

## CRM LESSON PLAN REPORT

HAND GRENADES (BCT)  
071-BT071081 / 5.02 ©

Approved  
10 Aug 2021

Effective Date: 10 Aug 2021

### SCOPE:

This lesson plan emphasizes the significance of safety throughout the conduct of hand grenade training. It introduces the Trainee to identifying the five types of hand grenades by their physical features and capabilities. The Trainee will learn how to employ hand grenades safely and identify which grenade type should be used to engage different targets. To receive a "GO" on the Hand Grenade Qualification Course, the Trainees must receive a passing score of 5 of 7 stations. Each trainee will ultimately be issued two live hand grenades to throw as a course requirement.

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**Distribution Restriction:** Distribution authorized to U.S. Government agencies and their contractors only due to references used in this lesson plan. This determination was made on date : 13 July 2021. Insert office symbol ATZB-IS.

**Destruction Notice:** Destroy by any method that will prevent disclosure of contents or reconstruction of the document

**Foreign Disclosure: FD3** - This training product has been reviewed by the developers in coordination with the MCoE foreign disclosure officer. This training product cannot be used to instruct international military students.

**SECTION I. ADMINISTRATIVE DATA**

**All Course Masters/POIs Including This Lesson**

<b>Courses</b>				
<u>Course Number</u>	<u>Version</u>	<u>Title</u>	<u>Phase</u>	<u>Status</u>
750-BT	11.0	Basic Combat Training	N/A	Analysis

<b>POIs</b>				
<u>POI Number</u>	<u>Version</u>	<u>Title</u>	<u>Phase</u>	<u>Status</u>
31B10-OSUT	21.0 ©	Basic Military Police	0	Analysis
12C10-OSUT	20.0 ©	Bridge Crewmember	0	Analysis
750-BT	11.0 ©	Basic Combat Training	0	Analysis
12C10-OSUT (ST)	20.0 ©	Bridge Crewmember	0	Analysis

**Task(s) Taught(\*) or Supported**

<u>Task Number</u>	<u>Task Title</u>	<u>Status</u>
<b>Individual</b>		
071-COM-4407 (*)	Employ Hand Grenades	Superseded
071-COM-4401 (*)	Perform Safety Checks on Hand Grenades	Superseded

**Reinforced Task(s)**

<u>Task Number</u>	<u>Task Title</u>	<u>Status</u>
071-COM-0502	Move Under Direct Fire	Approved
071-COM-0503	Move Over, Through, or Around Obstacles (Except Minefields)	Approved

**Knowledge**

<u>Knowledge Id</u>	<u>Title</u>	<u>Taught</u>	<u>Required</u>
011-1058K	Direct responsibility	Yes	No
071-OPN-0015	Safety Procedures	Yes	No
071-OPN-0016	Inspection Techniques	Yes	No
071-OPN-0022	Threat	Yes	No
071-WPN-0064	Target Detection Techniques	Yes	No
071-WPN-0090	Hand Grenades	Yes	No

**Skill**

<u>Skill Id</u>	<u>Title</u>	<u>Taught</u>	<u>Required</u>
S0411	Ability to practice safety at all times.	Yes	No
551-S-0054	Ability to identify faults or deficiencies during a maintenance inspection	Yes	No
071-WPN-0058	Employ Hand Grenades	Yes	No
071-WPN-0024	Follow Safety Procedures	Yes	No

**Administrative/ Academic Hours**

The administrative/academic (50 min) hours required to teach this lesson are as follows:

<u>Academic</u>	<u>Resident Hours / Methods</u>		
Yes	0 hrs	15 mins	Demonstration
Yes	7 hrs	10 mins	Practical Exercise (Hands-On/Written)
Yes	0 hrs	25 mins	Discussion (Small or Large Group)
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Total Hours(50 min):	8 hrs	0 mins	

**Instructor  
Action  
Hours**

The instructor action (60 min) hours required to teach this lesson are as follows:

Hours/Actions

Total Hours (60 min):                      0 hrs                      0 mins

**Test Lesson(s)**

<u>Hours</u>	<u>Lesson Number Version</u>	<u>Lesson Title</u>
None		

**Prerequisite  
Lesson(s)**

<u>Hours</u>	<u>Lesson Number Version</u>	<u>Lesson Title</u>
None		

**Training  
Material  
Classification**

Security Level: This course/lesson will present information that has a Security Classification of: U - Unclassified.

**Foreign  
Disclosure  
Restrictions**

FD3. This training product has been reviewed by the developers in coordination with the MCoE foreign disclosure officer. This training product cannot be used to instruct international military students.

**References**

<u>Number</u>	<u>Title</u>	<u>Date</u>
AR 385-63	Range Safety (MCO 3570.1C)	30 Jan 2012
ATP 3-34.5	Environmental Considerations	10 Aug 2015
ATP 5-19	RISK MANAGEMENT, with change 1 dated 8 Sep 2014	14 Apr 2014
FM 7-22	Holistic Health and Fitness	01 Oct 2020
STP 21-1-SMCT	SOLDIER'S MANUAL OF COMMON TASKS, WARRIOR SKILLS, LEVEL 1	07 Nov 2019
TC 3-23.30	GRENADES AND PYROTECHNIC SIGNALS ( <a href="https://armypubs.us.army.mil/doctrine/DR_pubs/dr_a_a/pdf/tc3_23x30.pdf">https://armypubs.us.army.mil/doctrine/DR_pubs/dr_a_a/pdf/tc3_23x30.pdf</a> )	25 Nov 2013
TRADOC REG 350-6	Enlisted Initial Entry Training Policies and Administration <a href="http://www.tradoc.army.mil/tpubs/regs/TR350-6.pdf">http://www.tradoc.army.mil/tpubs/regs/TR350-6.pdf</a>	09 Aug 2019

**Student Study  
Assignment**

Trainees will execute the grenade qualification course prior to throwing live grenades.

**NOTE:** IET BCT Graduation Standards - throw two live M67 hand grenades.

**NOTE:** All Trainees are required to employ two fragmentation hand grenades, or M69 w/M228 TPF 35 meters from the standing position while wearing a fighting load and PPE.

**Instructor  
Requirements**

Instructors/Cadre must be trained and have experience with grenades and pyrotechnic signals and have a thorough knowledge of TC 3-23.30.

**Support  
Personnel  
Requirements**

None.

**Additional  
Support  
Personnel  
Requirements**

<u>Name</u>	<u>Student Ratio</u>	<u>Qty</u>	<u>Man Hours</u>
Additional Instructors and/or Drill Sergeants Remarks:	0:0	12	96.0
NCOIC Remarks:	0:0	1	8.0
OIC Remarks:	0:0	1	8.0
Range Safety Officer Remarks:	0:0	1	8.0
Ammunition NCO Remarks:	0:0	2	16.0
Medic Remarks:	0:0	1	8.0
Bus Driver Remarks:	1:44		10.0
Driver, FLA Remarks:	0:0	1	8.0

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**Equipment  
Required  
for Instruction**

<u>ID - Name</u>	<u>Student Ratio</u>	<u>Instructor Ratio</u>	<u>Spt</u>	<u>Qty</u>	<u>Exp</u>
1005-01-361-8208 - Firing Attachment, Blank Ammunition Remarks:	1:1	0:0	No	0	No
1005-01-382-0953 - Carbine, 5.56 Millimeter: M4A1 Remarks:	1:1	0:0	No	0	No
1005-01-451-5119 - Cleaning Kit, Gun Remarks:	1:1	0:0	No	0	No
1005-01-630-9508 - 30 Round Magazine Assembly Remarks:	7:1	0:0	No	0	No
2310-01-090-7709 - Bus Transit 44 Passenger Remarks:	1:44	0:0	No	0	No
2310-01-380-8225 - Truck Ambulance: 4 Litter Armored 4x4 W/E (HMMWV): M997A2 Remarks:	1:200	0:0	Yes	1	
4110-01-485-3626 - Chest, Ice Storage, White, 48 Quart Capacity 2S Remarks:	1:50	0:0	Yes	0	No
4240-01-216-9409 - Pads, Knee, Industrial Remarks:	1:1	0:0	No	0	
4240-01-504-5131 - Pads, Elbow, Industrial Remarks:	1:1	0:0	No	0	
5820-01-243-4960 - Radio 10 Channel, Portable, Motorola: MDL-Q2 Remarks:	2:50	0:0	Yes	0	
5830-00-164-6622 - Public Address Set: AN/TIQ-2 Remarks:	1:200	0:0	Yes	0	
6515-00-721-9092 - Plug, Ear (DISCONTINUED WITHOUT REPLACEMENT) Remarks:	1:1	0:0	Yes	0	
6515-01-363-4495 - THERMOMETER,CLINICAL,HUMAN Remarks:	1:50	0:0	Yes	0	
6530-00-783-7510 - Litter, Nonrigid, Poleless, Nylon, 78 X 26 Inch, Retaining Straps, Field Use Remarks:	1:50	0:0	Yes	0	
6530-01-260-1222 - Rescue and Transport System, Patient Remarks:	1:50	0:0	Yes	0	
6545-01-532-3674 - Medical Equipment Set, Combat Lifesaver, Version 2005, UA 245A Remarks:	1:50	0:0	Yes	0	
7210-00-081-1417 - Sheet, Bed, Cotton-Polyester, White, 104 X 72 Inches, Solid, Plain, Flat Remarks:	2:50	0:0	Yes	0	
7240-00-089-3827 - Can, Water, Military: Plastic, 5-Gallon Capacity Remarks:	4:50	0:0	Yes	0	
8470-01-465-1867 - Body Armor: Interceptor Outer Tactical Vest, Large Remarks:	1:1	0:0	No	0	
8960-01-430-4378 - Ice, 8 Pounds Remarks:	1:10	0:0	Yes	0	
M12986 - Mask Chemical Biological M50 Remarks:	1:1	0:0	No	0	
T56383 - Truck Utility Cargo M1165 Remarks:	1:200	0:0	Yes	0	
Z36683 - (don't use not in FEDLOG) Trailer Water (Camel): 800 GAL 5 TON W/E Remarks:	1:200	0:0	Yes	0	

(Note: Asterisk before ID indicates a TADSS.)

**Materials Required**

*Instructor Materials:*

- TC 3-23.30
- Daily Risk Assessment
- Visitors Folder
- Lesson Plan
- Mock Hand Grenades (TADSS)

*Student Materials:*

Writing materials.

**Classroom, Training Area, and Range Requirements**

<u>ID - Name</u>	<u>Quantity</u>	<u>Student Ratio</u>	<u>Setup Mins</u>	<u>Cleanup Mins</u>
17882-4-10 Hand Grenade Qualification Course (NonFiring), 4 Firing Points (Firing Ranges), 10 Acre Remarks: 10 Acres	1	0:0	25	25
17883-6-40 Hand Grenade Familiarization Range (Live), 6 Firing Points (Firing Ranges), 40 Acre Remarks:	1	0:0	25	25

**Ammunition Requirements**

<u>DODIC - Name</u>	<u>Exp</u>	<u>Student Ratio</u>	<u>Instruct Ratio</u>	<u>Spt Qty</u>
G811 - Body, Hand Grenade, Practice: M69 for use with M228 Fuze Remarks:	N	0:0	0:0	105
G878 - Fuze, Hand Grenade: M228 for G881 (Practice Hand Grenade, M69) Remarks:	Y	15:1	0:0	
G881 - Hand Grenade, Fragmentation: M67 Remarks:	Y	2:1	0:0	
G900 - Hand Grenade, Incendiary: AN-M14 Remarks:	Y	0:0	0:0	1
G940 - Hand Grenade, Smoke Green: M18 (MILES) Remarks:	Y	0:0	0:0	1
G945 - Hand Grenade, Smoke Yellow Remarks:	Y	0:0	0:0	1
G950 - Grenade Hand Red Smoke (OPL) Remarks:	Y	0:0	0:0	1
G955 - Hand Grenade, Smoke Violet Remarks:	Y	0:0	0:0	1
G982 - Hand Grenade, Smoke Training: M83 Remarks:	Y	0:0	0:0	1
GG25 - Grenade, Hand Smoke Visual Restricted Terrain Remarks:	Y	0:0	0:0	1

**NOTE:** Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

**NOTE:** This lesson plan is a guide for the Cadre/Instructors to train the Trainees in a standardized format to achieve the standards. The Cadre/Instructors should follow the learning steps. However; the content can be re-worded or paraphrased to articulate personal experiences. The goal is to teach the Trainees in accordance with Army doctrine and maintain the standards.

***"The Trainee has been provided guidance on the Rules Of Engagement (ROE) and/or Rules Of Interaction (ROI). Coalition forces and noncombatants [such as refugees, media, Non-Governmental Organizations (NGOs) and/or contractor personnel] may be present in the operational area."***

Before presenting this lesson, Cadre/Instructors must thoroughly prepare by studying this lesson and identified reference material. Particular attention must be given to the Army values identified within the lesson. Cadre/Instructors must be role models and mentors to help Trainees assimilate Army values.

This training is an eight-hour block of instruction that typically occurs during the eighth week of training. It is a skill level 1 critical task. The lesson normally begins with an Cadre/Instructor to student ratio of 1:200. After the initial orientation/safety briefing, Trainees are then broken down into small groups or platoon size elements.

**NOTE:** During mock-bay and live-fire exercises, the Cadre/Instructors will have only one Trainee in the pit at a time or a Cadre/Instructors to Trainee ratio of 1:1. The number of Trainees trained by each Cadre/Instructors will be based on the number of pits available. The purpose of this block of instruction is to instruct the Trainee in the fundamentals of hand grenade safety, demonstrate proper hand grenade inspection, stowage sequence, proper right and left hand grip, confidence clip disengagement, pull pin extraction and arming procedure, and employment technique to engage and defeat threats. While doing this, the Trainees will gain the confidence in their abilities and equipment. Particular attention must be given to the values identified with in the lesson. Cadre/Instructors must be role models and mentors to help Trainees assimilate Army values by noting the values and their associated behaviors as appropriate during this training.

**Cadre/Instructors must** ensure that safety is reemphasized throughout the lesson. It is the responsibility of the Cadre/Instructors to ensure all current safety issues concerning the training are identified.

**Cadre/Instructors must** provide an explanation and ensure the Trainees are aware of fratricide.

**Cadre/Instructors must** be familiar with the contents of the Deliberate Risk Management Work Sheet (DD Form 2977) and all associated hazards and mitigating factors.

Cadre/Instructors must ensure the ammunition detail comply with handling ammunition in accordance with Army regulations (i.e., keep different DODICs separated, have the required number of fire extinguishers available and positioned accordingly, and address security).

1. The Cadre/Instructor will verify the classrooms, ranges and/or training areas have been scheduled.
2. The Cadre/Instructor will ensure all training materials and equipment are available and operational.
3. The Cadre/Instructor will setup the classroom, range and/or training area at a minimum of 30 minutes prior to the start of training.
4. The Drill Sergeant/Instructor will brief the Trainees one day prior on the materials/equipment they will be required to have for training.

**NOTE:** Due to time and resources some stations may be completed to standard sooner than others.

The Cadre/Instructors may include opportunity training to accommodate the lapse of time and to enhance the effectiveness of training.

**Concurrent Training:**

Leaders must program time and other resources for concurrent training as an integral part of their training plan.

Determine which tasks will be trained based on training assessments, current training plans, and available resources. Concurrent training is ideally linked to the prime POI event (closely related individual tasks). Focus should also be to critical, proficient, familiar, and awareness tasks, preferably in this order. Fully resourced concurrent training on awareness tasks is far preferable to no training plan at all. Ensure that properly executed concurrent training is well-structured, realistic, hands-on, and effective. The intent is that Trainees are actively engaged in some skill learning. Although hands-on training is preferred, concurrent training can be a series of test questions, which require a Trainee to go through the STP-21-1-SMCT, TCs, FMs, and TMs. Engaging the Trainee in a mental activity and/or performance oriented activity is the goal.

**The goal is for our Trainees to achieve the following outcomes:**

1. Identify the different types of hand grenades by their purpose and use.
2. Select the correct hand grenade for the mission.
3. Use proper hand grenade handling techniques.
4. Properly and safely employ hand grenades.

**A possible way to achieve the outcome:**

1. Trainees are graded during the grenade qualification course. They must identify 6 out of 6 grenades correctly.

This is part of a 7- station qualification course. Instructions are covered during Identify U.S. Hand Grenades.

2. Trainees are graded during the practical exercise. Trainee to Cadre/Instructor ratio is 1:1.

If the Trainee fails to properly demonstrate proper handling techniques, the Trainee will be given a " NO-GO " and then retested. If the Trainee fails again they will

be retrained and tested the Trainee is able to complete the task properly.

This event is graded using a mock up of the live qualification course.

3. Trainees are graded during the practical exercise. Trainee to Cadre/Instructor ratio is 1:1. If the Trainee does not safely employ a practice grenade from the mock-bay, they will be retrained and retested. Demonstrating and employing a practice hand grenade is REQUIRED prior to throwing a live hand grenade.

**Mock bay:**

a. The mock-bay exercise is to provide the Trainee an opportunity to go through the procedures that will take place in the live-fire pit. On-the-spot corrections of throwing and safety procedures must be continuous. Instructors/Cadre must identify those in need of additional training and cycle them back through training on specific tasks as required.

b. Review and demonstrate proper procedures to stow the hand grenade in the attached fragmentation pouch on the Trainee's individual equipment, gripping, and throwing grenades.

c. Conduct mock bay.

**SAFETY NOTE:**

- Mock-bay is the most important block of instruction the Trainees will receive. This block of instruction is the preparatory class before the Trainees move to live pit.

- Mock-bay exercise must immediately precede the live fragmentation grenade exercise.

Trainees must successfully complete mock-bay throwing prior to being allowed to throw live grenades.

(1) Evaluate the Trainees on their ability to safely employ one M69 practice hand grenade with the M228 practice fuse. Take all commands from the Pit NCOs. Any Trainee identified as a safety hazard will be sent to the Range Safety Officer (RSO) for additional training or to be eliminated from training.

(2) During mock-bay training, the hand grenade Instructors will identify borderline throwers.

(3) Instructors (Hand Grenade Cadre) who teach mock-bay,

but are not scheduled to throw in live pit are required to inform the NCOIC and the RSO of any Trainee that may have problems in the live pit.

(4) The PIT NCO will never take their eyes off the hand grenade during the arming procedures.



(5) **THINK SAFETY AT ALL TIMES.**

**Hand Grenade Cadre/Instructor requirements:**

**a. Conduct:** Instructors will be trained and certified on all mock-bay exercises prior to conducting live pit training. Instructors will demonstrate the procedures required when a grenade is dropped in the pit and when it falls outside the pit. Upon completion of the demonstration the **INSTRUCTOR WILL CONDUCT A PRACTICAL EXERCISE** with a cadre demonstrator **ON THE FOLLOWING EMERGENCY DRILLS:**

**NOTE:** The following are the procedures for the pit NCO:

**b. Trainee drops the hand grenade in the pit:**The Pit NCO yells "grenade in the pit". The Pit NCO will grab the Trainee by whatever means possible, (body armor, ACU, and shirt sleeve) and force the Trainee over the backwall (which is 36 inches high and beveled at a 45 degree angle) and assume the prone position along with the Trainee. The Pit NCO will lie on top of or beside the Trainee to prevent the Trainee from getting up or running away. The Pit NCO is authorized to use the requisite force necessary to get the Trainee safely out of the pit.

**c. Trainee drops the hand grenade over the back knee high wall:** The pit NCO yells "grenade outside of the pit". Once the Pit NCO knows for sure the grenade is out of the pit, the Pit NCO will grab the Trainee by whatever means possible and force the Trainee to the ground inside the pit. This will prevent the Trainee from getting up or running away. The Pit NCO will assume the prone position covering the Trainee or beside the Trainee. The Pit NCO is authorized to use the requisite force necessary to ensure the safety of the Trainee and himself/herself.

**d. Trainees milk the hand grenade by moving his/her thumb:** The Pit NCO will tell the Trainee freeze if he/she thinks the grenade has not armed, or to throw the hand grenade if he/she believe the grenade has armed. The Pit NCO does not have to wait for the tower NCO to give the command and throw. If the PIT NCO determines that the throwers grenade is not safe, they will command the Trainee to throw, and then sound off with "GRENADE OUT" signaling to the other pits that a throwing pit has employed their grenade early. If the Trainee does not throw their hand grenade, the Pit NCO will place their thumb across the Trainee's thumb and their fingers across the Trainee's fingers, securing the Trainee's hand. If the Trainee is right handed, the PIT NCO will come across with their right hand to secure the Trainee's throwing hand. Use the left hand to force the Trainee to the front wall. If the Trainee is left handed, the Pit NCO will come across with their left hand to secure the Trainee's hand, using the right hand to force the Trainee to the front wall. Force the Trainee to drop the grenade over the front wall and then bring the Trainee down in the pit and protect them from the blast.

**e. Trainee freezes after arming the hand grenade:** The Pit NCO will tell the Trainee to throw the hand grenade. If the Trainee does not throw their hand grenade, the Pit NCO will place their thumb across the Trainee's thumb and fingers across the Trainee's fingers, securing the Trainee's hand. If the Trainee is right handed, the PIT NCO will bring their right hand across to secure the Trainee's throwing hand. Use the left hand to force the Trainee to the front wall. If the Trainee is left handed, the Pit NCO will come across with their left hand to secure the Trainee's hand, using the right hand to force the Trainee to the front wall, forcing the Trainee to drop the grenade over the front wall and then bring the Trainee down in the pit and protect them from the blast.

**f. Trainee remains observing after they throws the hand grenade down range:** Once the Pit NCO watches the hand grenade leave the pit area, the Pit NCO will ensure the Trainee is on a knee or in the squatting position in the pit. If the Trainee is still standing and observing the grenade, the Pit NCO will force the Trainee down below the front wall by using the requisite physical force necessary to ensure the safety of the Trainee.

**g. Trainee fails to take commands from the Pit NCO:** If a Trainee fails to react to the command of prepare to throw, the Pit NCO will repeat the command of prepare to throw a second time. If the Trainee does not make an attempt to arm the grenade, the Pit NCO will place their hand over the Trainee's throwing hand, covering the fuse head, (left hand for right handed Trainees, and right hand for left handed Trainees). Then place the other hand on the Trainee's helmet

telling the Trainee to take a knee in the pit. The Pit NCO will explain to the Trainee what they must do to employ the grenade down range, and then take all commands from the tower NCO.

**h. A demonstration of all techniques will be conducted prior to Trainees entering the pit.**

**i. Trainees will practice procedures in the mock-bay, prior to proceeding to the live pit, on what action is needed if they drop the grenade in the pit and if they drop the grenade outside of the pit. Instructors will ensure all Trainees demonstrate and understand the proper procedures.**

**NOTE: If a Trainee needs additional training after the mock-bay, they must be retrained by a trained and qualified hand grenade Cadre/Instructor and go back through mock-bay prior to throwing a live grenade. All other Trainees will go directly from mock-bay to the live-bay pit area for a final safety briefing.**

NOTE: During mock-bay and live-fire exercises, the Cadre/Instructors will have only one Trainee in the pit at a time or a Cadre/Instructors to Trainee ratio of 1:1. The number of Trainees trained by each Cadre/Instructors will be based on the number of pits available. The purpose of this block of instruction is to instruct the Trainee in the fundamentals of hand grenade safety, demonstrate proper hand grenade inspection, stowage sequence, proper right and left hand grip, confidence clip disengagement, pull pin extraction and arming procedure, and employment technique to engage and defeat threats. While doing this, the Trainees will gain the confidence in their abilities and equipment. Particular attention must be given to the values identified with in the lesson. Cadre/Instructors must be role models and mentors to help Trainees assimilate Army values by noting the values and their associated behaviors as appropriate during this training.

**Proponent Lesson  
Plan Approvals**

<u>Name</u>	<u>Rank</u>	<u>Position</u>	<u>Date</u>
Joseph Hiner	Not available	Approver	10 Aug 2021

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## SECTION II. INTRODUCTION

Method of Instruction: Discussion (Small or Large Group)  
 Mode of Delivery: Resident Instruction  
 Instr Type (I:S Ratio): Military - NON-ICH (1:200)  
 Time of Instruction: 5 mins

### Motivator

The rifle, bayonet, and hand grenade are the Soldier's most lethal weapons in combat. Hand grenades give the Soldier the ability to kill enemy soldiers, destroy enemy equipment, provide signals, and control riots. In short, the hand grenade is the Soldier's personal indirect fire weapon system. But like with any weapon system, the lack of knowledge and understanding on how to safely employ the weapon turns it from a lethal weapon to an ineffective weapon. At the completion of this training you will become proficient in hand grenades. You will be able to identify the different types of hand grenades, select the correct hand grenade for the appropriate task, and be able to properly and safely employ hand grenades.

### Terminal Learning Objective

**NOTE.** Inform the students of the following Terminal Learning Objective requirements.

At the completion of this lesson, you [the student] will:

Action:	Employ Hand Grenades.
Conditions:	<p>On an approved hand grenade range, given 2 live M67 fragmentation grenades with time delay fuzes, an M84 STUN grenade (Flashbang), an M7A3 CS-riot control grenade, an M18 smoke hand grenade, an M83 TA smoke grenade, an M106 (SOD-Vr), an M14 incendiary grenade, and 10 M69 practice grenades with M228 training practice fuzes.</p> <p>The uniform will be a minimum of individual Fighting Load Carrier (FLC), Improved Outer Tactical Vest (IOTV), ballistic helmet, single hearing protection, and ballistic eyes protection.</p>
Standards:	<ol style="list-style-type: none"> <li>1. Perform safety checks on a hand grenade and identify all defects.</li> <li>2. Identify all U.S. hand grenades by their type/color/markings/usage.</li> <li>3. Correctly stow a hand grenade to individual load-carrying equipment (FLC).</li> <li>4. Select the correct hand grenade to complete each of the following:             <ol style="list-style-type: none"> <li>a. Disable or kill personnel.</li> <li>b. Signal personnel.</li> <li>c. Screen (provide concealment).</li> <li>d. Destroy equipment and start fires.</li> <li>e. Control riots or to disable individuals without causing serious injury.</li> </ol> </li> <li>5. Engage 5 targets out of a possible 7 to receive a "GO" on the Hand Grenade Qualification Course.</li> <li>6. Properly throw two live hand grenade to achieve the intended outcome.</li> </ol>
Learning Domain - Level:	Psychomotor - Precision
No JPME Learning Areas Supported:	None

### Safety Requirements

Safety must be paramount in the complex outdoor environment. During the training process, Commanders will utilize the 5-step Risk Management process to determine the safest and most complete method to train. Every precaution will be taken while replicating realistic battlefield conditions.

Everyone is responsible for recognizing, mitigating, and reporting hazardous conditions.

**CADRE/INSTRUCTOR NOTE:** The Cadre/Instructors will brief the unit/site SOP and Deliberate Risk Management Worksheet for all potential contingencies encountered during that training period/event (i.e., severe weather, fire, evacuation, and rally points, etc).

In addition to Range Regulations, safety requirements for the Hand Grenade Qualification Course (HGQC) and Hand Grenade Live Pit are separate enclosures, see Appendix C.

1. Completion of the Hand Grenade Qualification Course (HGQC) is not a prerequisite for live hand grenade training. Live Bay and HGQC may be reversed. All Trainees must employ a practice hand grenade at the Mock-bay pit prior to live-bay training. The mock-bay training with practice grenades must immediately precede live-bay training.
2. Proper supervision must be maintained during live-fire exercises. Under no circumstance will the practice of "CookOff" or "Milking" by the Trainees be condoned. Emphasize to the Trainee that constant pressure must be kept on the hand grenade safety lever. The Trainee will not hold the grenade longer than a 2-second count (ex. One Thousand One, One Thousand Two) after removing the secondary safety clip, disengaging the pull ring from the confidence clip (If present), pulling the safety pin and releasing the safety lever (Spoon) (Station 2 only).

**Safety Requirements:** Safety briefing and local range safety requirements.

**NOTE:** The safety briefing will include items particular to the local area and may be developed locally.

**SAFETY BRIEFING EXAMPLE:**

3. Safety Instructions.

a. General - If for any reason you become ill or injured during training, contact a fellow Trainee or other personnel. If you encounter an injured Trainee, administer first aid immediately. Attempt to contact another Trainee or Cadre personnel and send for help. Trainee safety has priority over everything else.

b. Snake bite - You are unlikely to see a snake during today's training. If you do, avoid it. Do not bother it and it will not bother you. If you are bitten by a snake, remain calm. Place a constricting band between the bite and your heart. Try to contact a fellow Trainee or Cadre personnel and send for help. If possible, identify the snake by its color, pattern, and shape of its head (such as fat, round, or flat).

c. Insect bites and bee stings- If you are bitten or stung and severe swelling occurs, contact another Trainee or other personnel. If anyone is allergic to bites and stings, give your name, rank, and SSN to the primary Instructor.

**NOTE:** Identify Trainees who are allergic to bites and stings. Have these Trainees contact the primary Instructor. He will record their names and roster numbers for quick reference.

d. Storm- In the event of violent weather accompanied by high winds or hail, seek shelter in the low ground area. Remain calm and dispersed until the storm subsides.

e. Lightning - In the event of storms accompanied by lightning, stay clear of high ground, power lines, lone pines, or metal structures. Remain calm and dispersed.

f. Duds, ammunition, or pyrotechnics - If you encounter these, DO NOT PICK THEM UP, KICK OR DISTURB THE DEVICE. Report this to the primary Instructor.

g. In case of a fire- Notify Range Control. Pit NCO's will secure grenades from the Trainee in their assigned throwing pit, and turn the grenades to the issue point. The Live-Bay Ammo NCO will account for all open and unpackaged hand grenades, secure the grenades in the ammunition bunker and post guards. Unit Drill Sergeants will move unit Trainees a safe distance away from the ammunition point and conduct an inspection for ammunition before moving the Trainees out of the live-bay area.

4. Summer/Winter safety briefing.

**NOTE:** Substitute appropriate local regulations/policies as necessary.

a. References.

- (1) USAIC Reg 210-4, Range and Terrain

(2) USAIC Reg 40-2, Field Medical Support and Emergency Evacuation

(3) USAIC Reg 40-14, Prevention of Heat Injury

(4) USAIC 40-24, Prevention and First Aid of Cold Weather Injury

b. Safety Instructions.

(1) Heat injury - These fall into four categories: sunburn, heat cramps, heat exhaustion, and heat stroke. Do not take chances. Often the symptoms of heat injury are hard to identify. If you feel dizzy or nauseous, slow down. If these symptoms continue get off your feet, open your clothing and remain in the shade. Try to contact a fellow Trainee or Cadre personnel.

**NOTE:** For safety, Trainees must have at least 2 quarts of water.

(2) Cold weather injury-Cold weather injuries can occur if the temperature or wind-chill factor drops. Cold weather injuries include immersion foot, trench foot, and frostbite. If you suspect a cold weather injury or encounter a fellow Trainee with a cold weather injury, rest the affected area. Try to re-warm it and send for help. **DO NOT RUB THE AFFECTED AREA.** The biggest danger is frostbite, because it can occur rapidly. It usually occurs on exposed surfaces. It can be recognized by aching, tingling, and stinging, followed by numbing and a sense of discomfort. Initially, skin will be red, then turn waxy white.

(3) Heat exhaustion-Wearing heavy multilayered clothing can cause overheating and heat exhaustion. If this occurs, slow down, get off your feet, and rest. If symptoms continue, try to contact a fellow Trainee or Cadre personnel.

**NOTE:** For safety purposes, Trainees must have 2 quarts of water.

5. Weapons Handling.

The Four Rules-There are four rules that will be followed at all times on and off the range.

a. Treat every weapon as if it were loaded.

b. Never point a weapon at anything you do not intend to shoot.

c. Keep the weapon on safe with your finger off the trigger unless you are ready to shoot and have the target in your sights.

d. Maintain situational awareness of what's going on around you, at your target, and beyond your target at all times.

**Risk Assessment Level**

**High - Hand Grenades (Live and Qualification Course).**

Assessment: Inability to conduct safe training or to identify disqualified Soldiers.

Controls: Range OIC brief training unit Cadre and leadership on the range DRAW, SOP, and training scenario.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

**High - Pit NCO unaware of procedures during live and mock bay.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: 1. Bay NCOs control each Soldier during throw. Pit NCO takes visual and verbal commands from OIC in Tower.

2. Pit NCO notifies OIC/RSO of any hazards and calls cease fire until resolved.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

**High - Loss of control during Live Fire.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: 1. Pit NCOs maintain direct control over Soldiers in the pit and maintain positive visual observation and control of the live grenades the entire time.

2. The following actions will be rehearsed prior to conducting Live Bay and will be overseen by the RSO and OIC. In

addition to running mock bay training pit, NCOs will rehearse procedures for a dropped HG in the throwing pit and throwing procedures for left and right handed throwers. The OIC and RSO will ensure all rehearsals are properly conducted.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **High - Armed Hand Grenade dropped in the pit.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: Pit NCO will assist the Soldier over the back wall while announcing "Grenade in the Pit." The pit NCO will then cover the Soldier with his body to maintain control.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **High - Armed Hand Grenade over back wall of pit.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: Pit NCO assist Soldier to the prone against the back wall announcing "Grenade outside the Pit." The pit NCO will then cover the Soldier with himself to maintain control.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **High - Soldiers watches grenade after thrown.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: Pit NCO physically forces Soldier down behind the front wall of the pit.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Medium - Soldier freezes after arming grenade.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: Pit NCO walks Soldiers to the front of the pit and forces Soldiers to release the grenade and assists him down behind the front wall of the pit.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **High - Soldier "milks" or "cooks" the hand grenade**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: Pit NCO will give the command of "Throw, Throw, Throw" to the Soldier. If Soldier does not throw the grenade, the pit NCO will assist the Soldier in dropping the grenade over the front wall of the pit. The pit NCO will then assist the Soldier in getting down behind the front wall of the pit. Pit NCOs will maintain a hand over the Soldier's hand during all live grenade throws to ensure the Soldiers do not "milk" the grenade and to maintain positive control over the armed grenades.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **High - Soldier being hit by fragments from the M67 Fragmentation Grenade.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: 1. RSO ensures all Soldiers are wearing IOTV with plates, ACH, and eye and ear protection while forward of the safety barrier and while throwing two live M67 Fragmentation Grenades.

2. NCOIC ensures medic with aid bag is in the tower during live grenade training and the ambulance is next to the live bay entrance.

3. The RSO and all Instructors will ensure helmets are worn at all times.

4. Trainees will be under overhead cover at all times except when they are throwing the grenade.

5. Instructors will control the Trainees under overhead cover.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Medium - Lack of accountability of grenades after employment.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: 1. When there is limited visibility, OIC makes the appropriate assessment; Bay NCOs also makes an assessment within their lane during live fire. Bay NCOs are in direct contact w/RSO and NCOIC to make safety calls, NCOIC and RSO continuously monitor visibility to ensure safe range conduct.

2. At no time will grenades be thrown into dense vegetation, snow, or standing water.

3. If the grenade does not employ, dud grenade procedures will be followed (shut lane down and contact range division for EOD).

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **High - Soldiers unable to meet standards set forth to employ two Live Hand Grenades.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: 1. Trainees receive instruction on proper throwing techniques and kill radius. Soldiers must exhibit proper gripping procedures, throwing techniques and throwing positions at the Mock Bay and be able to throw over and past the 15 meter line located to the front of the mock bay.

2. Bay NCOs will be certified on safety measures before running one of the live bays. Live Bay NCOs will give specific step-by-step instructions to each trainee who prepares to throw and observe and enforce correct performance measures.

3. Trainees that are unable to throw the proper distance or violate any of the 8 safety violations after retraining (Double No-Go) will not be allowed to throw a live hand grenade and must be rescheduled.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Medium - Ammunition accountability and storage.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: 1. When ammunition arrives, the unit Ammo NCO will account for all grenades and fuses by lot number at start and finish of training. All lots will be stored separately.

2. Ammunition will be stored at the appropriate location on the Range (i.e. live ammo pad and pyro ammo pad.)

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Low - Head/Eye Injuries.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: 1. Range Cadre will conduct PCIs of Soldiers' PPE, prior to instruction. ACH and eye protection are the minimum requirements for conducting the HGQC.

2. Training unit mitigates any misconduct or misuse of training aids.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Low - Demonstration of an M106 Smoke Grenade can cause fragmentation up to 30 Ft.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: OIC and RSO ensure:

1. A certified cadre demonstrator throwing the M106 along with all Soldiers observing demonstration are wearing IOTV with Who: plates, ACH, and eye/ear OIC, RSO, Cadre protection.

2. Demonstration will be conducted at least 30ft from the viewing audience.

3. Medic will be on site for demonstration.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Low - Improper handling of grenades with confidence clip attachment (Premature detonation) Injury to Soldier.**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy.

Controls: OIC and RSO ensure:

1. A certified cadre demonstrator throwing the M106 along with all Soldiers observing demonstration are wearing IOTV with plates, ACH, and eye/ear protection.

2. Cadre/Trainees are taught the proper method for arming a hand grenade with a confidence clip.

3. The pull ring must be rotated 1/4 to 1/2 turn in a clockwise directions to separate from the confidence clip.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Low - Range Fire**

Assessment: The OIC/NCOIC/RSO will assess, report, and document all hazards IAW with the local policy

Controls: Range NCOIC or RSO will:

1. Ensure there is no smoking within 50 feet of the ammo point.

2. Ensure 2x 10lb fire extinguishers are in the proximity of the ammo point, a minimum of 10m.

3. If fire appears in impact area, notify range control and monitor fire.

4. Remove flammable materials from firing line and out of the back blast area (100m at 90 degrees).

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Low - Hyponatremia.**

Assessment: Review the symptoms of Hyponatremia.

Controls: Drill Sergeants will monitor Trainee water consumption. Ensure the safety brief includes the symptoms of Hyponatremia.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate



information prior to the safety brief.

### **Low - Dehydration.**

Assessment: Check water levels in the unit water trailer prior to execution of training. Make sure Drill Sergeants check Trainees water level prior to departure.

Controls: Drill Sergeants will include symptoms of dehydration in their safety brief. Drill Sergeants will monitor the Trainees water consumption.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

### **Low - Heat/Cold Weather Injuries.**

Assessment: Ensure to check local weather reports prior to the execution of training. Drill Sergeants must conduct layouts prior to training to ensure all required clothing and equipment is present.

Controls: Drill Sergeants will monitor Trainees to ensure adequate hydration and nutrition. Drill Sergeants will ensure Trainees are wearing the appropriate clothing and protective gear for the local weather.

Leader Actions: Ensure DD Form 2977 is updated with the appropriate controls. Make sure every Drill Sergeant is aware of Controls prior to execution of training so they can take appropriate action.

### **Low - Interactions with local wildlife.**

Assessment: Check local listings of wildlife.

Controls: Ensure Drill Sergeants give a detailed Safety Brief prior to the execution of training to include what potentially hazardous animals and insects could be in the area. Drill Sergeants will monitor Trainees at all times.

Leader Actions: Ensure DD 2977 is updated with the appropriate controls. Ensure Drill Sergeants have to appropriate information prior to the execution of training.

### **Low - Interactions with poisonous plants.**

Assessment: Check local listings of potentially hazardous plants.

Controls: Drill Sergeants will give a detailed safety brief to include what types of poisonous plants are in the area, (sumac, poison oak/ivy). Drill Sergeants will ensure Trainees avoid the identified plants.

Leader Actions: Ensure DD 2977 is updated with the appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the execution of Training.

### **Low - Inclement weather.**

Assessment: Check local forecasts. Contact range control for more detailed information.

Controls: Drill Sergeants will brief Trainees what course of action to take for specific weather conditions (lightning, tornadoes, etc.).

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants are aware of what weather is expected and where to take shelter if appropriate.

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## **Environmental Considerations**

**NOTE:** Instructor should conduct a risk assessment to include environmental considerations IAW the current environmental considerations publication, and ensure students are briefed on hazards and control measures.

Units and installations will prepare an environmental risk assessment using the before, during, and after checklist found

in ATP 3-34.5 MCRP 4-11B, AUG 2015. The checklist should supplement local and state environmental regulations applicable to your area.

**Instructional  
Lead-in**

During this period of instruction you will become proficient in hand grenade identification, employment, safety procedures, characterizations, and capabilities.

## SECTION III. PRESENTATION

**NOTE:** Inform the students of the Enabling Learning Objective requirements.

### A. ENABLING LEARNING OBJECTIVE

<b>ACTION:</b>	Perform safety checks on hand grenades.
<b>CONDITIONS:</b>	Given a standard issued U.S. hand grenade, Fighting Load Carrier (FLC), Improved Outer Tactical Vest (IOTV), ballistic helmet, single hearing protection, and ballistic eyes protection.
<b>STANDARDS:</b>	<p>Properly inspect the hand grenade for defects and correctly insert, stow, or attach a grenade to your Fighting Load Carrier (FLC) with MOLLE attachments.</p> <ol style="list-style-type: none"> <li>1. Check to ensure the pull ring is present and set in the confidence clip (if present).</li> <li>2. Check to ensure the far side of safety pin has a 45 degree spread angle, or is in a diamond shape configuring.</li> <li>3. Check to ensure fuze is tight, and there is no gap between the bottom of fuze, and the top of the grenade body neck.</li> <li>4. Check to ensure the grenade body has no damage.</li> </ol>
<b>LEARNING DOMAIN - LEVEL:</b>	Psychomotor - Precision
<b>No JPME LEARNING AREAS SUPPORTED:</b>	None

ELO A - LSA 1. Learning Step / Activity ELO A - LSA 1. Perform safety checks on hand grenades.

Method of Instruction: Demonstration

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (3:55)\* (Hand Grenade Cadre/Instructor)

Time of Instruction: 5 mins

Media Type: Actual Equipment

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (\*) is derived from the parent learning object

**INSTRUCTOR NOTE: The cadre/instructor will conduct the following safety inspections (Steps 1-5):**

1. Inspect hand grenade shipping container for damage, if applicable.
2. Inspect the grenade canister, if applicable.
  - a. Inspect the canister for damage.
    - (1) Check to see if the seal on the canister has been tampered with or is missing.
    - (2) Ensure canister is not dented or punctured.
  - b. Open the canister.

**WARNING: Do not attempt to remove the grenade found upside down in its packing container.**

- c. Check to see if the grenade is upside down inside of the shipping canister.
  - (1) Replace canister top and tape in place if grenade found upside down.
  - (2) Return canister to ammunition disposal personnel.
3. Inspect the hand grenade.
  - a. Remove the packing material and the hand grenade from the canister.
    - (1) Check for rust on the body or the fuze.
    - (2) Ensure holes are not visible in the body or the fuze.

- (3) Check hand grenade for cracked body.
- (4) Place back in canister if any defect(s) are found, if applicable.
- b. Check the following before securing the hand grenades in ammunition pouches.

**WARNING: Never remove the fuze from a live grenade.**

- (1) Ensure fuse assembly is tightly fitted within the grenade body.
- (2) Inspect grenade to ensure all safety devices are present and serviceable.
  - (a) Ensure safety pin has pull ring and confidence clip.
  - (b) Ensure the safety lever is not bent or broken.
  - (c) Ensure safety clip is present, if required.
  - (d) Check to see if the safety pin is in proper position.

4. Secure the grenade.

**WARNING: Never carry the grenades suspended by the safety pull ring or safety lever. Do not attach grenades to clothing or equipment by the pull ring. Do not tape hand grenades to Soldier's gear. Do not attempt to modify a grenade.**

- a. Carry hand grenades using the proper procedures.
- b. Ensure that the grenade is fully inside the carrying pouch.
- c. Secure pouch flap.

5. Report any deficiencies to Supervisor.

**INSTRUCTOR NOTE: The following lessons below will be taught to the students.**

**INSTRUCTOR NOTE: The Cadre/Instructor will demonstrate the effect of live hand grenades.**

- a. All Soldiers should be in the bleachers.
- b. The primary Cadre/Instructor will inform the Soldiers to ensure they have their hearing protection in at this time.
- c. The Cadre/Instructor will throw live hand grenades to demonstrate their effects. (i.e. the M106 is a bursting type hand grenade used for screening and concealment, and it can be identified by its single circle pull ring seated in its confidence clip, light grenade body, with a brownband  $\frac{3}{4}$  down the body to indicate a low order explosive, and its double tooth safety spoon (lever).

**WARNING: The Cadre/Instructor throwing the live hand grenades will wear ballistic eye protection, body armor, a helmet and have single ear protection (i.e., ear plugs and ear muffs).**

**INSTRUCTOR NOTE: After the demonstration, the Trainees can be broken into groups (i.e., platoon) to conduct training.**

**TRANSITION:** Grenades must be continuously checked to ensure that they do not become dangerous due to damage or improper stowing/carry. You must perform safety checks, identify deficiencies, determine if the grenade is safe to use, and stow the grenades in the designed pouch on your Fighting Load Carrier (FLC) correctly to ensure that casualties are not taken accidentally.

**WARNING: Hand grenades, like any other weapon, must be inspected before use and properly secured to avoid serious injury or death.**

**INSTRUCTOR NOTE: Ensure the demonstrator points out each step.**

- d. Inspect grenade for defects.
  - (1) Inspect grenades to ensure all safety devices are present and in the correct position:
    - (a) Safety pin fully seated with pull ring set in confidence clip (If present), and the far side of the safety pin is spread at 45% or diamond shape configuration.
    - (b) Safety clip.
    - (c) Safety lever.

- (d) Safe lever lug ears are present, and pointing upward past the fuze lug center line.
- (2) Ensure all the safety devices are intact and serviceable.
- (3) Check the grenade fuze for tightness. It must be tightly fitted within the grenade body.
- (4) Check the grenade for rust or dirt. Clean any dirt off the grenade with a dry cloth.
- (5) Turn in any defective grenades.

**NOTE: The Soldier should inspect the hand grenade after transport, during pre-combat checks, and pre-combat inspections.**

**WARNING:**

- **Never use tape on a grenade.**
- **Never attempt to modify a grenade (i.e., Pull ring, Pull pin, Disengage confidence clip if present, etc.).**

- **Never attempt to defuse a grenade.**
- **Never attempt to remove a grenade found upside down in its packing container.**
- **Never handle a dud grenade.**
- **Never attach grenades to clothing or equipment by the pull ring or safety lever.**
- **Never attempt to remove tape once applied, or straighten pull pin if spread from the diamond shape configuration or 45 degree spread.**

**WARNING: Keep all portions of the hand away from the M69 practice grenade firing port (non-threaded end) when installing the M228 detonating fuze and when throwing the grenade. The fuze explosive charge can cause injury to the hand and fingers when it exits through the firing port.**

**CAUTION: The M228 practice fuze should be only finger-tight. Do not over-tighten the fuze. This could damage threads in the M69 body and the threaded end of the fuze.**

**NOTE: If the Soldier is a left-handed thrower, he will insert the fuze in the same manner as described above.**

e. Personnel should stow or carry hand grenades in designed hand grenade pouches attached to the Fighting Load Carrier (FLC). When storing grenades in the ammunition pouch or on the Fighting Load Carrier (FLC), personnel should adhere to the following guidelines:

- (1) Ensure that the grenade is fully seated inside of the carrying pouch.
- (2) Ensure the safety lever is inside the fragmentation or designed pouch and against the back panel of the pouch, with the pull ring in a downward position.
- (3) Close the top flap of the pouch, ensuring that the grenade and fuze assembly are fully covered by the top flap, then secure the top flap.

**WARNING:**

- **Do not tape a hand grenade safety lever or safety pin. The safety clip and or safety pin can be extracted when removing the tape causing the grenade to detonate prematurely.**

• **Never carry a hand grenade suspended by the safety pull ring or safety lever on your uniform or PPE.**

- **Do not tape a hand grenade to your gear.**
- **Under no circumstances will any hand grenade be carried in the Soldier's uniform pocket.**
- **Extra hand grenades will be carried their fiber canister (M67, M18, M83, M7A3) or metal hermetically sealed can (M14 Incendiary hand grenade), and carried in the Soldiers assault-pack or ruck-pack.**

**NOTE: While moving, occasionally check the grenade to make certain the grenade fuze is tight and secure in it's pouch.**

Check on Learning: Determine if the Trainees have learned the material presented by soliciting Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary: Trainees will be provided immediate feedback on their performance.

ELO A - LSA 2. Learning Step / Activity ELO A - LSA 2. Perform safety checks on hand grenades practical exercise.

Method of Instruction: Practical Exercise (Hands-On/Written)

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (3:55)\* (Hand Grenade Cadre/Instructor)

Time of Instruction: 15 mins

Media Type: Actual Equipment

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (\*) is derived from the parent learning object

The Trainee will perform safety checks on Hand Grenades.

Check on Learning: Determine if the Trainees have learned the material presented by soliciting Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary: Conduct a Summary Review.

**CHECK ON LEARNING (ELO A):**

**1. QUESTION:** What are you inspecting the fuze for?

**ANSWER:** To ensure the fuze is screwed tightly onto the body of the grenade.

**2. QUESTION:** Name two hand grenade defects.

**ANSWER:**

1. Fuze is unscrewed from the body of the grenade.
2. Safety clip is loose.
3. Safety pin is partially removed, bent, or both.
4. Safety pin is cracked.
5. Safety lever is broken.
6. Grenade is dirty.

**3. QUESTION:** While moving, what should you occasionally check the grenade for?

**ANSWER:** You should check to ensure the grenade is secure in it's pouch, and it's fuze is tight.

**REVIEW SUMMARY(ELO A):**

Conduct a Summary Review.

**B. ENABLING LEARNING OBJECTIVE**

<b>ACTION:</b>	Identify U.S. hand grenades.
<b>CONDITIONS:</b>	<p>Given the following grenades:</p> <ol style="list-style-type: none"> <li>1. M67 Fragmentation Hand Grenade with or without confidence clip.</li> <li>2. M18 Smoke Hand Grenade (Green, Yellow, Red, and Violet).</li> </ol>

	<p>3. M83 White Smoke Hand Grenade.</p> <p>4. M14 TH3 Incendiary Hand Grenade.</p> <p>5. M7A3 CS Riot Control Hand Grenade.</p> <p>6. M106 Screening Obscuration Devise-Visual Restricted Terrain (SOD-Vr).</p>
<b>STANDARDS:</b>	<p>Correctly identify all hand grenades by type/color/markings/usage.</p> <p><b>NOTE:</b> The Trainee need not identify the grenades' alphanumeric nomenclature.</p>
<b>LEARNING DOMAIN - LEVEL:</b>	Psychomotor - Precision
<b>No JPME LEARNING AREAS SUPPORTED:</b>	None

ELO B - LSA 1. Learning Step / Activity ELO B - LSA 1. Identify U.S. hand grenades

Method of Instruction: Discussion (Small or Large Group)

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (3:55)\* (Hand Grenade Cadre/Instructor)

Time of Instruction: 5 mins

Media Type: Actual Equipment / Equipment Based Instruction

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (\*) is derived from the parent learning object

**TRANSITION:** Hand grenades play an instrumental role in increasing combat effectiveness and survivability.

They can be used in all types of terrain and employed in most combat situations to—

- Eliminate the threat of enemy soldiers in the open and entrenched within fortified positions.
- Mark positions.
- Conceal operations.
- Surprise the enemy.
- Equalize the threat.
- Destroy or disable enemy equipment, when other weapons or munitions are not available or are in short supply.

You must be able to identify the types of hand grenades used and select the correct hand grenade for specific missions.

a. There are five types of hand grenades:

(1) Fragmentation. Used to disable or kill personnel. These grenades are used to produce casualties by the high-velocity projection of fragments.

(2) Chemical. Chemical grenades are used for incendiary purposes, screening, signaling, training, or riot control.

(3) Offensive. Offensive hand grenades (e.g., concussion grenades) are much less lethal than fragmentation grenades on an enemy in the open, but they are very effective against an enemy within a confined space.

(4) Nonlethal. Nonlethal grenades are used for diversionary purposes or when lethal force is not desired. Nonlethal munitions are designed to incapacitate personnel while minimizing fatalities, permanent injury to personnel, and collateral damage to property and the environment.

(5) Practice and Training. Practice hand grenades simulate the effects of other hand grenades so that training can be conducted with a reduced chance of injury to personnel or damage to property.

Practice and training grenades are for training personnel in use, care, and handling of service grenades.

b. Identification and use of specific grenades. Grenades are identified by type, color, markings, and their specific use. We will discuss each grenade.

(1) Fragmentation Grenade. M67 Fragmentation Grenade

(a) Identification- The M67 fragmentation grenade has an olive drab body with yellow markings.

(b) Use- The M67 fragmentation grenade is used to disable or kill personnel. Fragments are produced by serrated wire coils fitted to the inside of the grenade body. The grenade can be thrown 35 meters by the average Soldier. The effective killing radius is 5 meters and the effective casualty-producing radius is 15 meters.

**WARNING: Fragments can be dispersed as far as 230 meters, although the killing radius is 5 meters and the casualty-producing radius of the grenade is 15 meters.**

(2) Chemical Grenades.

(a) M18 Colored Smoke Hand Grenade

1. Identification- The M18 has a forest green body with light green markings. The top of the grenade indicates the smoke color. (i.e. Violet, Yellow, Green, and Red)

2. Use- Smoke signal hand grenades are used as ground-to-ground or ground-to-air signaling devices, target or landing zone marking devices, and screening devices for unit movements. The average Soldier can throw the M18 grenade 40 meters. The grenade burns for 70 to 90 seconds with an average burn time of 60 seconds.

**WARNING: Burning type grenades burn oxygen. Standard protective masks filter particles but will not supply oxygen. Therefore, burning grenades should not be used in enclosed or confined spaces.**

(b) AN-M14TH3 Incendiary Hand Grenade

1. Identification- The AN-M14TH3 incendiary grenade has a gray cylinder body with purple markings and a single purple band (current grenades). Under the standard color coding system, incendiary grenades are light red with black markings.

2. Use- The AN-M14 Incendiary grenade is used to start fires or destroy equipment. It can damage, immobilize, or destroy vehicles, weapons systems, shelters, or munitions. The grenade may also be used to start fires in areas containing flammable materials. A portion of the thermite mixture is converted to molten iron, which burns at 4,330 degrees Fahrenheit. The thermite filler can burn for 40 seconds and can burn through 1/8 inch homogenous steel. It produces its own oxygen and will burn under water.

3. The average Soldier can employ the M14 TH3 incendiary grenade by placing the grenade on the target to be destroyed, or by throwing the hand grenade. The M14 weighs 32.0 ounces, and can be thrown 25 meters by the average Soldier. Extreme caution must be taken not to "Cook Off" or "Milk" the grenade before employment.

**WARNING: Avoid looking directly at the grenade as it bursts. The intensity of the light is potentially hazardous to the retina.**

(c) ABC-M7A2 CS Riot-Control Hand Grenades

1. Identification-The ABC-M7A2 have a gray cylinder body with a red band and red markings.

2. Use- This grenade is used to control riots or disable individuals without serious injury. The riot control grenade ABC-M7A2 contains only CS as a filler. The grenades differ only in the amount and form of the CS they contain. The grenade can be thrown 40 meters by the average Soldier. The grenade produces a cloud of irritant agent for 15 to 35 seconds.

**CAUTION: Riot-control grenades throw sparks up to 1 meter from emission, which can ignite vegetation and other flammable materials.**



(d) M106 Screening Obscuration Devise-Visual Retracted Terrain (SOD-Vr)

1. Identification- The M106 SOD-Vr is a canister shape grenade with a light green body and black writing, with a single brown band three quarters the way down the body of the grenade which indicated a "Low order explosive capability". The grenade is surrounded by a Mylar coating its nomenclature is on the front of the grenade reads "GREN HAND SMK VIS RESTRICTED TERRAIN M106". This grenade has a warning safety label on the front and back of the grenade reading "**WARNING EXPLODES IMMEDIATELY**" and "**DO NOT COOK OFF**" with an orange label. This grenade has a single circular pull ring seated in a confidence clip, and a double tooth safety lever.

2. Use- The M106 is an exploding/bursting type grenade used as a quick obscurant hand grenade for casualty evacuation or to break contact or light of sight.

3. The average Soldier can employ the M106 SOD-Vr 40 meters from the standing or kneeling throwing positions.

(3) Practice and Training Grenades.

(e) M69 Practice Hand Grenade

1. Identification- The M69 has a light blue body with white markings; the safety lever of the M228 Training Practice fuze is light blue with black markings and a brown tip.

2. Use-The M69 practice hand grenade is used for all individual and collective training tasks. The M69 practice hand grenade provides realistic training and familiarizes the Soldier with the functioning and characteristics of the M67 fragmentation hand grenade. The average Soldier can throw the M69 hand grenade 35 meters. After a delay of 4.0 to 5.5 seconds, the M69 emits a small puff of white smoke and makes a loud popping noise. The grenade body can be used repeatedly by replacing the fuze assembly.

**WARNING: The fuze fragments may exit the hole in the base of the grenade body and cause injuries.**

Check on Learning:

Determine if the Trainees have learned the material presented by soliciting Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary:

Conduct a Summary Review.

ELO B - LSA 2. Learning Step / Activity ELO B - LSA 2. Identify U.S. hand grenades practical exercise.

Method of Instruction: Practical Exercise (Hands-On/Written)

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (3:55)(Hand Grenade Cadre/Instructor)

Time of Instruction: 15 mins

Media Type: Actual Equipment

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

The Trainee will identify U.S. Hand Grenades.

**NOTE: Use charts or inert grenades to conduct an exercise on identifying the types and uses of grenades. Each Trainee is expected to learn the distinguishing characteristics of each type of grenade by shape, color and/or markings, and consideration of employment for each type of grenade as outlined in the task.**

Check on Learning:

Determine if the Trainees have learned the material presented by soliciting

Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary: Conduct a Summary Review.

**CHECK ON LEARNING (ELO B):**

QUESTION: What are the five types of hand grenades?

ANSWER:

1. Fragmentation.
2. Chemical.
3. Offensive.
4. Nonlethal.
5. Practice and training.

QUESTION: What is the M67 Fragmentation hand grenade's killing radius?

ANSWER: The killing radius for the M67 frag. is 5 meters.

**NOTE:** The M67 has an effective casualty producing radius of 15 meters and fragments can disperse as far as 230 meters.

QUESTION: What is the description of the M18 colored smoke hand grenade?

ANSWER: The M18 colored smoke is a forest green cylinder with light green marking with one emission hole at the bottom of the grenade with the color of the top indicating the color of the smoke.

**REVIEW SUMMARY(ELO B):**

Conduct a Summary Review

**C. ENABLING LEARNING OBJECTIVE**

<b>ACTION:</b>	Employ hand grenades.
<b>CONDITIONS:</b>	Given a U.S. hand grenade, individual fighting load carrier(FLC), Improved Outer Tactical Vest (IOTV), ballistic helmet, single hearing protection, and ballistic eyes protection.
<b>STANDARDS:</b>	The Trainee will employ the hand grenade from the proper throwing position and engage the target to achieve the intended outcome.
<b>LEARNING DOMAIN - LEVEL:</b>	Psychomotor - Precision
<b>No JPME LEARNING AREAS SUPPORTED:</b>	None

ELO C - LSA 1. Learning Step / Activity ELO C - LSA 1. Employ hand grenades.

Method of Instruction: Demonstration  
 Mode of Delivery: Resident Instruction  
 Instr Type (I:S Ratio): Military - NON-ICH (3:55)\* (Hand Grenade Cadre/Instructor)  
 Time of Instruction: 10 mins  
 Media Type: Actual Equipment / Equipment Based Instruction  
 Other Media: Unassigned  
 Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (\*) is derived from the parent learning object

**INSTRUCTOR NOTE: The following steps (1-5) are the Individual Task Performance steps covered under the Individual Task List. These steps are required to be in the lesson.**

1. Select appropriate hand grenade based on type of target.
2. Select proper throwing position.

**NOTE: You can use five positions to throw grenades - standing, prone-to-standing, kneeling, prone-to-kneeling, and alternate prone. However, if you can achieve more distance and accuracy using your own personal style, do so as long as your body is facing sideways and toward the enemy's position, and you throw the grenade overhand.**

- a. Ensure you have a proper covered position.
  - b. Determine the distance to the target.
  - c. Align your body with the target.
3. Grip the hand grenade.

**NOTE: Do not remove the safety clip or the safety pin until the grenade is about to be thrown.**

- a. Ensure you have a position that provides cover.
- b. Determine the distance to the target.
- c. Align your body with the target.

**NOTE: For left handed throwers the grenade is inverted with the top of the fuze facing downwards in the throwing hand.**

- d. Keep the pull ring away from the palm of the throwing hand so that it can be easily removed by the index or middle finger of the free hand.
4. Prepare the hand grenade.

- a. Tilt the grenade forward to observe the safety clip.
- b. Remove the safety clip by sweeping it away from the grenade with the thumb of the opposite hand.
- c. Insert the index or middle finger of the non-throwing hand in the pull ring until it reaches the knuckle of the finger.

**DANGER: If pressure on the safety lever is relaxed after the safety clip pin are removed, the striker can rotate and strike the primer while the thrower is still holding the grenade. Continuing to hold the grenade beyond this point can result in injury or death.**

- d. Ensure that you are holding the safety lever down firmly.
- e. Twist the pull ring toward the body (away from the body for left handed throwers) to release the pull ring from the confidence clip.

**CAUTION: Never attempt to reinsert a safety pin into a hand grenade during training. In combat, however, it may be necessary to reinsert a safety pin into a grenade. Take special care to replace the pin properly. If the tactical situation allows, it is safer to throw the grenade rather than to trust the reinserted pin.**

- f. Remove the safety pin by pulling the pull ring from the grenade.
5. Throw the hand grenade so it is within the effective range of the target.

- a. Observe the target to estimate the distance between the throwing position and the target area.

**NOTE: In observing the target, minimize exposure time to the enemy (no more than 3 seconds).**

**WARNING: The flight path of the grenade must be checked to make sure no obstacles alter the flight of the grenade or cause it to bounce back toward you.**

- b. Ensure there are no obstacles that can alter or block the flight of the grenade when it is thrown.

c. Confirm body target alignment.

**DANGER: Use cook-off procedures only in a combat environment. In training, never cook off live fragmentation hand grenades or offensive concussion grenades. Never cook off the M84, stun grenade, or smoke grenades. These grenades have short fuze delays (1 to 2.3 seconds) and will cause serious personal injury if cook-off procedures are performed. The grenade must be thrown immediately after count off.**

d. Cook off the hand grenade. (Optional)

**NOTE: Cooking off uses enough of the grenade's 4- to 5-second delay (about 2 seconds) to cause the grenade to detonate above ground or shortly after impact with the target.**

(1) Release the safety lever.

(2) Count "One thousand one, one thousand two".

e. Throw the grenade overhand so that the grenade arcs, landing on or near the target.

**NOTE: To be effective the target must be within the bursting radius of the grenade.**

f. Allow the motion of the throwing arm to continue naturally once the grenade is released.

g. Seek cover to avoid being hit by fragments or direct enemy fire.

**NOTE: If no cover is available, drop to the prone position with your protective head gear facing the direction of the grenade's detonation.**

**INSTRUCTOR NOTE: The following steps will break down the performance steps to a further understanding.**

**NOTE: While the Cadre/Instructor is explaining the following: grenade inspection, grenade stowage, grenade identification, (shape, size, color, and marking), proper right and left hand grip, safety clip removal, confidence clip disengagement, arming procedures, pull pin extraction, and throwing positions (Standing, Kneeling, and Alternate Prone), the demonstrator(s) should be posted and performing the step(s) as it is being explained.**

a. The Grip- The safest and easiest way to grip a hand grenade for throwing is to hold it as follows:

**WARNING: If pressure on the safety lever is relaxed after the safety clip and safety pin have been removed, it is possible that the striker can rotate and strike the primer while the thrower is still holding the grenade. This is called "milking" the grenade. The thrower must be instructed to maintain a firm grip and enough pressure on the safety lever so that the striker cannot rotate.**

(1) For right-handed personnel, the grenade is held upright in the throwing hand with the safety lever placed between the first and second joint of the thumb and the pull ring away from the palm of the throwing hand so that it can be easily removed by the index finger or middle finger of the free (non-throwing) hand.

(2) For left-handed personnel, the grenade is held inverted in the throwing hand with the safety lever placed between the first and second joint of the thumb with the pull ring facing away from the palm of the throwing hand so that it can be easily remove by the index finger or middle finger of the free (non-throwing) hand.

**WARNING: Left-handed personnel must make sure they hold smoke grenades away from their face.**

b. Body positioning and arming.

**NOTE: After securing the proper grip on the grenade, the Soldier will bring both hands into the working area "Chin to Chest-Name Tape Level" before proceeding with the arming procedure.**

(1) No matter which position is used (Standing, Kneeling or Alternate Prone) when throwing a hand grenade, a comfortable and normal feeling is necessary. The two most important points in accurate throwing are body-target alignment and eye-target focus. The body should be aligned with the target throughout the throw, while completing the full follow through and taking cover. Ensure that the arming sequence is properly followed each time a grenade is thrown:

(a) Step 1- Secure hand grenade in the proper right or left hand grip.

(b) Step 2- Remove the secondary safety clip. To disengage the pull ring from the confidence clip, right hand Soldier palm facing upward, left hand Soldier palm facing downward, insert index or middle finger into the pull ring, and turn the pull ring 90 degrees clockwise towards the body for right hand throwers, away from the body for left hand throwers to disengage the pull ring from the confidence clip (if present). Pull the pull ring with safety pin straight out of the grenade.

(c) Step 3- Bring the grenade 4-6 inches behind the throwing ear, maintain body target alignment and eye-target focus.

(d) Step 4- Throw the grenade, and seek cover until detonation.

(2) Standing- This position is the most desirable and natural one from which to throw grenades. It allows an individual to obtain the greatest possible throwing distance. The standing position is normally used when occupying a fighting position or during operations in fortified positions or urban terrain. Throwing from this position is accomplished as follows:

(a) Step 1- Assume a natural stance with your weight balanced equally on both feet. Secure the grenade in the proper right or left hand grip, bring both hands into the working area before proceeding with the arming procedures.

(b) Step 2- Remove the secondary safety clip. To disengage the pull ring from the confidence clip, right hand Soldier palm facing upward, left hand Soldier palm facing downward, insert index or middle finger into the pull ring, and turn the pull ring 90 degrees clockwise towards the body for right hand throwers, away from the body for left hand throwers to disengage the pull ring from the confidence clip (if present). Pull the pull ring with safety pin straight out of the grenade.

(c) Step 3- Bring the grenade 4-6 inches behind the throwing ear, maintain body target alignment and eye-target focus.

(d) Step 4- Employ the grenade, drop to the prone position or behind available cover to minimize exposure to fragmentation until detonation.

(3) Kneeling- This position reduces the distance that a grenade can be thrown. It is used primarily when the Soldier has only a low wall, a shallow ditch, or similar cover to protect him. Throwing from this position is accomplished as follows:

(a) Step 1- Assume the kneeling position: right hand thrower; place the left knee on ground (move knee/foot in or out to stabilize throwing position) right leg extended to the rear with the side of the boot firmly against the ground, left hand throwers right knee on the ground (move knee/foot in or out to stabilize throwing position), left leg extended to the rear with the side of the boot firmly against the ground.

(b) Step 2- Remove the secondary safety clip. To disengage the pull ring from the confidence clip, right hand Soldier palm facing upward, left hand Soldier palm facing downward, insert index or middle finger into the pull ring, and turn the pull ring 90 degrees clockwise towards the body for right hand throwers, away from the body for left hand throwers to disengage the pull ring from the confidence clip (if present). Pull the pull ring with safety pin straight out of the grenade.

(c) Step 3- Bring the grenade 4-6 inches behind the throwing ear, maintain body target alignment and eye-target focus.

(d) Step 4- Employ the grenade, drop to the prone position or behind available cover to minimize exposure to fragmentation until detonation.

(4) Alternate Prone-This position reduces both distance and accuracy. It is only used when an individual is pinned down by hostile fire and is unable to rise to engage his target. There are four steps in the process of throwing from a prone position.

(a) Step 1- Lie on your back with your body perpendicular to the grenades intended line of flight, right hand throwers cock the right leg, left hand thrower cock the left leg to make knee to knee contact, with the side of the boot braced firmly against the ground. Bring the throwing hand with grenade and non-throwing hand into the working area.

(b) Step 2- Remove the secondary safety clip. To disengage the pull ring from the confidence clip, right hand Soldier palm facing upward, left hand Soldier palm facing downward, insert index or middle finger into the pull ring, and turn the pull ring 90 degrees clockwise towards the body for right hand throwers, away from the body for left hand throwers to disengage the pull ring from the confidence clip (if present). Pull the pull ring with safety pin straight out of the grenade.

(c) Step 3- With your free hand, grasp any object that is capable of giving you added leverage to increase your throwing distance, and turn your head and eye in the direction of the throw.

(d) Step 4- (Pull-Push-Throw) Pull with your non-throwing hand, push off with the foot against the ground, and throw the grenade at the same time. Allowing the momentum of the throw to roll you over into the prone position until detonation.

c. Employment Considerations.

(1) Soldiers employ hand grenades throughout the spectrum of warfare to conceal positions and to inflict greater casualties.

(2) When employing any type of hand grenade, Soldiers must ask themselves the following questions:

(a) What types of grenades do the rules of engagement (ROE) permit and restrict?

(b) What effect is desired (e.g., kill, stun, obscure, destroy equipment, mark a location, etc.)?

(c) Does the structural integrity of the room and building permit the types of grenades selected for use?

**WARNING: DO NOT use fragmentation or concussion grenades in buildings that have walls of thin veneer material. Fragmentation grenade particles can penetrate partitioned walls.**

(d) Will the scheme of maneuver permit the use of fragmentation grenades and not cause fratricide?

(e) Will the type of grenade used cause a fire in an undesired location?

Check on Learning:

Determine if the Trainees have learned the material presented by soliciting Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary:

Conduct a Summary Review.

ELO C - LSA 2. Learning Step / Activity ELO C - LSA 2. Employ hand grenades practical exercise.

Method of Instruction: Practical Exercise (Hands-On/Written)

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (3:55)\* (Hand Grenade Cadre/Instructor)

Time of Instruction: 15 mins

Media Type: Actual Equipment

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (\*) is derived from the parent learning object

The Trainee will perform "Employ Hand Grenades".

Check on Learning:

Determine if the Trainees have learned the material presented by soliciting Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary:

Conduct a Summary Review.

**CHECK ON LEARNING (ELO C):**

**QUESTION:** What are the two most important points for accurate throwing of a hand grenade?

**ANSWER:** Body target alignment and eye target focus.

**QUESTION:** What is the arming sequence that is used every time you throw a hand grenade?

**ANSWER:**

1. Remove the safety clip.
2. Disengage pull ring from confidence clip, right hand Soldier palm facing skyward, left handed Soldier palm facing downward, insert index or middle finger, turn pull ring towards body (clockwise) for right hand Soldiers and away from the body for left handed Soldier (if present).
3. Pull the pull ring with safety pin.
4. Throw the hand grenade.

**QUESTION:** What are the 3 positions in which you will throw a hand grenade from?

**ANSWER:** Standing, Kneeling, and Alternate Prone.

**REVIEW SUMMARY(ELO C):**

Conduct a Summary Review.

**D. ENABLING LEARNING OBJECTIVE**

<b>ACTION:</b>	Negotiate the Hand Grenade Qualification Course (HGQC).
<b>CONDITIONS:</b>	During daylight, on a Hand Grenade Qualification Course consisting of 7 stations, with individual Fighting load Carrier (FLC), Improved outer tactical vest (IOTV), ballistic helmet, single hearing protection, ballistic eyes protection, and individual weapon, given ten M69 fuzed practice grenades.
<b>STANDARDS:</b>	To receive a "GO" on the Hand Grenade Qualification Course the Trainee must achieve a passing score for 5 out of the 7 stations. <b>NOTE:</b> <ol style="list-style-type: none"> <li>1. Passed all 7 stations - EXPERT.</li> <li>2. Passed 6 of 7 stations - FIRST CLASS.</li> <li>3. Passed 5 of 7 stations - SECOND CLASS.</li> <li>4. Passed 4 or less - UNQUALIFIED.</li> </ol>
<b>LEARNING DOMAIN - LEVEL:</b>	Psychomotor - Precision
<b>No JPME LEARNING AREAS SUPPORTED:</b>	None

ELO D - LSA 1. Learning Step / Activity ELO D - LSA 1. Safety Brief for Hand Grenade Qualification Course.

Method of Instruction: Discussion (Small or Large Group)  
 Mode of Delivery: Resident Instruction  
 Instr Type (I:S Ratio): Military - NON-ICH (3:55)(Hand Grenade Cadre/Instructor)  
 Time of Instruction: 5 mins  
 Media Type: Equipment Based Instruction  
 Other Media: Unassigned  
 Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

**NOTE: Cadre/Drill Sergeant will conduct a safety brief prior to Trainees negotiating Hand Grenade**

**Qualification Course.**

Check on Learning: Determine if the Trainees have learned the material presented by soliciting Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary: Conduct a review summary.

ELO D - LSA 2. Learning Step / Activity ELO D - LSA 2. Conduct Hand Grenade Qualification Course.

Method of Instruction: Practical Exercise (Hands-On/Written)

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (3:55)(Hand Grenade Cadre/Instructor)

Time of Instruction: 3 hrs 5 mins

Media Type: Actual Equipment

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

**TRANSITION:** This period of instruction is designed to engage targets in a simulated combat environment.

You will be required to negotiate the course and engage each target with a practice grenade while being supported by your buddy. You in turn must support your buddy as he engages the target with his grenade.

Check on Learning: Determine if the Trainees have learned the material presented by soliciting Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary: Conduct a Summary Review.

**CHECK ON LEARNING (ELO D):**

**1. QUESTION:** When and for how long do you apply the cook-off method?

**ANSWER:** The cook-off method is applied for bunkers, buildings, caves, etc. and should only be cooked-off for a maximum of 2 seconds.

**2. QUESTION:**How close must the grenade detonate to qualify as a target hit for dismounted troops?

**ANSWER:** The grenade must detonate within 5 meters of dismounted troops to qualify as a target hit.

**3. QUESTION:**What should you do when receiving hand grenades?

**ANSWER:** Inspect the grenades for defects.

**REVIEW SUMMARY(ELO D):**

Conduct a Summary Review.

**E. ENABLING LEARNING OBJECTIVE**

<b>ACTION:</b>	Employ a live fragmentation hand grenade.
<b>CONDITIONS:</b>	On a hand grenade range, given 2 live fragmentation hand grenades, individual Fighting Load Carrier (FLC), Improved outer tactical vest (IOTV), ballistic helmet, single hearing protection, and ballistic eye protection. <b>NOTE: The Trainee must have practiced in a mock throwing pit with training grenades prior to</b>



	<b>throwing two live hand grenades.</b>
<b>STANDARDS:</b>	<p>Trainees will employ live hand grenades by:</p> <ol style="list-style-type: none"> <li>1. Safely arm and throw each grenade out of the throwing pit.</li> <li>2. Comply with pit safety NCO instructions.</li> </ol>
<b>LEARNING DOMAIN - LEVEL:</b>	Psychomotor - Precision
<b>No JPME LEARNING AREAS SUPPORTED:</b>	None

ELO E - LSA 1. Learning Step / Activity ELO E - LSA 1. Safety Brief for Throwing a live Hand Grenade.

Method of Instruction: Discussion (Small or Large Group)

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (3:55)\* (Hand Grenade Cadre/Instructor)

Time of Instruction: 5 mins

Media Type: Equipment Based Instruction

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (\*) is derived from the parent learning object

**NOTE: Hand Grenade Cadre/Instructor will conduct a safety brief prior to Trainees entering live Hand Grenade Bay.**

1. Perform.

a. Cadre will conduct Mock-Bay safety briefing.

b. Each Trainee is required to arm and employ one M69 practice hand grenade with M228 training practice fuze IAW with the Pit NCO's commands and without assistance.

**NOTE: The Trainee will wear individual body armor with attachments during all phases of hand grenade training, to include ballistic helmet, eye protection, and single hearing protection.**

2. Live Bay Pit.

a. Under the supervision of a live ammunition NCO and RSO, the Trainee will attach two live fragmentation grenades to their equipment, or secure a grenade in the proper right of left hand grip based on the throwing hand, and carry the second grenade in the bottom half of the fiber shipping canister in the non-throwing hand. When told to do so, the Trainee will range walk directly to their assigned pit, sounding off with their throwing hand. At no time after the live grenades are attached or placed in the Trainee's throwing hand will the Trainee be out of sight of the issuing NCO and Pit NCO.

b. When the Trainee arrives at the throwing pit, they will stand in the center of the pit with their back to the left wall if right-handed, or to the right wall if left-handed. If the Trainee has a grenade in the bottom shipping canister before entering the throwing pit, they will hand the grenade to the Pit NCO. This procedure allows the Pit NCO to enter the pit and face the Trainee to observe their actions. They will continue by following all commands from the safety NCO in their pit and the safety tower.

**NOTE: The Pit NCO will constantly observe the movements of the Trainee.**

c. Control of throwing pits should be centralized, such as a tower or observation bunker.

d. When the Trainee is in a standing position and prepared to remove the grenade from the ammo pouch, the pit NCO will announce, "Remove the grenade from ammo pouch and assume the proper grip".

e. After the removal of the grenade from the ammo pouch the pit NCO directs the Trainee to "Remove the

safety clip, disengage the pull ring from the confidence clip, extract the pull ring, and prepare to throw".

**NOTE: From this time on, the pit safety NCO does not remove their eyes from the Trainee's throwing hand until the completion of the throw.**

f. Actions of the Trainee on the command Prepare to Throw:

(1) With the throwing hand and non-throwing hand in the chin/chest working area, the Trainee will remove the safety clip (Secondary safety).

(2) Right hand throws (Palm Skyward), Left hand throws (Palm Downward), index or middle finger extended, insert the finger into the pull ring, turn the pull ring 90° clockwise (Right hand: Towards the body), (Left Hand: Away from the body) to disengage the pull ring from the confidence clip.

(3) Extract the pull ring and assume the standing throwing position.

(4) On the Pit NCO's command, the Trainee employs the grenade into the live bay target area, then takes a knee in the middle of the pit.

**WARNING:**

- If a grenade is dropped in the pit, the Pit NCO will announce "grenade in the pit". The Pit NCO will grab the Trainee the quickest practical means, (i.e., body armor, ACU shirt sleeve, etc.) and force the Trainee over the back wall and assume the prone position along with the Soldier. The Pit NCO will lie on top of or beside the Trainee to prevent the Trainee from getting up or running away. The Pit NCO is authorized to use the requisite force necessary to get the Trainee safely out of the pit.

- If a grenade is dropped over the back wall of the pit, the pit NCO announces "grenade outside of the pit". Once the Pit NCO knows for sure that the grenade is out of the pit, the Pit NCO will grab the Trainee by any practical means and force the Trainee to the ground inside the pit. This will prevent the Trainee from getting up or running away. The Pit NCO will assume the prone position covering the Trainee or beside the Trainee. The Pit NCO is authorized to use the requisite force necessary to ensure the safety of the Trainees and themselves.

(5) When the Trainee is ready to throw, the Pit NCO will signal the tower by raising their arm, indicating that the Trainee has armed the grenade and is ready to throw.

(6) When all throwing pits are ready, the tower safety NCO commands "THROW", and the pit safety NCO repeats the command "THROW".

**NOTE: Only one pit per bay will throw at a time. The tower NCO will preface his/her command of "THROW" by identifying which pits are authorized to throw (e.g. Pits one, three and five, Prepare to throw, THROW).**

**NOTE: The throwing bays may have multiple throwing pits. Active throwing pits must be separated by an earth berm.**

(7) The Trainee immediately throws the grenade and then takes a knee.

**VALUES NOTE: You will demonstrate the Army value of personal courage by throwing two live fragmentation grenades, facing fear, danger, or adversity (physical and moral) with courage.**

**WARNING: If a Trainee releases the safety lever but fails to throw the grenade, the Pit NCO forcefully repeats the command to throw, and if necessary, the Pit NCO throws the grenade himself.**

(8) Once the tower has given the clear signal, the Trainee prepares to throw the second grenade repeating the procedures done during the first throw.

(9) The Pit NCO directs the Trainee to exit the live pit area after the final "ALL Clear, All CLEAR" has been given from the tower.

**WARNING: "Cook-off" or "Milk" of live hand grenades is not authorized or condoned. Pit NCO's will remind the Trainee to maintain a firm grip of the grenade throughout the arming sequence and**

**employment procedure.**

Check on Learning: Determine if the Trainees have learned the material presented by soliciting Trainee questions and explanations. Ask the Trainees questions and correct misunderstandings.

Review Summary: Conduct a summary review.

ELO E - LSA 2. Learning Step / Activity ELO E - LSA 2. Throw live hand grenades.

Method of Instruction: Practical Exercise (Hands-On/Written)

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (3:55)\* (Hand Grenade Cadre/Instructor)

Time of Instruction: 3 hrs 10 mins

Media Type: Actual Equipment

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (\*) is derived from the parent learning object

**TRANSITION:** During this period of instruction, you will throw two live hand grenades. Previous instruction emphasized the proper safety checks, identifying grenades, and engaging combat type targets. The practice grenades with fuzes function very similar to the live fragmentation grenades. The exception is that the live grenade is a highly explosive weapon. The live fragmentation grenade is safe when all safety procedures are followed. The required safety and arming procedures will be practiced when you throw two practice grenades with fuzes from the mock pit. The same procedures will be used when throwing the live grenades from the live pit. The grenade is used frequently in combat situations to destroy the enemy. It will be a part of your equipment in all combat operations. Respect what it can do but do not fear using it.

Check on Learning: Determine if the Soldiers have learned the material presented by soliciting Soldier questions and explanations. Ask the Soldiers questions and correct misunderstandings.

Review Summary: Conduct a Summary Review

**CHECK ON LEARNING (ELO E):**

**1. QUESTION:** What is "milking a grenade?"

**ANSWER:** The unintentional releasing of pressure from the safety lever, leading to premature activation of the fuze and grenade detonation.

**2. QUESTION:** Where should you hold the grenade to begin the arming procedure?

**ANSWER:** The grenade should be held under the chest/chin.

**3. QUESTION:** After you have thrown your grenade, what must you immediately do?

**ANSWER:** Immediately take cover.

**REVIEW SUMMARY(ELO E):**

Conduct a Summary Review.

## SECTION IV. SUMMARY

Method of Instruction:	Discussion (Small or Large Group)
Mode of Delivery:	Resident Instruction
Instr Type(I:S Ratio):	Military - NON-ICH (1:200) (Hand Grenade Cadre/Instructor)
Time of Instruction:	5 mins

### Check on Learning

Conduct a check on learning by asking questions, soliciting answers from Trainees and correcting misunderstandings. The following questioning prompts can be utilized to determine if the Trainees have achieved the desired level of learning and are capable of applying the information taught during this lesson:

**QUESTION:** What are the five common types of grenade usage?

**ANSWER:**

- 1) Disable or kill personnel.
- 2) Signal personnel.
- 3) Screen or provide concealment.
- 4) Start fires or destroy equipment.
- 5) Control riots or disable personnel without serious injury.

**QUESTION:** What must you inspect the grenade for to determine it is safe?

**ANSWER:**

- 1) Ensure the fuze is not unscrewed from the body of the grenade.
- 2) Ensure the safety clip is in the correct position. If not, correct defect and reset safety clip. If the safety clip cannot be found or reseated, turn in grenade to issue point.
- 3) Check the safety pin. If the pin is partially removed, turn it in to the issue point.
- 4) Check the safety ring. Reject the grenade if the safety ring is cracked.
- 5) Check the safety lever and ears. Check for bent or broken safety lever or ears. Reject the grenade if the lever or ears are bent, broken or mutilated to the point the Soldier cannot secure the proper grip.

**NOTE: Both safety lever ears must be seated under the fuze lug, pointing upward, and passing the lug center line.**

- 6) Check the lever. Check for bent or broken safety lever. Reject the grenade if the lever is broken.
- 7) Check for dirt. If the grenade is dirty or grimy, wipe it with a damp dry cloth.

### Review/ Summary

Soldiers will be provided immediate feedback on their performance.

## SECTION V. STUDENT EVALUATION

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### Testing Requirements

Performance on this terminal learning objective will be evaluated with a hands-on end-of-test, HGQC, and reinforced during the field training exercise. Trainees must be able to negotiate the HGQC and be able to satisfactorily accomplish the tasks in a field environment.

**NOTE:** Refer Trainee to the Trainee Evaluation Plan.

### Feedback Requirements

- a. Schedule and provide immediate feedback in context to the material presented. Correct Trainee misunderstandings.
- b. Provide remedial training as needed.

**Appendix A - Viewgraph Masters**

**Hand Grenades (BCT)**  
**071-BT071081 / Version 5.02 ©**

<b>Sequence</b>	<b>Media Name</b>	<b>Media Type</b>
None		

## Appendix B - Assessment Statement and Assessment Plan

**Assessment Statement: None.**

**Assessment Plan: None.**

**Appendix C - Practical Exercises and Solutions**

**PRACTICAL EXERCISE(S)/SOLUTION(S) FOR LESSON 071-BT071081 Version 5.02 ©**

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**Appendix D - Student Handouts**

**Hand Grenades (BCT)**  
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<b>Sequence</b>	<b>Media Name</b>	<b>Media Type</b>
None		