

**LAKEPORT POLICE DEPARTMENT EXPANDED COURSE OUTLINE**  
**LESS LETHAL WEAPONS UPDATE**  
**-12 Gauge Less Lethal Shotgun**  
**-Pepperball Gun**

**STATEMENT OF PURPOSE:**

The course will provide the trainee with the minimum topics of instruction for safe and effective use of Department approved Less Lethal weapons. Through learning activities, students will satisfactorily demonstrate the use and manipulation of each weapon prior to the carrying of the weapon for Patrol. Students must demonstrate an assessment of learning of the Department's policy for deployment of such weapons via a practical exercise and verbal test.

**COURSE OBJECTIVES:**

The trainee will:

1. Demonstrate knowledge of their Department Use of Force/Less Lethal Weapons Policy.
2. Demonstrate of minimum standard of Less Lethal Weapons proficiency with every technique, exercise and course of fire, to include:
  - a. Judgement and decision making
  - b. Weapons safety
  - c. Basic presentation techniques
  - d. Fundamentals of shooting
  - e. Target/Non-Target identification
  - f. Speed, accuracy and effectiveness under stress and/or movement
  - g. Shot placement, effectiveness of multiple rounds

**Minimum standards of performance shall be tested by an instructor observing the trainee during their performance of each technique, exercise and course-of-fire. If the trainee does not meet minimum standards, as established by the presenter, remediation will be provided until the standard is met**

- A. WEAPONS INTRODUCTION/ORIENTATION **(0800-0830)**
1. Define Specialty Impact Munitions
    - a. **12 Gauge Shotgun**
      - i. Nomenclature
      - ii. Loading/unloading

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- iii. Effective uses and application
    - iv. Cleaning and maintenance
  - b. Pepper Ball Gun**
    - i. Nomenclature
    - ii. Loading/unloading
    - iii. Effective uses and application
    - iv. Cleaning and maintenance
- 2. Define possible psychological and physiological effects a subject may experience after exposure to SIMS
  - a. Benefits and detractors
    - i. Unable to react or cause injury
    - ii. Sensory overload
- 3. Define and differentiate Blunt trauma and Penetrating trauma
  - a. Impact sites
    - i. Appropriate impact zones
    - ii. Inappropriate impact zones
  - b. Stabilization of the person
    - i. Detain subject
    - ii. Secure weapons or threats
  - iii. Area clear of victims or other people
  - c. First Aid Treatment
    - i. Primary patient assessment
    - ii. Secondary patient assessment
    - iii. Request ambulance if needby
- 4. Define low and high energy Impact munitions and their desirable effects
  - a. Incapacitation
    - i. Unable to carry out effect/threat
  - b. Desired effects-compliance
    - i. Surrender voluntarily
    - ii. Surrender due to arrest team after threat removed
  - c. End threat to public and peace officers
    - i. Proper procedure and deployment stabilizes event
    - ii. Force used is appropriate and less lethal per application
  - d. Define FPS of various less lethal projectiles
    - i. Under 300 FPS for effective application

5. Identify Impact Zones and explain their associated risks
  - a. “green zones”
    - i. Extremities
  - b. “red zones”
    - i. Head
    - ii. Groin
    - iii. Chest

**B. FUNDAMENTALS OF ENGAGEMENT**

**(0830-0845)**

1. Identify and explain the elements of a physical encounter
  - a. Fight or flight
    - i. Adrenaline dump
    - ii. Run from the threat or problem
    - iii. Stay and fight the threat of problem
2. Defined the Force Array and identify the appropriate level for SIMS
  - a. 12 Gauge
    - i. Smooth bore
    - ii. Pump action
    - iii. Semi-auto shotguns do not cycle less lethal rounds
  - b. Pepper Ball Gun
    - i. Semi-automatic
3. Identify deployment strategies and be able to make appropriate recommendations for SIMS munitions selection
  - a. Less lethal operator
    - i. Focused on subject and accurate deployment
    - ii. May have to deliver multiple applications depending on subject and effectiveness of munitions
    - iii. Ensure launching platform is appropriate
    - iv. Be aware of backstop and beyond
    - v. Communicate deployment of less lethal as to not cause
  - b. Cover person (may be lethal or not cover depending on environment)
    - i. Must be aware of backstop and beyond
  - c. Use of apprehension canine may be considered

**C. FIRING CONSIDERATIONS**

**(0845-0915)**

1. Define Direct fire and In-Direct fire and explain their proper uses, advantages and disadvantages
  - a. Line of sight, direct impact on approved impact zones
  - b. [REDACTED]
  - c. [REDACTED]
  - d. May serve as area denial
2. Define Single and Multiple Projectile munitions. Explain their correct use and possible advantages and disadvantages
  - a. Line of sight, direct impact on approved impact zones
  - b. [REDACTED]
  - c. [REDACTED]
  - d. May serve as area denial
3. Demonstrate functional knowledge is Single shot and multiple shot delivery systems. Identify their respective advantages and disadvantages
  - a. Single shot – must make proper impact
    - 1 May cause subject to continue their act without follow up
    - 2 May not have desired compliance effect; secondary deployment munitions take longer to employ
  - b. Multi-launch launcher permits rapid re-engagement
    - 1 May have ability to continue deployment quicker
    - 2 Can increase desired compliance effect; platform allows for quicker follow up

**D. DECISION MAKING**

**(0915-0930)**

1. Demonstrate an understanding of existing case law as it pertains to SIMS
  - a. Case Law
  - b. State Law
2. Demonstrate an understanding of policy/procedure development specific to SIMS
  - a. Agency Deployment Policy
  - b. Rules of engagement
  - c. Roles and responsibilities
  - d. Arrest team
  - e. Medical/EMS Standby
3. Understand the need for proper training in SIMS and be able to identify the elements critical to achieving that success
  - a. Priority of life
  - b. Correct deployment
  - c. Tactical considerations

- d. Provide options other than lethal force
  - e. Professional application of less lethal munitions and delivery platforms
  - 4. Identify storage and disposal issues related to SIMS
    - a. MSDS information and concerns
    - b. Property disposal sites; not thrown in regular trash
  - 5. No matter what tactic or use of force is used, several factors must be considered:
    - a. Citizens
    - a. Law Enforcement / Correctional Officers
    - b. Tactical Officers
    - c. Suspects
      - 1. All situations require tactical decision making. To correctly apply sound decision, these safety priorities must be considered first:
        - a. Hostages
        - b. Citizens
        - c. Law Enforcement / Correctional Officers
        - d. Tactical Officers
        - e. Suspects
  - c. Ask two questions with regard to the priority of life doctrine:
    - 1. The decision to act or not act is to whose benefit or whose detriment?
    - 2. Who is the immediate beneficiary and/or who is going to suffer?
  - d. If the person higher than you is the beneficiary and the person lower than you is the one that suffers from that action:
    - 1. Then it is a tactically sound and safe decision or action?
  - e. Priority of Life
    - a. Two questions must also be answered:
    - b. Who benefits the most from the decision right now?
    - c. What is the risk being taken versus the benefits to be received? We then need to apply a “Risk/Benefit Ration Analysis”.
- E. Psychological (mental) Effects **(0930-0945)**
- 1. Specialty Impact Munitions have a tremendous MENTAL effect on an individual.
  - 2. In many (if not the majority of) cases the mental effects may far outweigh the physical effects and can be the determining factor in the subject’s response or time of incapacitation or distraction.
    - a. ANXIETY – pointed firearm

1. Anxiety – The action of pointing a firearm directly at an individual, and/or actually firing a projectile, arouses connotations and a fear of having been shot with a firearm. Pain may re-enforce this belief.

b. FEAR – mental distraction

1. Fear – Specialty impact munitions may cause a powerful mental distraction. Mentally the subject must cope with both the physiological pain that the body feels and the perceived danger.

c. PANIC – less control

1. Panic – Panic is not a desirable response as it may lead to less control of the subject or crowd. The impact is likely to create fear, which may create a “fight or flight” response.

**F. OODA Loop (0945-0950)**

1. OODA Loop

a. The basis of our “tactics”

b. Controlling Opponents Decision Making Cycle

c. Observe

d. Orient (the most important aspect)

f. Decide

g. Act

**G. PATTERNS OF CONFLICT (0950-0955)**

1. If an opponent is reacting to a situation that no longer exists, they need to begin the loop anew

2. If they decide on a new act, they need to again start over. You are “in their loop”

3. This will result into a “paralysis by analysis” by your opponent

**H. Physiological Effects (0955-1000)**

1. Specialty impact munitions are used to:

i. Disorient

ii. Incapacitate

iii. Injury should be expected

a. Physiological (physical) Effects

1. Specialty impact munitions are used with the intent to cause pain, and at times sufficient blunt trauma to disorient or incapacitate an individual.

a) As such, some degree of injury is expected. This is necessary to achieve compliance or a momentary degree of incapacitation.

- b) The physiological effects of specialty impact munitions are due to the transfer of energy. When an object with mass and velocity collides with a fluid medium, like the human body, the energy from the forward motion of the object is transferred to the fluid medium.
    - 2. Low Energy – slight discomfort
    - 3. High Energy – greater discomfort
  - I. Low Energy Specialty Impact Munitions are designed to deliver minimal energy to cause slight physical discomfort for pain compliance or mental distraction **(1000-1005)**
    - a. Pain compliance is designed to be minimal
    - b. Distraction method is low risk due to low energy
  - J. High Energy Specialty Impact Munitions **(1005-1010)**
    - 1. Designed to deliver enough energy to inflict sufficient blunt trauma causing greater physical discomfort and possible incapacitation.
      - a. Pain compliance is far stronger
      - b. Distraction and incapacitation are far greater
  - K. Fluid Shock **(1010-1015)**
    - a. A kinetic energy transfer of a solid object that strikes or makes contact with a fluid mass object such as the human body
    - b. Fluid shock is energy transferred from the forward motion of an object
  - L. Blunt Trauma – Maximum Desired Effect **(1015-1020)**
    - a. An impact of a projectile that leaves the body surface intact, but causes sufficient injury to incapacitate the subject
    - b. Target area is critical to reduce injury potential
  - M. Blunt Trauma **(1020-1030)**
    - a. The MAXIMUM desired effect of an impact munitions is Blunt Trauma. An impact from an object that leaves the body surface intact, but may cause sufficient (non-life threatening) injury to distract and or incapacitate the subject. The lowest expected response is pain. For this reason, projectiles impacting a person will always result in injury. However, the intent with specialty impact munitions is to minimize the amount of injury that is painful. In most situations it does not exceed bruising. Specialty impact munitions have been known to cause abrasions, contusions, lacerations, and, fractures.
      - 1.Pain
      - 2.Swelling

- 3. Range of Movement
- 4. Generally heals in days
- 5. Some bruises may take months to heal

b. Penetrating Trauma

The unintended and most undesirable outcome of an impact munitions is penetration. Penetration from a SIM may result from a combination of the following: excessive kinetic energy determined by the weight, size, shape, and velocity of the projectile; target distance; subject's physical stature, shot placement, and clothing.

- 1. Pain
- 2. Swelling
- 3. Range of Movement
- 4. Generally heals in days
- 5. Some bruises may take months to heal

N. Maximum Effect without Serious Injury (1030-1035)

- 1. Penetrating Trauma
- 2. Unintended
- 3. Undesirable
- 4. Penetrating Trauma

O. Deployment Considerations; (1035-1045)

- 1. Successful Outcome depends on:
  - a. Assessment of situation
  - b. Training experience
  - c. Operational experience
  - d. However, there are several other considerations significantly influence the manner in which the rounds should be deployed
  - e. Appropriate Use of Force for the Exhibited Level of Threat.
  - f. Distance (Energy, Accuracy & Time)
  - g. Available Target Areas
  - h. ACCURACY – prevents potential injury and gives us optimum energy from the munitions
  - i. ENERGY – need sufficient energy for incapacitation or distraction
  - j. DISTANCE – affects accuracy and munitions energy
- 2. Accuracy



a. The round must be accurate through the OPTIMUM ENERGY RANGE

4. Energy

a. The round must deliver sufficient energy from a given distance, maximizing the success of incapacitation or distraction

5. Distance

- a. Distance is a significant factor influencing the outcome of an engagement. It affects the total overall performance of a specialty impact round regarding accuracy and available impact energy.
- b. Distance and the role it plays on accuracy and energy makes shot placement and important consideration.
- c. Distance equates to time. The greater the distance the subject is from the arrest team, the more time he subject has to recover from the psychological and physiological effects of a specialty impact munitions.
- d. Close range engagements
  - 1. Increases potential incapacitation
  - 2. Increases risk of serious injury
- e. Long range engagements
  - 1. May affect accuracy and increase potential for serious injury
  - 2. Additionally, energy will decrease over distance and sufficient amount of energy may not be available to incapacitate the subject
- f. Factors Influencing Point of Aim
  - 1. Clothing
  - 2. Physical Stature
  - 3. Physical Condition
  - 4. Age
  - 5. Immediate Surroundings
  - 6. Impact Areas
  - 7. Target Pictures
  - 8. Threat Level

Q. Impact Areas

(1045-1100)

- 1. Shots [REDACTED] provide for the highest probability of causing immediate incapacitation, but also have the potential to cause serious injury or death.
- 2. Areas such as the head, neck, spine, and groin should be avoided if possible.
  - a. ZONE ONE

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

4. The groin area should not be intentionally targeted

b. ZONE TWO

Consists of medium muscle groups

1. [REDACTED]

Zone Two has a greater potential for causing serious injury when struck. In most cases these areas lack the muscle density found in Zone One. That muscle density absorbs much of the kinetic energy from the SIM, minimizing injury. Without this density, the energy is transferred more easily into the body. This increases the painful stimuli, as well as the potential for injury. In addition to the types of injury seen in Zone One, a strike in Zone Two may result in a laceration or fracture.

B. ZONE THREE

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

c. ZONE THREE

Zone Three carries the greatest potential for serious or fatal injury. Zone Three includes the head, neck, spinal cord, kidney area, and the center of mass. Understanding that law enforcement and corrections personnel are already taught to target center of mass with firearms, it is critical to stress the importance of appropriate zone selection when using Specialty Impact Munitions. In a stressful encounter, the officers may focus on center of mass due to the prior weapons training. Therefore, instructors may ensure their people are not targeting Zone Three unless deadly force can be justified. All SIM rounds have the potential for causing serious injury and/or death.

4. IMPACT AREAS

a. [REDACTED]

b. Because of the mobility of the shoulders and arms there is greater potential to miss and unintentionally strike another zone.

- c. Careful consideration should be given before aiming for the shoulders or arms.

R. Force Array **(1100-1105)**

A. LESS-LETHAL FORCE OPTIONS

- 1. OC Aerosol Projectors
- 2. Electrical Discharge Weapons
- 3. Chemical Munitions
- 4. Specialty Impact Munitions
- 5. Impact Weapons – batons

S. Munitions Selection **(1105-1115)**

A. CROWD MANAGEMENT

- 1. Specialty impact munitions are effective crowd management tools for:

- a) Dispersal
- b) Anti-looting
- c) Area denial

B. Crowd Management

1. Specialty impact munitions are effective crowd management tools for disbursement, anti-looting or area denial. The munitions can be used to target groups or individuals providing motivation or instigating civil disorder. Using specialty impact munitions in a riot situation should be a part of an escalation of force philosophy. Other less lethal measures such as chemical agents may be explored first.

2. Multiple projectiles

- a) Rubber Balls
- b) Foam Batons
- c) Rubber Batons
- d) Wood Batons

Multiple projectiles are deployed at low angles for pain compliance to move or rout crowds during civil disturbances. Examples of multiple projectile munitions include rubber balls, foam batons, rubber batons, and wood batons.

B. SINGLE SUBJECT **(1115-1130)**

- 1. Specialty Impact Munitions are used effectively against single subjects:

- a. “Suicide by cop”
- b. Arrest violent subjects armed with knives or clubs
- c. High threat level incidents
- d. Targeting crowd instigator

2. Availability
  - a) Calibers: 12 gauge, 37 mm, and 40mm
  - b) Various Propellants: Black Powder, Smokeless
  - c) Various Projectiles: Flexible, Non-Flexible
  - d) Purpose: Pain compliance up to incapacitation from a variety of distances.
2. Selecting a Weapons Delivery System
  - a) Define the Mission
  - b) Delivery/Weapon System 12 Gauge Shotguns
    1. Pup style with IC choke preferred
    2. Shotguns are more readily available and allow for a wide range of purposes – lethal, less-lethal, chemical delivery, and breaching
    3. Munitions are more cost effective than 37 mm
      - a) Although projectile size is not as great, multiple shots are available for follow up, if necessary
      - b) Should be clearly marked as to munitions type
4. 12 Gauge Small Bore
  - a. Multiple and single projectiles
  - b. Limitations
    1. Payload
    2. Accuracy
    3. Range
    4. Energy
  - c. Cost Efficient
  - d. Accessible
  - e. Portable
5. Pepper Ball Gun
  - f. Multiple and single projectiles
  - g. Limitations
    5. Payload
    6. Accuracy
    7. Range
    8. Energy
  - h. Cost Efficient
  - i. Accessible
  - j. Portable

T. Legal Issues

**(1130-1145)**

1. Liability Update – discuss new liability concerns
  - a. Any serious incident involving the use of force can potentially result in lawsuits filed by, or on behalf of injured parties.
  - b. The acts of the individual officer, their training and the practices of the agency are closely scrutinized.
2. Legal Issues Update – discuss new case law
  - a. Any serious incident involving the use of force can potentially result in lawsuits filed by or on behalf of injured parties.
  - b. The training the officers received will be closely examined to answer the following questions:
    1. Were the actions of the officer(s) consistent with their training?
    2. Was the training adequate and acceptable by today’s contemporary standards?
    3. If the officers were not trained does it amount to “deliberate indifference” on the part of the agency?

U. Applications

**(1145-1200)**

1. Students will wear all safety equipment
2. Students will properly load and unload weapon delivery system
  - a. Students will identify the proper munitions delivery system based on distance, threat conditions and amount of threats.
3. Students will accurately fire the weapons platform and munitions striking only approved areas of the simulated body.

Discussion – Questions – Evaluations