

Non-Lethal Weapons Capabilities within Detainee Operations
CD 500 / Version 2005
30 Jun 2005

SECTION I. ADMINISTRATIVE DATA

| | | | |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------|
| All Courses Including This Lesson | <u>Course Number</u> | <u>Version</u> | <u>Course Title</u> |
| | | 2005 | Detainee Operations |
| Task(s) Taught(*) or Supported | <u>Task Number</u> | <u>Task Title</u> | |
| | | <u>INDIVIDUAL</u> | |
| | 181-906-1505 (*) | Conduct Combat Operations According To The Law Of War | |
| | 191-376-4119 (*) | Operate Riot Control Agent Dispersers (M33A1/M36/M37) | |
| | 191-376-4122 (*) | Position Yourself in Riot Control Formations | |
| Reinforced Task(s) | <u>Task Number</u> | <u>Task Title</u> | |
| | 191-381-1324 (*) | Apply Priorities of Force Within a Detainment Facility | |
| Academic Hours | The academic hours required to teach this lesson are as follows: | | |
| | <u>Mobilization Hours/Methods</u> | | |
| | Test | 3 hrs | 5 mins / Conference / Discussion |
| | Test Review | 0 hrs | |
| | | 0 hrs | |
| | Total Hours: | 3 hrs | 5 mins |
| Test Lesson Number | <u>Hours</u> | <u>Lesson No.</u> | Testing (to include test review) _____ _____ <u>N/A</u> _____ |
| Prerequisite Lesson(s) | <u>Lesson Number</u> | <u>Lesson Title</u> | |
| | None | | |
| Clearance Access | Security Level: "For Official Use Only" Requirements: There are no clearance or access requirements for the lesson. | | |
| Foreign Disclosure Restrictions | FD7. This product/publication has been reviewed by the product developers in coordination with the Fort Leonard Wood, Missouri 65473 foreign disclosure authority. This product is NOT releasable to students from foreign countries. | | |

References

| <u>Number</u> | <u>Title</u> | <u>Date</u> | <u>Additional Information</u> |
|----------------|------------------------------------------------------------------|-------------|-------------------------------|
| FM 19-15 | Civil Disturbances. | 25 Nov 1985 | |
| FM 3-19.40 | Military Police Internment/Resettlement Operations. | 01 Aug 2001 | |
| STP 19-95C1-SM | MOS 95C, Corrections Specialist, Skill Level 1, Soldier's Manual | 30 Sep 2003 | |
| FM 3-22.40 | Tactical Employment of NLWs | 15 Jan 2003 | |

Student Study Assignments

Read STP 19-95C1-SM, pp. 3-276 – 3-282; pp. 3-291 – 3-296.

Instructor Requirements

One primary instructor.

Additional Support Personnel Requirements

| <u>Name</u> | <u>Stu Ratio</u> | <u>Qty</u> | <u>Man Hours</u> |
|-------------|------------------|------------|------------------|
| None | | | |

Equipment Required for Instruction

| <u>Id Name</u> | <u>Stu Ratio</u> | <u>Instr Ratio</u> | <u>Spt</u> | <u>Qty</u> | <u>Exp</u> |
|--------------------------------------------------------|------------------|--------------------|------------|------------|------------|
| 6515-01-481-1706 Computer System | | | | | |
| 6730-00-224-9819 Screen, Projection, BM-6RB S5 | | | | | |
| 6730-01-T54-0767 Projector, Multimedia, Eiki LC-X1U | | | | | |
| *7110-00-T23-8813 Chalkboard, Dry Eraser | | | | | |

Materials Required

Instructor Materials:
Viewgraphs.

Student Materials:
Pen/pencil and notebook.

Classroom, Training Area, and Range Requirements

Classroom, General Purpose, 600 SF, 20 PN

Ammunition Requirements

| <u>Id</u> | <u>Name</u> | <u>Exp</u> | <u>Stu Ratio</u> | <u>Instr Ratio</u> | <u>Spt Qty</u> |
|-----------|-------------|------------|------------------|--------------------|----------------|
| None | | | | | |

Instructional Guidance

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

NOTE: **All Detainees are to be treated humanely, with dignity and respect, at all times.**

**Proponent
Lesson Plan
Approvals**

| <u>Name</u> | <u>Rank</u> | <u>Position</u> | <u>Date</u> |
|--------------|-------------|-----------------|-------------|
| DENNIS, Wade | LTC(P) | Director, DTLD | |

SECTION II. INTRODUCTION

Method of Instruction: Conference / Discussion
 Instructor to Student Ratio is: _
 Time of Instruction: 5 mins
 Media: -None-

Motivator

NOTE: Display viewgraph CD 500-VG#1 (Non-Lethal Weapons Capabilities within Detainee Operations)

NOTE: Instructors are required to incorporate Contemporary Operating Environment (COE) issues and reinforce VALUES in this lesson to include scenarios and practical exercises. There are key variables that can be expected in virtually every conflict that serve as building blocks for the operational environment (OE). They are interrelated and sometimes overlap, and serve collectively as the foundation for understanding COE. Information can come from CALL (Center for Lessons Learned) <http://call.army.mil> or any media source including newspaper/magazine articles, television/radio information, law enforcement/field training circulars, etc. and should be current and relevant to the training. Do not violate any copyright or reproduction laws.

The eleven variables are:

- 1. Physical environment**
- 2. Nature and stability of the state**
- 3. Military capabilities**
- 4. Technology**
- 5. Information**
- 6. External organizations**
- 7. Social demographics**
- 8. Regional Relationships**
- 9. National will**
- 10. Time**
- 11. Economics**

NOTE: Display viewgraphs CD 500-VG#2 (Terminal Learning Objective) and CD 500-VG#3 (Administrative Information)

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 non-lethal capabilities within detainee operations. |
| Conditions: | In a classroom environment, given instruction. |
| Standards: | Employ non-lethal capabilities within detainee operations in accordance with local SOP. |

Safety Requirements

No major considerations.

Risk Assessment Level

Low

Environmental Considerations

NOTE: It is the responsibility of all Soldiers and DA civilians to protect the environment from damage.

Caring for the environment begins with the Army's vision of environmental responsibility. The following vision statement describes what the Army expects of all Soldiers and leaders:

Vision Statement: *"The Army will integrate environmental values into its mission in order to sustain readiness, improve the Soldier's quality of life, strengthen community relationships, and provide sound stewardship of resources."*

Taking care of the environment protects health, safety, and natural resources. For example, when fuel spills on the ground, it soaks into the soil, poisons plants, and eventually enters streams and lakes that supply drinking water. (See [FM 3-100.4](#) for more information.)

Caring for the environment also supports the Army mission. Costly environmental cleanups detract from Army readiness. During war, many wise tactical, medical, or operations-security (OPSEC) practices are also good environmental practices. Handling fuels safely, maintaining vehicles, disposing of solid waste/hazardous waste (HW), and managing and turning in ammunition properly are sound environmental and tactical considerations that carry over from training into combat operations.

Many practices that damage the environment waste time and do not lead to success in combat. One example occurred during the Gulf War when Iraqi Soldiers set fire to Kuwaiti oil fields and poured millions of gallons of crude oil into the Persian Gulf. The Iraqi Army deliberately damaged environmental resources and wasted valuable time and effort on activities that did not stop the allies' advance. Remember, environmental stewardship does not prevent the Army from fighting and winning wars—it supports the Army mission.

Training will be conducted in the proper designated areas only. This ensures natural and environmental resources are maintained properly for continued training realism. All spills of hazardous property and POL products will be reported to the appropriate environmental office. The activity responsible for the spill will contain the spill to reduce further environmental and training area degradation. Equipment will be operated to conform to environmental operating permits. Live foliage will not be used as camouflage material. Improper disposal of trash and refuse, inadequate cleanup of training areas pollutes ground water resources, and may result in a potential health or safety hazard.

References: Field Manual 3-100.4/MCRP 4-11B, Environmental Considerations in Military Operations, dated 15 June 2000; w/change #1 dated 11 May 2001.

Training Circular 3-34.489, The Soldier and the Environment, dated 8 May 2000; with change number 1, dated 26 October 2001.

Evaluation

None.

Instructional
Lead-In

NOTE: Display viewgraph CD 500-VG#4 (Historical Background)

As early as the 1960's, law enforcement have experimented with and using Non-Lethal Blunt Munitions. Wood batons and Beanbag rounds were used to against rioters in cities and campuses across the country because of the United States involvement in Viet Nam and Cambodia. At that time there was very little, if any, thought put into authorized incidents of "deadly force" or rules of engagement. People were being severely hurt unnecessarily.

1. The United States military involvement in places such as Haiti, Somalia, Bosnia and Kosovo where the mission requirements in dictate a need for a *less than lethal* approach. Non-lethal munitions requirements where designed to meet the many needs of our armed forces in these "New" environments.
2. It is the intent of non-lethal munitions to "modify behavior" of aggressors in a hostile environment. Often, proclamations are issued and ignored. Unless some "action" is taken when ultimatums are issued, we know crowds will take that as a sign of weakness and a victory.
3. Non-lethal munitions provide a standoff range. If, as a control force, we can force a crowd to do what we want without coming into to direct contact with them, we have won the day. The greater the distance that we can keep from violent rioters or protesters, the safer it is for all parties. Distance is safety!
4. Non-lethal munitions create a *pause* in confrontation. This pause serves to give the controlling force an element of surprise, distracting the crowd from seeing what we are about to do. This, of course, gives our troops the greater advantage, giving us time to further assess the whole situation.
5. **Most importantly**, non-lethal munitions give the Commander additional options, alternatives or "new *tools*" to draw from in his choice of use of force options. But, **Non-Lethal munitions are not a replacement for lethal force!**

NOTE: Display viewgraph CD 500-VG#5 (Historical Background, cont.)

In the early 1990's the Department of Defense began to seriously test and evaluate Non-lethal munitions and other less lethal tools because of it's new operational tempo. Missions consisting mostly of Peace-Making, Peace Keeping and Humanitarian became the focus of the US Military Forces.

NOTE: Display viewgraph CD 500-VG#6 (Historical Background, cont.)

In 1995, 1 MEF under the command of Lt Gen Anthony Zinni was responsible for protecting the final withdrawal of forces from Somalia. The requirement of using non-lethal munitions was a controversial issue. At the request of General Zinni, a capability set was quickly assembled and fielded. It was brought to the theatre. Trainers of the capability set were Military Police personnel, civilian law enforcement personnel and Marines attached to 1 MEF's Special Operations Training Group (SOTG). This consolidated team quickly trained Marine forces attached to the Marine Expeditionary Unit (MEU) in the use of the equipment and munitions. Mogadishu was the first environment where Marines employed these new Non-lethal tools and technology. The employment enjoyed only marginal success, but this aggressive support by 1 MEF did add credibility to the non-lethal effort and the obvious need.

SECTION III. PRESENTATION

1. Learning Step / Activity 1. Use of non-lethal systems.

Method of Instruction: Conference / Discussion
Time of Instruction: 10 mins
Media: -None-

NOTE: Display viewgraph CD 500-VG#7 (Non-Lethal Munitions Intent)

a. Non-lethal systems are used to:

- (1) Modify behavior without causing serious injury or death.
- (2) Incorporate safety for Soldiers by creating a "Stand-Off" distance.
- (3) Provide a distraction.
- (4) Provides the commander with an alternative use of force capability.

NOTE: NLW by no means are meant to replace lethal capability!

NOTE: Display viewgraph CD 500-VG#8 (Use of Force Applications)

b. The Force Continuum

- (1) Based on the types and frequency of missions US Forces have been involved in for more than ten years, every unit recognizes and has had to operate under some type of force continuum. The Force Continuum options correlate to varying levels of justification based on the level of force used. Before, only specialty units and Military Police were familiar with the concept of operating within a "Force Continuum" concept
- (2) Now all units must conform to the "train for war, but operate under rules of engagement" mentality. It's up to everyone to know and operate under these new rules and often-restrictive engagement requirements.

NOTE: Display viewgraph CD 500-VG#9 (Impact Munitions/Force Continuum)

c. Rules of Engagement will also dictate what type and degree of force that will be used to control any given mission.

- (1) In all types of missions, the potential for a lethal outcome is possible. If used improperly, in the hands of an untrained Troop, a situation of excessive force used could arise.

INSTRUCTOR NOTE: As trainers, it is vitally important that we teach our Troops these concepts of the force continuum and where impact munitions fit in. Secondly, "how" to use these new tools called non-lethal munitions. What are their capabilities, characteristics and under what circumstances do you them? These will be major challenge to you in training.

- (2) The actual need to use non-lethal munitions may fluctuate depending on the situation. The force applied will continually change as the levels of threat present themselves. As the threat increases, so does our level of force; as the threat decreases so does our level of force.

NOTE: Display viewgraph CD 500-VG#10 (Review)

d. Review.

- (1) Briefly review the learning activity.
- (2) Solicit student questions.
- (3) Correct student misunderstandings.

TRANSITION: Knowing that the force continuum can constantly change will enhance our understanding of the degree of force to apply. Now let's cover the types of non-lethal munitions.

NOTE: Conduct a check on learning and summarize the learning activity.

2. Learning Step / Activity 2. Categories of non-lethal munitions.

Method of Instruction: Conference / Discussion
Time of Instruction: 5 mins
Media: -None-

NOTE: Display viewgraph CD 500-VG#11 (Blunt Munitions)

- a. There are two areas in which non-lethal munitions can be categorized. The first type we will talk about is the non- flexible and flexible projectile. Next, are the single and multiple projectiles.

NOTE: Display viewgraph CD 500-VG#12 (Non-Flexible)

- (1) Non-Flexible projectiles are generally composed of rigid or semi-rigid material. These projectiles are usually comprised of rubber, or dense foam. Examples of non-flexible projectiles are the rubber ball rounds, fin stabilized round, sponge grenade and the foam baton round.

NOTE: Display viewgraph CD 500-VG#13 (Flexible)

- (2) Flexible projectiles are generally composed of lead silica or sand filled cloth bags or a membrane containing a gelatin like substance. Characteristically they conform to the contour of the surface they strike. Example of a flexible projectile is the 12ga. beanbag round.

NOTE: Display viewgraph CD 500-VG#14 (Single Projectiles)

- b. The second type of munitions is single and the multiple projectiles.

- (1) Single Projectiles are rounds that launch one projectile. These rounds are generally intended for an individual target but may be used for area targets depending on the range. Primary purpose is to affect one target.

NOTE: Display viewgraph CD 500-VG#15 (Multiple Projectiles)

- (2) Multiple projectiles are rounds that launch more than one projectile. These rounds are generally intended for area targets but may be used for point targets at closer ranges. Primary purpose is to affect multiple targets.

NOTE: Display viewgraph CD 500-VG#16 (Review)

c. Review.

- (1) Briefly review the learning activity.
- (2) Solicit student questions.
- (3) Correct student misunderstandings.

TRANSITION: So, we now know that there are two ways to classify non-lethal rounds. First, there are both flexible and non-flexible types of rounds. Second, there are single and multiple projectile rounds. Let's look deeper now into the characteristics and specifications of these rounds.

NOTE: Conduct a check on learning and summarize the learning activity.

3. Learning Step / Activity 3. Characteristics and product specifications.

Method of Instruction: Conference / Discussion
Time of Instruction: 1 hr
Media: -None-

NOTE: Display viewgraph CD 500-VG#17 (Characteristics and Product Specifications)

NOTE: Display viewgraph CD 500-VG#18 [12GA Beanbag Round (Marine)]

a. 12 Gauge, Beanbag Round (Marine Specific)

- (1) Product Specifications:
 - (a) Made of pliable cloth filled with sand or 9 shot
 - (b) Travels at 300 feet per second
 - (c) Has an impact pressure of 123 foot-pounds
- (2) Characteristics:
 - (a) Point target is 30 meters.
 - (b) Area target is 50 meters.
 - (c) Do not engage closer than 30 meters unless deadly force is required.
 - (d) Long-range munitions
 - (e) Designed for direct fire

NOTE: Display viewgraph CD 500-VG#19 [12 GA Rubber Fin Stabilized Round (Army)]

b. 12 Gauge, Rubber Fin Stabilized Round (Army Specific)

- (1) Product Specifications:
 - (a) Made of a molded, durable hard rubber
 - (b) Travels at 500 feet per second
 - (c) Has an impact pressure of 223 foot-pounds
- (2) Characteristics:
 - (a) Point target is 10-20 meters

- (b) Do not engage closer than 10 meters unless deadly force is required
- (c) Close-range munitions
- (d) Designed for direct fire

NOTE: Display viewgraph CD 500-VG#20 [12 GA Rubber Fin Stabilized Round (Marine)]

c. 12 Gauge, Rubber Fin Stabilized Round (Marine Specific)

(1) Product Specifications:

- (a) Made of a molded, durable hard rubber
- (b) Travels at 530 feet per second
- (c) Has an impact pressure of 280 foot-pounds

(2) Characteristics:

- (a) Point target is 15-30 meters.
- (b) Area target capabilities outside of 30 meters
- (c) Do not engage any close than 15 meters unless deadly force is required
- (d) Designed for direct fire

NOTE: Display viewgraph CD 500-VG#21 [12 GA Crowd Dispersal Cartridge (Army)]

d. 12 Gauge Crowd Dispersal Cartridge (Army Specific)

(1) Product Specifications:

- (a) Made of hard durable rubber balls
- (b) Contains a count of 18, .32 caliber rubber balls
- (c) Travels at 300 feet per second
- (d) Has an impact pressure of 123 foot-pounds

(2) Characteristics:

- (a) Point target is 10-20 meters.
- (b) Area target capabilities outside of 30 meters
- (c) Do not engage any close than 10 meters unless deadly force is required
- (d) Designed for direct fire, capable of affecting single or multiple targets

NOTE: Display viewgraph CD 500-VG#22 (40MM Rubber Ball Round)

e. 40MM, Multiple Rubber Ball Round (Army Specific)

(1) Product Specifications:

- (a) Made of hard durable rubber balls
- (b) Contains a count of 22, .60 caliber rubber balls
- (c) Travels at 325 feet per second

(2) Characteristics:

- (a) Point and area target capabilities is 10-30 meters.
- (b) The closer to target the less you affect.
- (c) The further out from the target area the more you affect.

- (d) Do not engage any close than 10 meters unless deadly force is required
- (e) Kinetic energy falls off beyond 15 meters.
- (f) Close range munitions.

(3) Very effective against a group due to the cone of fire.

NOTE: Display viewgraph CD 500-VG#23 (40MM Crowd Dispersal Cartridge)

f. 40MM Crowd Dispersal Cartridge (Army Specific). This round is expected to be "type-classed" in September 2002 and made available for units shortly thereafter.

(1) Product Specifications:

- (a) Made of hard durable rubber balls
- (b) Contains a count of 48, .48 caliber rubber balls
- (c) Travels at 375 feet per second

(2) Characteristics:

- (a) Point and area target capabilities is 10-50 meters.
- (b) Do not engage any close than 10 meters unless deadly force is required

NOTE: Display viewgraph CD 500-VG#24 [40MM Foam Baton Round (Marine)]

g. 40MM, Multiple Foam Rubber Baton Round (Marine Specific)

(1) Product Specifications:

- (a) Made of durable foam rubber.
- (b) Contains a count of 3 1", 40mm batons.
- (c) Travels 325 feet per second

(2) Characteristics:

- (a) Point and area target capabilities is 10-30 meters.
- (b) The closer to target the less you affect.
- (c) The further out from the target area the more you affect.
- (d) Do not engage any close than 10 meters unless deadly force is required
- (e) Kinetic energy falls off beyond 15 meters.
- (f) Close range munitions.
- (g) Very effective against a group due to the pattern of fire.

NOTE: Display viewgraph CD 500-VG#25 [40MM Sponge Grenade (Army)]

h. 40MM Sponge Grenade (Army Specific)

(1) Product Specifications:

- (a) Projectile is made of both a soft foam rubber head and a hard plastic base
- (b) Travels at 265 feet per second

(2) Characteristics:

- (a) Point target capabilities are 10-50 meters.
- (b) Do not engage any close than 10 meters unless deadly force is required.

- (c) Considered a long range, direct fire round.
- (d) Designed to engage and affect a single target.

NOTE: Display viewgraph CD 500-VG#26 (Rubber Ball Grenade)

i. Rubber Ball Grenade

(1) Hand Thrown or Weapon Launched

(a) Product Specifications:

- 1) Projectiles are 25-caliber hard durable rubber balls
- 2) Each grenade contain 100 pellets
- 3) Has a 1.3 second delay once spoon is released and another 1.5 seconds delay with internal fuse is activated.
- 4) Distance relative to individual throwing grenade.

(b) Characteristics:

- 1) Effective engagement range is 2-3 meters.
- 2) Maximum range is 15-20 meters
- 3) Grenade engages targets at 360 degrees from detonation.
- 4) Minimum safe distance is 4 meters.
- 5) Grenade is either hand thrown or muzzle launched from a 12-gauge shotgun.

NOTE: Display viewgraph CD 500-VG#27 (Rubber Ball Grenade)

NOTE: Display viewgraph CD 500-VG#28 (Rubber Ball Grenade Launching Cup)

(2) Rubber Ball Grenade Launching Cup

(a) This is a device to propel Rubber Ball Grenades out to a distance of approximately 100 meter. Much greater than just throwing one. It is durable and easily mounted on a 12 gauge shotgun muzzle.

(b) Product Specifications:

- 1) Designed to propel Rubber Ball Grenade to a distance of 100 meters.
- 2) It is durable and easily mounted on the muzzle of a 12 gauge shotgun.
- 3) Requires a blank 12-gauge cartridge to propel grenade from the launching cup.

NOTE: Display viewgraph CD 500-VG#29 [M84 Stun Hand Grenade (Army)]

j. M84 Hand Thrown Stun Grenade (Army Specific)

(1) Product Specifications:

- (a) Hand Thrown
- (b) Made of a durable hard aluminum shell that is quickly reloaded.
- (c) Primarily made for Special Reaction Team (SRT) use in a forced entry situation.

(2) Characteristics:

- (a) Candlepower is 1 to 2.5 million
- (b) Body is 5 ¼ "in length and has a hexagonal shape.
- (c) Fuse delay time is between 1.0 to 2.0 seconds once spoon is released.
- (d) Explodes at 168-175 db

NOTE: The reusable body can be thrown back as a weapon in riot situations.

NOTE: Display viewgraph CD 500-VG#30 (Diversionary Grenade)

k. MK 141 Hand Thrown Diversionary Grenade (Marine Specific)

(1) Product Specifications:

- (a) Hand Thrown
- (b) Designed to be used by a Control Force engaged in crowd control situations.
- (c) Air burst is recommended at 10 meters from control force.

(2) Characteristics:

- (a) Candlepower is 2 million
- (b) Body is 5" in length and 1 1/3" in diameter.
- (c) Fuse delay is 1.5 seconds after spoon is released.
- (d) Explodes with 183db

NOTE: Display viewgraph CD 500-VG#31 (Ranges)

l. Consideration for non-lethal rounds includes:

- (1) The three objectives to consider when employing non-lethal munitions are accuracy, effectiveness, and reduced injury.
 - (a) Accuracy- Did I hit the intended target or targets
 - (b) Effectiveness-Did the round I employed have the desired affect?
Reduction of
 - (c) Injury- Did the round cause greater trauma to the target(s) than intended?
- (2) Each objective is equally important and achievable when considering the range to the target(s). The range and munitions selection will determine accuracy. The accuracy will determine the effectiveness while minimizing an undesirable and unintended injury from the munitions. Minimum safe firing distances were established for each round to meet these requirements. Remember, nothing is 100% effective or guaranteed.

NOTE: Display viewgraph CD 500-VG#32 (Review)

m. Review.

- (1) Briefly review the learning activity.
- (2) Solicit student questions.
- (3) Correct student misunderstandings.

NOTE: Conduct a check on learning and summarize the learning activity.

4. Learning Step / Activity 4. Effects of non-lethal rounds.

Method of Instruction: Conference / Discussion
Time of Instruction: 10 mins
Media: -None-

NOTE: Display viewgraph CD 500-VG#33 (Effect of Non-Lethal Rounds)

a. Effects of non-lethal rounds include:

NOTE: Display viewgraph CD 500-VG#34 (Physical Effects)

(1) Physical effects

- (a) Non-Lethal Munitions are NOT intended to kill or seriously injure.
- (b) They are designed to alter behavior by:

- 1) Physical Discomfort
- 2) Blunt Trauma
- 3) Immediate Incapacitation

NOTE: Display viewgraph CD 500-VG#35 (Physical Effects, cont.)

- (c) Non Lethal munitions are not intended to kill or seriously injure. Impact munitions are designed to cause physical discomfort, blunt trauma, or immediate incapacitation. When a projectile impacts human tissue, its velocity is transformed into energy. There are two basic types of physical consequences that can occur upon impact. They are:

NOTE: Display viewgraph CD 500-VG#36 (Blunt Trauma)

- 1) Blunt Trauma:
 - a) The desired effect of impact munitions; an impact from an object that leaves the body surface intact and may cause sufficient (non-life threatening) reaction to incapacitate the individual(s).
 - b) Damage to the body of the individual will depend largely on the range to the target, where the round strikes the body, and munitions selection.

NOTE: Display viewgraph CD 500-VG#37 (Penetrating Trauma)

- 2) Penetrating Trauma:
 - a) The unintended and undesirable outcome for impact munitions. A perforating trauma that leaves an entrance and possibly an exit wound as the object enters the body.
 - b) Penetration from impact munitions could occur primarily from a projectile striking an area of soft tissue void of any supporting bone structure or muscle mass.
 - c) Minimum safe firing distances are established to help reduce this effect.
 - d) Damage to the body of the individual will depend largely on the range and the selection of munitions.

TRANSITION: That's the physical effects of non-lethal rounds; now, let's discuss the psychological effects.

NOTE: Display viewgraph CD 500-VG#38 (Psychological Effects)

- (2) Psychological affects target behavior modification. Three conditions exist - anxiety, fear, and panic.

NOTE: Display viewgraph CD 500-VG#39 (Anxiety)

- (a) Anxiety - A fear of the unknown. The crowd may hesitate in their willingness to escalate force because the control forces are armed with weapons. The crowd does not know whether or not the weapons will contain lethal or non-lethal munitions. It is important not to disclose what type of munitions you are employing. This maintains the element of surprise when using non-lethal munitions. *In other words, do not educate the crowd!*

NOTE: Display viewgraph CD 500-VG#40 (Fear)

- (b) Fear - A realization of the unknown. The understanding that force is about to be used against them will enhance their fear. The behavior of the individual(s) witnessing the effects of others being fired upon will modify the actions that they will take.

NOTE: Display viewgraph CD 500-VG#41 (Panic)

- (c) Panic - The emotional or physical reaction to fear. Once the munitions have been employed, the crowd will immediately react by either fleeing the area or retaliating against the controlling force. This is a serious factor considering panic can act as an advantage or disadvantage for the control force. This is largely dependent upon the agenda, mind set and the emotional contagion of the crowd.

NOTE: Display viewgraph CD 500-VG#42 (Review)

b. Review.

- (1) Briefly review the learning activity.
- (2) Solicit student questions.
- (3) Correct student misunderstandings.

TRANSITION: We've just covered blunt vs. penetrating trauma and the intended effect of these non-lethal munitions. Lastly, we saw how anxiety, fear and panic are excellent psychological tools that enhance success using non-lethal munitions. Now, here are some factors to consider with their tactical employment.

NOTE: Conduct a check on learning and summarize the learning activity.

5. Learning Step / Activity 5. Tactical deployment considerations.

Method of Instruction: Conference / Discussion
Time of Instruction: 20 mins

Media: -None-

NOTE: Display viewgraph CD 500-VG#43 (Tactical Deployment Considerations)

- a. Tactical employment considerations are factors that play an important role in the use of non-lethal munitions. All considerations must be reviewed in order to ensure maximum effectiveness of the munitions. Some considerations should include but are not limited to:

NOTE: Display viewgraph CD 500-VG#44 (Considerations)

- b. Considerations include:

NOTE: Display viewgraph CD 500-VG#45 (Distance)

- (1) Distance- As distance increases, accuracy and velocity of the munitions decreases. The selection of the munitions will be a contributing factor in the desired level of effectiveness.

NOTE: Display viewgraph CD 500-VG#46 (Shot Placement)

- (2) Shot Placement- Shot placement will be dictated according to the level of threat presented. When munitions are employed with a non-lethal intent, shot placement will be any area of the body excluding the head, neck or spine. When munitions are deployed with a lethal intent, the point of aim will change to the head, neck or spinal column.

NOTE: Display viewgraph CD 500-VG#47 (Level of Threat)

- (3) Level of threat- An individual's intentions or the threat that is displayed will be a determining factor in the decision to use non-lethal or lethal force. For example, a crowd that is verbally aggressive but possesses no weapons presents a lesser threat than a crowd throwing rocks and carrying clubs. In situations where deadly force applies, any non-lethal munitions may be fired from any distance to terminate the threat. In situations that present a lesser threat, shot placement and selection of munitions become an important issue.

NOTE: Display viewgraph CD 500-VG#48 (Age)

- (4) Age- Age will affect the decision to employ non-lethal munitions. For example, a group of elderly people/children will generally not present as great of threat as a group of young men.

NOTE: Display viewgraph CD 500-VG#49 (Level of Clothing)

- (5) Level of clothing- Climate will usually determine the amount of clothing worn by individuals living in the community. In a situation where a crowd is lightly dressed such as in Somalia, munitions selection, shot placement, and engagement distance should be considered to ensure effectiveness and reduced injury.

NOTE: Display viewgraph CD 500-VG#50 (Skip Firing Rounds)

- (6) Skip firing rounds- Skip firing rounds is the least preferred method of employment. Deflection will decrease velocity and energy of the round. The

surface in which the projectiles are deflected will be a significant factor in the amount of velocity and energy that is lost. The trajectory of the projectiles becomes almost unpredictable when skipped across a surface such as gravel or earth. Asphalt or concrete like surfaces may cause a splintering effect on wooden baton rounds. Skip fired munitions will deflect hard, smooth surfaces at approximately the same angle as they strike. Because of the angle of deflection, the kneeling position is the most preferred method of employment when skip firing munitions.

NOTE: Display viewgraph CD 500-VG#51 (Non-Lethal with Lethal Backing)

- (7) Lethal application in conjunction with non-lethal munitions- Lethal capabilities will always augment non-lethal munitions; there should always be an option to apply deadly force if the situation demands it. *Never bring a beanbag to a gunfight!*

NOTE: Display viewgraph CD 500-VG#52 (Review)

c. Review.

- (1) Briefly review the learning activity.
- (2) Solicit student questions.
- (3) Correct student misunderstandings.

NOTE: Conduct a check on learning and summarize the learning activity.

6. Learning Step / Activity 6. Non-lethal weapons use in detainee operations in the Iraqi Theatre.

Method of Instruction: Conference / Discussion
Time of Instruction: 1 hr
Media: -None-

INSTRUCTOR NOTE: This learning step contains information and pictures that are specific to the Iraqi Theatre. If using this lesson for troops deploying to a different theatre, please use information and pictures specific to the theatre of deployment.

NOTE: Display viewgraph CD 500-VG#53 (WARNING)

COMMENT: This information is to be used for instructional purposes only!

NOTE: Display viewgraph CD 500-VG#54 (untitled)

a. This is the general layout of the Theater Internment Facility at Camp Bucca, Iraq. This information is intended to offer a visual means for you to understand the effects and capabilities of the NLW Systems that are being used within detainee operations. The capabilities and techniques used at the facility that you work in may very well differ based on physical plant, SOP, Commander's guidance for employment, restrictions of employment, etc. Use this information as a basis for understanding the capability and employment possibilities.

- (1) The west Sally Port was located to the far right side of the middle perimeter. If I were to start there and drive around the entire perimeter, ending up where

I began, it is a total of 1.7 miles! That is a huge facility consisting of slightly more than 100 acres of land on the inside of the perimeter fence.

- (2) Within the facility there were 12 individual compounds. A compound measured 440' X 570'! To grasp the size of a compound, if you imagine 3 football fields side by side; the compound was just a little larger.
- (3) The compounds were only 50' apart, which caused problems with communication and the passing of items. The detainees would throw notes, cigarettes, rocks, etc. from one compound to another.
- (4) There were 6 compounds on the lower half of the slide depicted and 6 on the upper half. The separation between the rows of six compounds was what we called Main Street and it separated the compounds by 150'.

NOTE: Display viewgraph CD 500-VG#55 (Compound Layout)

- b. This is a typical compound layout. Remember 440' X 570'. There were at least 30 tents or buildings per compound; five rows of six deep! Additional tents were added to compounds if more room was required to increase detainee capacity.

- (1) Notice the placement of the towers, the guard building, shower, latrines and holding area.

NOTE: Display viewgraphs CD 500-VG#56 (untitled), CD 500-VG#57 (untitled), CD 500-VG#58 (untitled), CD 500-VG#58 (untitled), and CD 500-VG#60 (untitled)

- (2) The tower on the left was 30 feet tall. You will see later how this affected some weapon systems. The building on the right is a Compound Control Team (CCT) building. This is where the guard force that managed the compound worked out of.

NOTE: Display viewgraph CD 500-VG#61 (Non-Lethal Weapons Systems)

- c. NLW systems used at most facilities in Iraq include:

- (1) Mossberg 12 Gauge Shotgun
- (2) Riot Control Equipment
- (3) Hand Grenade, NL, M84
- (4) M-203 GL
- (5) X-26 Taser
- (6) M5, MCCM
- (7) OC Disperser
- (8) FN-303

NOTE: Display viewgraph CD 500-VG#62 (Non-Lethal Weapons Systems, cont.)

- d. The different types of munitions used include:

- (1) 12 Gauge Shotguns
 - (a) Fin Stabilized Rubber Projectile
 - (b) Rubber Buckshot
 - (c) Beanbag Rounds
- (2) Stun Grenades
- (3) OC Spray Canisters

- (a) Individual (small)
- (b) Foggers (medium)

- (4) FN 303 (Recently received)
- (5) M203 GL
- (6) Tasers
- (7) OC Grenades
- (8) Non-Lethal Claymore

NOTE: Display viewgraph CD 500-VG#63 (12 Gauge Shotgun)

e. Observations in regard to the 12 gauge shotgun. A very effective escort and close range NLW. The shotgun is very easily trained and employed. However, from the 30 ft towers the capability of this weapon to reach out was significantly reduced.

(1) Positives

- (a) Point and crowd were effective 30 meters or less
- (b) Accurate when within range
- (c) Easily employed
- (d) Very good system to use for escort and details
- (e) Beanbag most effective for point targets; most punch
- (f) Ease of training new users

(2) Drawbacks

- (a) Ineffective from towers
- (b) Ineffective beyond 30 meters
- (c) Older rounds did not project far and were almost useless
- (d) Beanbags max effective range is less than other rounds
- (e) Drastic decrease in accuracy and power after 20 meters

NOTE: Display viewgraph CD 500-VG#64 (Shotgun Maximum Range)

(3) This slide depicts the range of the shotgun when fired from the towers. There is plenty of space that the shotgun cannot reach out to. What do you think the detainees did? Exactly, they would migrate or move outside of the shotgun range. However, the guards in the towers would continue to fire the weapon!!!! All that did was condition the detainees to the capability of the shotgun ... they knew what it could do and planned around it. That is why it is imperative that you know the capability of the weapon ... why fire if they are outside your capability. You must know distances within your area of responsibility. That will assist with the selection of a weapon system!

NOTE: Display viewgraph CD 500-VG#65 (Hand Grenade, NL M84)

f. The M84 – NL Hand Grenade (Flash Bang) was very effective early on. The noise and flash was enough to deter detainees just coming off of the battlefield. However, they quickly figured out that all the M84 did was make a loud noise and a bright flash. All they had to do was cover their ears and turn their head away from the grenade. The major drawback to the M84 was that the body of the grenade remained intact after it detonated!!!! Now the detainee has a weapon to use against the guards. The M84 was a VERY effective diversionary tool used to distract the detainees or cause a faint.

- (1) Positives
 - (a) Easily deployed
 - (b) Pin point deployment
 - (c) Deployed from Tower
 - (d) Good for quick distraction or diversion

- (2) Drawbacks
 - (a) Has minimal impact if any
 - (b) Deployment based upon ability of Soldier to throw
 - (c) Detainee turns head and covers ears to avoid flash and bang
 - (d) Body of grenade provides weapon to detainees
 - (e) Deployment based on location of delivery

NOTE: Display viewgraph CD 500-VG#66 (Hand Grenade Approximate Range)

- (3) Range of the M84. Range is based on how far the grenade can be thrown, however with the M84 accuracy is more important than distance.

NOTE: Display viewgraph CD 500-VG#67 (M203 GL)

- g. The M203 GL was one of the most effective systems used. It had the distance and the punch to gain respect. The obvious drawback to the 40mm GL was it is a breach loaded – single shot weapon. The compound the drawback, there were no where near enough M203s to main all of the towers. In the event of a disturbance, all grenadiers would assemble at a predetermined location in order to receive special instructions on where they would be employed. The one worry with the M203 was the firer of the weapon. As we all know the pistol grip for the M203 is a magazine inserted into the M16/4. The apprehension was that during an incident (escape or disturbance); in the heat of the moment with adrenaline fully pumping that a Soldier would grasp the wrong pistol grip then send a lethal round down range. Kind of far fetched but it was conceivable so why put a Soldier in that position?

- (1) Positives
 - (a) Both crowd and point rounds very effective
 - (b) Ability to reach out for distance
 - (c) Deployed from Tower
 - (d) Greater knockdown power so it produces compliance with a hit

- (2) Drawbacks
 - (a) Must estimate or bracket for effectiveness
 - (b) One round fired then reloads
 - (c) Slow reload time
 - (d) Limited number of M203s per MTOE

NOTE: Display viewgraph CD 500-VG#68 (M203 Range)

- (3) Capability of the M203 ... MUCH BETTER!

NOTE: Display viewgraph CD 500-VG#69 (Oleoresin Capsicum (OC) Spray)

h. OC Spray was used in 4ml and 400ml sizes. The 4ml was an individual spray ... the 400ml was a mass/group spray. Very good escort, individual detainee and Special Housing Unit (SHU) system but ineffective during disturbances.

(1) Positives

- (a) Effective at keeping detainees from the fence-line
- (b) Effective for area denial
- (c) Use is easily trained

(2) Drawbacks

- (a) Dependent on weather and wind factors
- (b) Does not have a very good range
- (c) With crowds of 30 or more the spray is ineffective after the front line takes the brunt

NOTE: Display viewgraph CD 500-VG#70 (OC Fogger Range)

- (3) The 400ml canister was mainly used to keep the detainees off of the fence line during a disturbance.

NOTE: Display viewgraph CD 500-VG#71 (Water Truck)

i. KBR water trucks were available. Therefore in the winter time the trucks could be used to spray detainees down in the event of a disturbance.

(1) Positives

- (a) Easily deployed
- (b) Pin point deployment
- (c) Deployed from around the compound easily deployed
- (d) Pin point deployment
- (e) Deployed from around the compound

(2) Drawbacks

- (a) Area must be large truck assessable
- (b) Difficult to adjust to different positions when crowd moves
- (c) Deployment based on location of delivery

NOTE: Display viewgraph CD 500-VG#72 (Water Truck Range)

- (3) Water truck capability.

NOTE: Display viewgraph CD 500-VG#73 (FN 303)

j. The FN-303 or the Compressed Air Launcher (CAL) is a new addition to the capability. Being used in OIF since Feb 05. Has an effective range of a little over 100 meters with very good velocity and accuracy ... depending on the munitions being fired. Positive feedback on the system. The CAL is nothing more than a high speed paint ball rifle. The advantage of the CAL is that it can deploy a multitude of munitions ... rubber pellets, fin stabilized rubber bullets, OC balls and paint balls. The drawbacks to the system are being aggressively addressed by the manufacturer of the CAL. The OC gel ball is being replaced with a powdered form of OC. The CAL addressed the concern with the M203 and a Soldier

grabbing the wrong pistol grip. This system clearly distinguishes between lethal and non-lethal.

(1) Positives

- (a) Addresses shortcomings of the shotgun
- (b) Easily deployed
- (c) Pin point deployment
- (d) Better suited for Towers
- (e) Has punch and range
- (f) Multiple munitions can be deployed
- (g) Distinguishes weapon systems

(2) Drawbacks

- (a) Plastic magazine poorly designed and not durable
- (b) OC is a gel

NOTE: Display viewgraph CD 500-VG#74 (FN 303 Range)

- (3) Greater range and compliments the M203 and lethal capability.

NOTE: Display viewgraph CD 500-VG#75 (Modular Crowd Control Munitions)

k. Non-lethal claymore.

(1) Positives

- (a) Very good for perimeter security
- (b) Effective if they can be emplaced
- (c) Can be mounted on front of vehicle without damage

(2) Drawbacks.

- (a) Time to emplace during disturbance
- (b) Cannot be permanently emplaced because the heat will melt the rubber

NOTE: Display viewgraph CD 500-VG#76 (MCCM Range)

- (3) Capability of the NL claymore. Used primarily for area denial.

NOTE: Display viewgraph CD 500-VG#77 (X-26 Taser)

- l. X-26 Taser was very effective for escorts, single detainees and SHU operations. The laser sight was a big deterrent. The presence of the X-26 was even more effective than actually firing the system. This was due to the Iraqi culture ... if an Iraqi Police Officer ever drew their pistol somebody was going to be shot and likely killed. The psychological effect of the X-26 was big.

(1) Positives

- (a) Very good for escort functions and close detainee operations
- (b) Laser sight is big deterrent

(2) Drawbacks

- (a) Ineffective during winter due to additional clothing
- (b) Onetime use
- (c) Unable to deploy for crowds

NOTE: Display viewgraph CD 500-VG#78 (Considerations)

m. Considerations

- (1) Frequency of use
- (2) Size of the facilities and compounds
- (3) Number of detainees
- (4) Ability to employ the systems
- (5) Release valve ... nowhere for crowd to go
- (6) Training on systems and their capabilities

NOTE: Display viewgraphs CD 500-VG#79 (untitled)

- n. Results of the riot on 31 Jan 2005 at Camp Bucca where five detainees were fatally shot.

NOTE: Display viewgraphs CD 500-VG#80 (untitled)

- (1) The detainees would fashion slingshot out of fabric and use it to hurl rocks at the guards. VERY ACCURATE AND EFFECTIVE!!!!

NOTE: Display viewgraphs CD 500-VG#81 (untitled)

- (2) Catwalk and stairs of one of the towers.

NOTE: Display viewgraph CD 500-VG#82 (Review)

o. Review.

- (1) Briefly review the learning activity.
- (2) Solicit student questions.
- (3) Correct student misunderstandings.

NOTE: Conduct a check on learning and summarize the learning activity.

SECTION IV. SUMMARY

| |
|-------------------------------------------------------|
| Method of Instruction: <u>Conference / Discussion</u> |
| Instructor to Student Ratio is: _____ |
| Time of Instruction: <u>5 mins</u> |
| Media: <u>-None-</u> |

Check on Learning

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

Review / Summarize Lesson

NOTE: Display viewgraph CD 500-VG#83 (Review/Summarize)

The non-lethal weapon systems currently being used are overall effective. As with any weapons system the capabilities must be understood so the system can be properly employed. Within Detention Operations (DO) the key is versatility and multiple functions or capabilities of the system. As with 'cause and effect', every use of a system within the DO setting it conditions a response and demonstrates the systems capability. With new systems the challenge will always be training.

SECTION V. STUDENT EVALUATION

**Testing
Requirements**

None

**Feedback
Requirements**

NOTE: Feedback is essential to effective learning. Schedule and provide feedback on the evaluation and any information to help answer students' questions. Provide remedial training as needed.

Appendix A - Viewgraph Masters (N/A)

Appendix B - Test(s) and Test Solution(s) (N/A)

Appendix C - Practical Exercises and Solutions (N/A)

Appendix D - Student Handouts (N/A)