



## **LESS LETHAL, FLASH SOUND DIVERSIONARY DEVICE, CHEMICAL AGENTS INSTRUCTOR CERTIFICATION**

### **COURSE OVERVIEW AND INSTRUCTIONAL GOALS**

<b>COURSE LENGTH:</b>	40 Hours	5 Days
	29 Hours	Classroom
	11 Hours	Practical

### **COURSE OVERVIEW**

**THIS INSTRUCTOR CERTIFICATION EXPIRES FOUR YEARS AFTER COMPLETION OF THE CERTIFICATION COURSE.**

The Less Lethal Impact Projectiles Instructor Course is a train the trainer course designed to familiarize attendees with less lethal weapons, impact munitions and deployment tactics. Topics to be covered include instructor development techniques, less lethal force philosophy, case law, policy issues, technology overview, deployment tactics, product demonstrations, and less lethal practical scenarios.

The Flash Sound Diversionary Device Instructor Course is a train the trainer course designed to familiarize attendees with flash sound diversionary devices (FSDD). Topics to be covered include history of diversionary devices, definitions, and nomenclature, legal aspects of diversionary devices, policy issues, preparation and deployment of diversionary devices, and practical application.

The Chemical Agent Instructor Course is a train the trainer course designed to familiarize attendees with chemical munitions. Topics to be covered include history, products and characteristics, delivery systems, hazards, decontamination, gas masks, and general tactics as they relate to the use of chemical agents.

### **NOTICE**

The information necessary to present instruction regarding less lethal munitions, flash sound diversionary devices, and chemical agents is contained within the curricula of this course. The ability to teach others and correctly convey the course content is an individual skill. Completing this NTOA course of instruction is not an endorsement of any individuals teaching skill or experience. Instructors should ensure that they have met the necessary requirements to instruct the subject matter as required by local or state mandates. Further, instructors should be approved to teach the materials by their agency head or designee.

### **INSTRUCTIONAL GOALS**

Upon completion of this course the attendee will be familiar with:

1. Instructor Development Techniques
2. Less Lethal Force Philosophy
3. Case Laws, Legal Studies Training Issues
4. Less Lethal Policy
5. Use of Force Reports
6. Less Lethal Force Technology
7. Less Lethal Deployment Tactics
8. Conducting Less Lethal Practical Scenarios
9. History of Flash Sound Diversionary Devices (FSDD's)



10. Specific Definitions
11. Nomenclature
12. Legal Aspects of Diversionary Devices
13. Tactics involving Flash Sound Diversionary Devices
14. Deployment Concerns
15. FSDD Policy Issues
16. Preparation and Deployment of Diversionary Devices
17. Chemical Munitions Products and Characteristics
18. Chemical Munitions Delivery Systems
19. Potential Hazards of Chemical Munitions
20. Decontamination Issues
21. Gas Masks
22. General Tactics as they Relate to the Use of Chemical Agents

### **SPECIFIC INSTRUCTIONAL GOALS**

1. The less lethal force philosophy as outlined in this course of instruction
2. At least three significant less lethal force options available to law enforcement today
3. Two basic classifications of kinetic energy impact munitions
4. The three most significant factors that must be considered when evaluating kinetic energy impact projectiles
5. At least three kinetic energy impact projectile delivery systems
6. The characteristics of the most commonly used less lethal projectiles
7. Less lethal kinetic energy impact projectiles and their placement on a “use of force” model. Students will also be able to explain some circumstances that may cause an officer to use such devices differently than the “use of force” model suggests.
8. Several situations in which the use of less lethal force projectiles would be appropriate
9. Actions that should be taken in cases where a person is struck with a kinetic energy impact projectile
10. The three most significant issues that must be addressed with end users in extended range kinetic energy impact programs
11. Case laws as they relate to less lethal deployment
12. Sample less lethal policies and the philosophy behind less lethal policies
13. Use of force reports as they relate to the deployment of kinetic energy impact projectiles
14. Various tactics as they relate to the deployment of kinetic energy impact projectiles as well as arrest teams, entry teams, containment teams, and civil disorder
15. The actual deployment of various kinetic energy impact projectiles. Students will observe them being deployed and will discuss accuracy issues and proper application.
16. The history of the flash sound diversionary device (FSDD)
17. What a diversionary device is
18. Specific definitions as they relate to the FSDD
19. Specific nomenclature as it relates to a FSDD
20. The difference between a deceptive and physiological distraction and the characteristics of each
21. The effects of the FSDD on the human body
22. Three types of explosions
23. The difference between a detonating explosive and a deflagrating explosive
24. The components of a FSDD
25. The components of the M201A1 fuze
26. The combustion characteristics of a FSDD
27. Deployment concerns involved with using a FSDD
28. The “critical number” as it relates to the sound produced by a FSDD
29. Rendering safe procedures for a FSDD
30. Concerns to be addressed when developing policy for the use of a FSDD



31. Case law as it relates to the deployment of a FSDD
32. The first documented case in which a lacrimator was used by civilian law enforcement
33. The two basic concepts of chemical munitions deployment
34. The two most common chemical agents used by civilian law enforcement today
35. The most likely effects of law enforcement chemical agents on human beings
36. The differences between primary and secondary contamination
37. The most commonly used chemical munitions and the deployment concepts most applicable to those particular munitions
38. Multiple concepts of chemical munitions deployment
39. The steps in the chemical agent decontamination process
40. The process of testing a chemical agent mask for proper fit and operation

**In addition, the student will:**

1. Take part in practical scenarios to become familiar with tactics and proper decision-making involving the use of less lethal impact munitions, diversionary devices, and chemical agents.
2. Take part in familiarization drills utilizing several less lethal projectile delivery systems, including the 12-gauge shotgun, 37 mm launcher, and 40 mm launcher.
3. Demonstrate in a practical examination, the ability to safely and effectively deploy a diversionary device. Students will deploy at least one diversionary device.
4. Demonstrate the ability to safely dismantle and clean a FSDD (if applicable to the brand being deployed).
5. Complete a written test on Less Lethal Projectiles, FSDD's, and Chemical Agents which requires 80% to pass.



**LESS LETHAL, FLASH SOUND DIVERSIONARY DEVICE, CHEMICAL AGENTS –  
INSTRUCTOR CERTIFICATION  
DAY TO DAY / HOUR TO HOUR AGENDA**

**DAY ONE**

<b>Hours:</b>	<b>Instruction:</b>
0800-0830	Introduction of Instructor and Students / Registration
0830-0900	Pre-Test for Less Lethal Projectiles, FSDD's, and Chemical Agents
0900-0930	Explanation of Course Objectives
0930-1030	Instructor Development Techniques / Safety Lead - In
1030-1200	Less Lethal Force Philosophy
1200-1300	Lunch
1300-1700	Less Lethal Force Technology

**DAY TWO**

<b>Hours:</b>	<b>Instruction:</b>
0800-0900	Less Lethal Force Technology
0900-1100	Case Laws, Legal Concepts, Use of Force Reports
1100-1200	Less Lethal Policy
1200-1300	Lunch
1300-1500	Injury Photos / Impact Projectile Death Cases
1500-1700	Tactical Decision Making

**DAY THREE**

<b>Hours:</b>	<b>Instruction:</b>
0800-0900	Less Lethal Final Exam
0900-1100	Less Lethal Videos / Incident Debriefs
1100-1200	Lunch
1200-1400	(AT RANGE) Product Demo and Familiarization Drills
1400-1700	(AT RANGE) Practical Scenarios / Scenario Demonstration



## **DAY FOUR**

### **Hours:**

0800-1030

1030-1200

1200-1300

1330-1330

1330-1400

1400-1700

### **Instruction:**

Chemical Munitions Overview / Decontamination / Policy Considerations

Chemical Agents Delivery Systems

Lunch

Gas Masks

Chemical Munitions Incident Debriefs

(AT RANGE) Chemical Agent Product Demonstration / Practical Demonstration and Deployment of 12 Gauge / 37 mm / 40 mm Chemical Agent Projectiles / Chemical Agents Exposure / Gas Mask Clearance Demonstration / Decontamination

## **DAY FIVE**

### **Hours:**

0800-1000

1000-1100

1100-1200

1200-1300

1300-1400

1400-1630

1630-1700

### **Instruction:**

Diversionsary Devices History, Definitions, Nomenclature, Types

Characteristics of Diversionsary Devices, Tactics

Diversionsary Device Legal Aspects, Policy Considerations, Deployment Concerns

Lunch

Chemical Agents / FSDD Review and Exam

(AT RANGE) Practical Deployment of Diversionsary Devices / Demonstration of Cleaning and Preparation of Diversionsary Devices

Course Review / Course Closeout at Range



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### COURSE OUTLINE

- I. Preface
  - A. Course Overview
  - B. Instructional Goals
  - C. Agenda
  - D. Outline
  - E. Co-Host Logistics
  
- II. Instructor Development Techniques / Safety Lead-In
  - A. Course Presentation
  - B. Basic Teaching Technique
  - C. Lesson Plan Development
  - D. Course Preparation
  - E. Visual Aids
  - F. Testing and Qualification
  - G. Safety Concerns / Causes of Training Injuries and Deaths
  
- III. Less Lethal Force Philosophy
  - A. Force Continuum
  - B. Objectives and Criteria for Deployment
  - C. De-escalation in Deadly Force Situations
  - D. Reduction of Injury Potential
  - E. Conditions for Deployment of less Lethal Munitions
  - F. Rules of Engagement
  
- IV. Case Laws, Legal Concepts, Use of Force Reports
  - A. Specific Cases Involving Less Lethal Deployment
  - B. Liability Reduction as it applies to Case Laws
  - C. Legal Justification for Less Lethal Munitions Use
  - D. Critique Several Actual Less Lethal Incidents
  - E. Requirements / Recommendations
  - F. Sample Reports
  
- V. Less Lethal Policy
  - A. Requirements / Recommendations
  - B. Sample Policies



- VI. Less Lethal Force Technology
  - A. Available Products
    - i. Kinetic Energy Projectile (Primary Course Focus)
    - ii. Non-Flexible Single – 12 gauge / 37 MM / 40 MM
    - iii. Non-Flexible Multi – 12 gauge / 37 MM / 40 MM
    - iv. Flexible Single – 12 gauge / 37 MM / 40 MM
    - v. Flexible Multi – 37 MM / 40 MM
    - vi. Taser, Pepper Ball, Others
  - B. Delivery Systems
    - i. Smooth Bore – 12 gauge / 37 MM
    - ii. Rifled Bore – 12 gauge / 37 MM / 40MM
    - iii. Single Shot
    - iv. Multi Shot
  - C. Evaluation – Product Selection Criteria
    - i. Accuracy
    - ii. Effectiveness
    - iii. Potential for Causing Death or Serious Injury
- VII. Injury Photos Impact Projectile Deaths
- VIII. Less Lethal Tactics / Decision Making
  - A. Entry Tactics
  - B. Containment
  - C. Civil Disorder
  - D. Arrest Teams
- IX. Less Lethal Written Review and Exam
- X. Less Lethal Videos / Incident Debriefs
- XI. Product Demo and Familiarization
  - A. Test and Evaluate Available Products
- XII. Less Lethal Scenario-Based Training
- XIII. Diversionary Devices
  - A. History



- B. Types
  - C. Definitions
  - D. Nomenclature
- XIV. Diversionary Devices
- A. Characteristics
  - B. Tactics
- XV. Diversionary Devices
- A. Legal Aspects
  - B. Policy Considerations
  - C. Deployment Concerns
- XVI. Diversionary Devices
- A. Demonstration of Proper Deployment Techniques
  - B. Demonstration of Proper Handling and Grips
  - C. Demonstration of Proper Control of the Safety Pin
  - D. Demonstration of Proper Render Safe Procedures
  - E. Demonstration of Re-Inserting the Safety Pin
- XVII. Diversionary Devices
- A. Demonstration of Proper Cleaning
  - B. Demonstration of Proper Preparation
- XVIII. Chemical Munitions Overview / Decontamination / Policy Considerations
- A. History
  - B. CN / CS / OC
  - C. Effects
  - D. Primary / Secondary Contamination
  - E. Relative Toxicity
  - F. Decontamination
  - G. Sample Policy
- XIX. Chemical Agent Delivery Systems
- A. Pyrotechnic / Combustion
  - B. Blast Dispersion
  - C. Liquid
  - D. Aerosol Liquid
  - E. Dust
  - F. Fog





- XX. Gas Masks
  
- XXI. Chemical Munitions Incident Debriefs
  
- XXII. Exposure
  - A. Product Demonstration
  - B. Practical Demonstration of 12 Gauge and 37 MM Chemical Projectiles
  - C. Gas Mask Clearance Demonstration
  - D. Decontamination for Exposure
  
- XXIII. Flash Sound Diversionary Device and Chemical Agents Review and Exam
  
- XXIV. Course Evaluation and Closeout



**LESS LETHAL, FLASH SOUND DIVERSIONARY DEVICE, CHEMICAL AGENTS –  
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CO-HOST LOGISTIC REQUIREMENTS**

**CLASSROOM**

- Adequate seating for up to 34 students with tables, good ventilation
- Marker board & markers
- Flip chart with paper

**AUDIO VISUAL**

- LCD Projector for computer presentation
- Large projection screen (minimum of 6'x6' screen size)
- Speaker system to connect to laptop for audio
- Extension cord and power strip
- AV table or cart

**OTHER**

- Range or tactical area where less lethal weapons and diversionary devices can be deployed
- .12 Gauge shotgun
- 37 MM weapon system if available
- Sage or Arwen weapon system if available
- 40 mm weapon system if available
- Pepperball System if available
- Target stands
- Targets – full body target such as “Numb John” is best
- Shoot house or building for scenarios is recommended
- Extra ear protection for students
- Extra eye protection for students
- Range area or house where 12 gauge or 37 mm chemical agent projectiles can be deployed and chemical agents exposure can be conducted
- Shovel, bucket, and water at range area (water should be available for potential fire hazards and for decontamination purposes)
- Tactical Emergency Medic or EMS Available at the Range for Demonstration

**\*\*NO LIVE FIRE\*\***



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STUDENT EQUIPMENT LIST**

**INDIVIDUAL**

Law Enforcement I. D.

Eye protection

Ear protection

Gas mask

Nomex Gloves

Clothing such as BDU's that are suitable for physical activity. Students will be outside at times and will take part in range activities.

A change of clothes to wear after chemical contamination

Agency Approved Chemical Agent Mask (APR)

Students who have not received an approved level 1, 2, or 3 chemical agent exposure to CS or OC will be required to have an exposure for completions of this course. However, a waiver is available to students who have already been exposed. Students who complete the waiver will be exempt from the level 1,2, and 3 exposure requirements. It is recognized that many students participating in this course have already been exposed to CS or OC.

All students will be exposed to pyrotechnic CS for fit and evaluation of their masks.