
3. Ensure that carrying strap is snapped and secure.
4. After the live grenades have been attached to the ammunition pouches, each soldier will be instructed not to remove the live grenades until told to do so by the pit safety NCO in the live pit.

VII. THROW THE GRENADES.

NOTE: Soldiers must be briefed on safety procedures for dropped grenades.

NOTE: The range OIC must be positioned in the tower to observe throw-phase procedures and count grenade explosions for purposes of grenade accountability.

A. Assign a Pit Safety NCO to Each Throwing Pit.

1. The safety NCO directs soldiers to specific throwing pit safety NCO.
2. The pit safety NCO observes movement of soldier to the pit.
3. The soldier identifies the throwing arm to pit safety NCO.
4. The pit safety NCO directs soldier to appropriate position of pit, based on left or right throwing arm.

5. The pit safety NCO directs soldier to remove a grenade from the ammo pouch with the proper grip.

6. The pit safety NCO directs soldier to remove safety clip and prepare to throw. (From this point on, the pit safety NCO does not remove his eyes from the throwing hand until completion of the throw. The pit safety NCO signals the tower that the soldier is prepared to throw.)

WARNING: IF A GRENADE IS DROPPED IN THE PIT THE PIT SAFETY NCO FORCES THE SOLDIER OUT OF THE PIT INTO THE DESIGNATED SAFE AREA. AND FOLLOWS HIM

B. Order the Throw.

1. When all throwing pits are ready, the tower NCO commands THROW, and the pit safety NCO repeats the command THROW.

NOTE: Only one pit will throw at a time.

2. The soldier throws the grenade and then drops to cover.

WARNING: IF A SOLDIER RELEASES THE SAFETY LEVER BUT FAILS TO THROW THE GRENADE. THE PIT SAFETY NCO FORCEFULLY REPEATS THE COMMAND TO THROW. AND IF NECESSARY. THE PIT SAFETY NCO THROWS THE GRENADE HIMSELF

3. The tower NCO commands CLEAR after observing each grenade detonate.

4. The soldier prepares to throw a second grenade, repeating required steps.

5. The pit safety NCO directs the soldier to exit the live pit area after a final ALL CLEAR from the tower.

WARNING: "COOKING OFF" WILL BE NOT BE DONE WITH LIVE GRENADES DURING TRAINING

VIII. COMPLETE THE MISSION.

A. Clear the Range.

1. Close down range control according to local SOP.
2. Remove all equipment and ammunition from range.
3. Police range, rake the impact area, and perform other maintenance as required by local SOP.
4. Request a range inspection from range control when ready to be cleared.

B. Turn In Paperwork and Equipment.

1. Submit after-action report to headquarters.
2. Report any noted safety hazards to proper authorities.
3. Turn in all unexpended grenades in original grenade containers to the ASP, along with all safety pins and packing residue from all detonated grenades.