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# BASIC COURSE INSTRUCTOR UNIT GUIDE

35

FIREARMS/CHEMICAL AGENTS

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**UNIT GUIDE 35**

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## SPECIFICATIONS FOR LEARNING DOMAIN #35: FIREARMS/CHEMICAL AGENTS

June 1, 1994

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### I. INSTRUCTIONAL GOALS

The goals of instruction on **Firearms** are to provide students with:

- A. an understanding of the operation and nomenclature of semi-automatic and revolver type handguns;
- B. an understanding of the operation and nomenclature of law enforcement shotguns;
- C. knowledge of the effective range and spread of different barrel and load combinations commonly used in law enforcement shotguns;
- D. the ability to use a handgun effectively in combat situations; and
- E. the ability to use a shotgun effectively in combat situations.

The goals of instruction on **Chemical Agents** are to provide students with:

- F. an understanding of the legal aspects of using nonlethal chemical agents;
- G. the ability to use hand-held aerosol chemical agents safely and effectively;
- H. the ability to use a gas mask safely and effectively; and
- I. an understanding of the effects of nonlethal chemical agents.

### II. REQUIRED TOPICS

The following topics shall be covered:

- A. Nomenclature and operating characteristics of revolvers and semi-automatic handguns

- B. Nomenclature and operating characteristics of law enforcement shotguns
- C. Care and cleaning of handguns and shotguns
- D. Handgun and shotgun marksmanship
- E. Shooting positions: handguns and shotguns
- F. Evolution of chemical agents
- G. Legal aspects of chemical agents
- H. Types of chemical agents
- I. Orientation to chemical agents delivery methods
- J. Aerosol chemical agent deployment tactics
- K. Care and Maintenance of aerosol chemical agents devices
- L. Disposal of aerosol chemical agent devices
- M. Physiological and psychological effects of nonlethal chemical agents
- N. Decontamination procedures
- O. Care and use of gas masks

### III. REQUIRED TESTS

The following tests shall be administered:

- A. An exercise test that requires the student to demonstrate loading, unloading, drawing, holstering and clearing malfunctions in a handgun
- B. An exercise test that requires the student to demonstrate loading, unloading, and clearing malfunction in a shotgun

- C. An exercise test that requires the student to demonstrate care and cleaning of handguns
- D. An exercise test that requires the student to demonstrate good handgun shooting technique including stance, grip, breath control, sight alignment, trigger control and follow through
- E. An exercise test that requires the student to will demonstrate the following handgun shooting positions: crouch, point shoulder, barricade, prone, kneeling, and hip
- F. An exercise test that requires the student to demonstrate good shotgun shooting technique including stance, breath control, point aiming, trigger control and follow through
- G. An exercise test that requires the student to shoot a minimum of 60 rounds and obtain an acceptable score (determined by the academy), under daylight conditions, on a handgun course consisting of single and multiple silhouette targets
- H. An exercise test that requires the student to shoot a minimum of 60 rounds and obtain an acceptable score (determined by the academy), under nighttime conditions, on a handgun course consisting of single and multiple silhouette targets
- I. An exercise test that requires the student to shoot a minimum of 30 rounds and obtain an acceptable score (determined by the academy), under daylight conditions, on a handgun combat range
- J. An exercise test that requires the student to shoot a handgun combat range after being stressed by an anaerobic physical activity and obtain an acceptable score (determined by the academy)
- K. An exercise test that requires the student to shoot a minimum of 30 rounds and obtain an acceptable score (determined by the academy), under nighttime conditions, on a handgun combat range

- L. An exercise test that requires the student to shoot a minimum of six rounds and obtain an acceptable score (determined by the academy) on a shotgun course with single and multiple silhouette targets
- M. An exercise test that requires the student to shoot a minimum of six rounds and obtain an acceptable score (determined by the academy), under nighttime conditions, on a shotgun course with single and multiple silhouette targets
- N. An exercise test that requires the student to safely and effectively use a gas mask

IV. REQUIRED LEARNING ACTIVITIES

- A. The student shall be exposed to a nonlethal, riot-control chemical agent
- B. The student shall be exposed to a nonlethal, aerosol chemical agent

V. HOURLY REQUIREMENTS

Students shall be provided with a minimum of **60 hours** of instruction on firearms and chemical agents.

VI. ORIGINATION DATE

July 1, 1993

VII. REVISION DATES

June 1, 1994

The curricula contained in this document is designed as a *guideline* for the delivery of performance-based law enforcement training. It is part of the POST Basic Course guidelines system developed by California law enforcement trainers and criminal justice educators in cooperation with the California Commission on Peace Officer Standards and Training.

## HANDGUN HANDLING DEMONSTRATION

Given a standard service handgun authorized by the academy, the student will demonstrate safe handling of the handgun while:

- A. Loading and unloading
- B. Cleaning
- C. Clearing malfunctions
- D. Drawing and replacing the weapon in the holster

Performance Objective 7.5.1

### CURRICULUM

- A. General information
  - 1. When handling any weapon the student must know:
    - a. How the weapon basically works
    - b. If it is loaded
    - c. Where it is pointing
    - d. What and where the target is
    - e. Where the projectile(s) will go
    - f. Where the projectile(s) may stop
- B. Four "cardinal" rules of firearm safety
  - 1. Handle all guns as though they are loaded
  - 2. Never point a gun at anything you are not willing to strike
  - 3. Keep your finger off the trigger unless you intend to shoot
  - 4. Be sure of your target and line of fire
- C. General safety precautions
  - 1. Always remember that the one in possession of the firearm is responsible
  - 2. It is essential to establish good safety habits and abide by them
  - 3. When handing a firearm to another person check that:

- a. The weapon is unloaded (rounds removed from the cylinder, magazine removed, action open)
  - b. Safety on, if applicable
  - c. Muzzle not pointed at anyone.
4. Never dry fire where an unintentional discharge could cause death or injury to another person
  5. Be aware of the potential of ricochet if a projectile is fired at:
    - a. Surface of water
    - b. A flat, hard surface whether horizontal or at an angle

NOTE: It is desirable for the instructor to demonstrate this concept for the students during range exercises

D. Procedure for loading and unloading firearms

1. The following procedures apply to all situations except combat or an actual tactical event
2. Load and unload a firearm in a safe area

NOTE: Instructor should discuss common examples of "safe areas" (e.g., sand barrel, etc.)

3. Visually inspect the firearm to make sure it is unloaded or properly loaded
4. Remember that the four "cardinal" rules of firearm safety apply to all handling situations

E. Procedures for rendering a firearm safe

1. Always assume the weapon is loaded
2. Point it in safe direction
3. Keep finger away from trigger guard
4. Put safety on if applicable
5. Remove the magazine if applicable
6. Open the action
  - a. To open the action of most semi-automatic pistols, pull back on the slide and engage the slide lock to keep the

action open. On some models it will be necessary to disengage the safety in order to open the action

- b. To open the action of a revolver, activate the cylinder release and open the cylinder.

7. Unload the weapon

- a. On most semi-automatic weapons the chambered round will be ejected when the slide is pulled back
- b. On a revolver with the cylinder open depress the ejector and remove the cartridges

8. Visually and physically check chamber(s), magazine port and magazine

- a. As a check to prevent losing a round or to prevent an accidental discharge count the number of rounds
- b. Recheck cylinder and chamber(s)

NOTE: Instructors may wish to discuss how to handle situations where an officer is presented with an unfamiliar firearm (e.g., not manipulating the firearm until a more knowledgeable person is available, situations where a private person turns over an unusual weapon to an officer, etc.)

F. Range safety rules

- 1. Instructors should explain any safety rules particular to the range site or to the particular type of activity being instructed
- 2. POST regulations require that each presenter identify specific safety rules particular to the training site and the types of tasks students are expected to perform. These rules should be discussed in detail with students. Guidelines for the development of range safety rules are provided in the document POST Guidelines for Student Safety in Certified Courses.

G. Drawing the handgun from the holster

- 1. Many accidental discharges occur while drawing a handgun. Therefore, safety is the primary factor to be considered. (The type of holster will determine which method to be used)
  - a. Grip the handgun tightly
  - b. Remove from holster

- c. Always keep the trigger finger off the trigger and along the side of the handgun until the handgun is clear of the body

NOTE: The instructor may wish to discuss the advantages and disadvantages of different types of holsters

H. Holstering the handgun

1. The weapon should be made safe for holstering

NOTE: Instructor may wish to point out distinctions between various weapons (e.g., single action, double action, need to place the strong thumb behind the hammer with some models, etc.)

2. Keep the finger out of the trigger guard
3. Secure the safety strap after weapon is holstered

I. Range malfunction

1. Point the handgun down range
2. Unless otherwise directed by local range policy, raise off hand and wait for the instructor

J. Street malfunction

1. Revolver and semi-automatic pistol
  - a. Attempt to clear the malfunction as instructed
  - b. If the weapon still misfires, consider the best escape route

K. Considerations previously identified for rendering a weapon safe must be followed before any cleaning procedure is initiated

## SHOTGUN HANDLING DEMONSTRATION

Given a standard shotgun, the student will demonstrate the safe handling of a shotgun while:

- A. Conducting initial inspection
- B. Loading and unloading (including combat loading)
- C. Clearing malfunctions

Performance Objective 7.5.2

### CURRICULUM

- A. Conducting initial inspection
  - 1. The characteristics and location of key parts on shotguns differs substantially among manufacturers. The instructor should demonstrate proper operation of each make of shotgun used by the academy class.
  - 2. The student should be required to demonstrate the initial inspection of a shotgun as instructed and follow all applicable safety requirements.
- B. Loading and unloading the shotgun
  - 1. Loading and unloading procedures will also vary depending upon the make and model of shotgun used in training. The instructor should demonstrate correct loading and unloading procedures for each make of shotgun used by the academy class.
  - 2. The student should be required to demonstrate loading and unloading procedures as instructed.

At a minimum demonstration should include:

    - a. Safe unloading of a chambered round
    - b. Removal of rounds from magazine
    - c. Recheck of the shotgun after rounds have been removed
    - d. Combat loading
- C. Clearing shotgun malfunctions
  - 1. Procedures for clearing malfunctions are also dependent upon the make and model of the shotgun. The instructor should demonstrate proper procedures for clearing both range and field

malfunctions for all makes of shotguns used by the academy class.

2. The student should be required to demonstrate as instructed the procedures for clearing malfunctions. The demonstration should include procedures for both range and field situations.

## PARTS OF REVOLVERS AND SEMI-AUTOMATIC HANDGUNS

Given a drawing, overhead, visual, model, or an actual firearm, the student will either verbally or in writing, identify the principle parts and characteristics of both a revolver and a semi-automatic handgun.

Parts and characteristics of a revolver will minimally include:

- A. Hammer/firing pin
- B. Trigger
- C. Barrel
- D. Cylinder/cylinder release/direction of cylinder rotation
- E. Ejector/extractor
- F. Front and rear sights
- G. Trigger guard
- H. Grip/stock
- I. Frame

Parts and characteristics of a semi-automatic will minimally include:

- A. Hammer/firing pin
- B. Trigger
- C. Barrel
- D. Slide
- E. Ejector
- F. Extractor
- G. Trigger guard
- H. Grip/stock
- I. Frame
- J. Magazine and component parts
  - 1. Body
  - 2. Follower
  - 3. Butt plate
  - 4. Spring
- K. Magazine port/magazine release
- L. Safety mechanism
- M. Slide lock

Performance Objective 7.6.1

## CURRICULUM

- A. Parts and characteristics of revolver service handguns
  - 1. Hammer/firing pin
  - 2. Trigger
  - 3. Barrel

4. Cylinder/cylinder release/direction of cylinder rotation
5. Ejector/extractor
6. Front and rear sights
7. Trigger guard
8. Grip/stock
9. Frame

B. Parts and characteristics of semi-automatic service handguns

1. Hammer/firing pin
2. Trigger
3. Barrel
4. Slide
5. Ejector
6. Extractor
7. Trigger guard
8. Grip/stock
9. Frame
10. Magazine and component parts
  - a. Body
  - b. Follower
  - c. Butt plate
  - d. Spring
11. Magazine port/magazine release
12. Safety mechanism
13. Slide lock

NOTE: Describe each major point and provide students with illustration showing various parts.

C. Characteristics of ammunition

1. Caliber - review attributes
2. Design function - hollow point, ball, jacket, etc.
3. Weight of bullet.
4. Ballistics - distance, speed, trajectory, etc.



## CLEAN, CARE AND STORAGE OF HANDGUN

The student will demonstrate the proper care, cleaning and storage of the service handgun.

Performance Objective 7.7.1

### CURRICULUM

#### A. Cleaning equipment

1. Appropriately sized bore brush
2. Cleaning rod
3. Cleaning patches
4. Cleaning solvent, if applicable
5. Lubricant
6. Clean rags

#### B. Cleaning a revolver

1. Before any cleaning is attempted the firearm must be rendered safe according to the previously instructed guidelines
2. Revolvers should not be disassembled for cleaning; This should only be done by a gunsmith or department armorer
3. Cylinder and grips should only be removed if specifically permitted by local policy and then only with appropriate instruction
4. When providing instruction on how to clean a revolver, particular attention should be directed to the following areas:
  - a. Barrel
  - b. Cylinders
  - c. Forcing cone
  - d. Rear plate
  - e. Star
  - f. Trigger
  - g. Hammer

C. Cleaning a semi-automatic pistol

1. Before any cleaning is attempted the firearm must be rendered safe according to the previously instructed guidelines
2. Semi-automatic pistols should be disassembled (field stripped) as instructed. Disassembly beyond field stripping should only be done by a gunsmith or department armorer.
3. When providing instruction on how to clean a semi-automatic pistol, particular attention should be directed to the following areas:
  - a. Barrel assembly
  - b. Slide assembly
  - c. Frame assembly
  - d. Magazine assembly
  - e. Recoil spring and guide
4. Instruction and demonstration should be provided on proper lubrication of the semi-automatic pistol

D. Student cleaning demonstration

1. Instructor should demonstrate the cleaning process and point out safety factors of firearms being used
2. Students should be required to clean their service handgun periodically throughout firearms training.
3. Instructors should conduct periodic inspections to ensure that cleaning procedures are being employed and that the weapon is being maintained in serviceable condition
4. Instructors should refer to any prevailing department policy as applicable

E. Instructors should discuss recommendations for both short term and long term storage of firearms. Examples should include but are not limited to:

1. Trigger blocks
2. Gun safes or other secure storage containers
3. Use of handcuffs through the strap as a temporary security device
4. Use of other devices to secure the firearm

- F. Instructors may wish to discuss current legal requirements and liabilities associated with negligence storage of firearms (Penal Code Section 12035).
- G. Instructors may wish to discuss guidelines for firearm safety in the home



## PARTS OF SHOTGUNS

Given a drawing, overhead, visual, model, or an actual shotgun, the student will either verbally or in writing identify the principle parts and characteristics of the weapon.

Parts and characteristics will minimally include:

- A. Trigger
- B. Trigger guard
- C. Barrel
- D. Loading port
- E. Magazine tube
- F. Ejection port
- G. Receiver
- H. Grip/stock
- I. Safety
- J. Action release
- K. Front and rear sights
- L. Muzzle
- M. Fore end

Performance Objective 7.8.1

## CURRICULUM

- A. The law enforcement shotgun is either a pump or self-loader.
  - 1. It is 12-gauge, short barrel, and is virtually a straight tube without choke.
- B. Shotgun parts
  - 1. The student needs to know the parts required for safe handling of the shotgun and those required for proper handling aside from pure consideration of safety, such as cleaning, unloading and loading, and those required for an understanding of the instructions on how to shoot.
  - 2. The three main parts of the shotgun are the stock, the receiver, and the barrel.
  - 3. The instructor is required to identify and describe the following parts of the shotgun:
    - a. Trigger
    - b. Trigger guard
    - c. Barrel

- d. Loading port
- e. Magazine tube
- f. Ejection port
- g. Receiver
- h. Grip/stock
- i. Safety
- j. Action release
- k. Front and rear sights
- l. Muzzle
- m. Fore end

C. General description

1. The Pump (Slide Action) - Repeating shotguns - operated by working a slide - are called slide-action or pump shotguns. Development has resulted in general similarity between makes and models. The pump has the distinct advantage of offering the shooter four or more rounds. With practice, great proficiency can be developed and the pump gun can be fired almost as rapidly as the semi-automatic.
2. The "Automatic" (Self-Loader) - This semi-automatic type offers several advantages. It usually holds four or more rounds. The action lessens recoil. It can be fired rapidly without the development of dexterity on the part of the shooter.

D. Capabilities

1. Shotgun shot spread
2. Shotgun pellets can be lethal up to 200 yards or more; however, the maximum effective range is approximately 40 yards.
3. Most combat firing occurs under 20 yards.
4. Test results indicate that the shot spread is 1-inch for each yard of distance. All of the pellets can be grouped within a human sized target which is less than 20 yards away. Beyond 20 yards the area of shot spread increases.
5. When firing from a greater distance, the officer must consider the proximity of innocent persons and the shot spread.

6. Before firing the following factors should be considered:
  - a. Distance from the target
  - b. Probable shot spread
  - c. Proximity of innocent persons
  - d. Environment (e.g., building construction, occupied dwellings, etc.)
  
- E. Shot or load
  1. Description - The most common size shot used for general police duty is #00 buckshot. This shot shell contains nine separate lead spheres, each approximately .33 caliber in size.
  2. Many law enforcement agencies are utilizing alternative shotgun loads (i.e., 12 pellet 00 buckshot, #4 buckshot, #1 buckshot or rifled slugs).

NOTE: The instructor may wish to concentrate discussion on the type of ammunition most commonly used by agencies participating in the academy
  
- F. Why the shotgun is used
  1. The shotgun is a triple-threat weapon. It can be used as a rifle, shotgun, and a chemical agent delivery device. These advantages are not available in any other police weapon.
    - a. Greater fire power is available when needed. Properly loaded, the shotgun is the appropriate weapon for a variety of situations.
  2. A shotgun uses a variety of loads, from slugs to birdshot.
    - a. Where pellet spread is not desirable or when tactically necessary the rifled slug may be used.
      - (1) Lethal range in excess of 500 yards.
      - (2) Effective range up to 100 yards.
  3. Psychological value.
    - a. The appearance of an officer armed with a shotgun may provide a deterrent and prevent the need for the actual use of lethal force.



## HANDGUN MARKSMANSHIP

The student will demonstrate the principles of good marksmanship using the service handgun.

The demonstration will minimally include:

- A. Stance
- B. Grip
- C. Breath control
- D. Sight alignment
- E. Trigger control
- F. Follow-through

Performance Objective 7.10.1

## CURRICULUM

- A. Principles of marksmanship
  - 1. Instruction should be provided regarding the following principles of marksmanship:
    - a. Stance
    - b. Natural
    - c. Comfortable
    - d. Stable
    - e. Tactical
  - 2. Grip
    - a. One handed vs. two handed
    - b. Appropriate for the style of weapon used
    - c. Grips sized correctly for the shooter's hand
    - d. Proper positioning of hand(s) and fingers appropriate to the style of weapon used
  - 3. Breath control
    - a. Natural (do not hold your breath)
  - 4. Sight alignment
    - a. Fundamental to accuracy

- b. Effect of the dominant eye
  - c. Front sight focus
  - d. Relationship of front and rear sight
  - e. Relationship of sight picture to sight alignment
5. Trigger control
- a. Proper placement of finger on trigger
    - (1) Single action
    - (2) Double action
  - b. Steadily increasing pressure straight to the rear (press)
  - c. Surprise break
6. Follow-through
- a. Maintain/reacquire sight picture in preparation for a second or subsequent shot

## SHOOTING POSITIONS

The student will minimally demonstrate the following shooting positions as instructed with and without cover.

- A. Standing
- B. Prone
- C. Kneeling

Performance Objective 7.10.2

## CURRICULUM

- A. The students will be required to demonstrate as instructed the following shooting positions
  - 1. Standing
    - a. Without cover
    - b. From position(s) of cover
  - 2. Prone
    - a. Without cover
    - b. From position(s) of cover
  - 3. Kneeling
    - a. Without cover
    - b. From position(s) of cover
- B. Instruction should be reinforced regarding the distinction between cover and concealment



## SHOTGUN MARKSMANSHIP

The student will demonstrate the principles of good marksmanship using a standard law enforcement shotgun as instructed.

The demonstration will minimally include:

- A. Stance
- B. Breath control
- C. Aiming
- D. Trigger control
- E. Follow-through
- F. Proper position on shoulder

Performance Objective 7.11.1

## CURRICULUM

- A. Instruction should be provided regarding the following principles of marksmanship:
  - 1. Stance
    - a. Natural
    - b. Comfortable
    - c. Stable
    - d. Tactical
  - 2. Breath control
    - a. Natural (do not hold your breath)
  - 3. Aiming
    - a. Fundamental to accuracy
    - b. Effect of the dominant eye
    - c. Front sight focus
    - d. Relationship of front and rear sight, if applicable
    - e. Relationship of sight picture to sight alignment
  - 4. Trigger control
    - a. Proper placement of finger on trigger

- b. Steadily increasing pressure straight to the rear (press)
  - c. Surprise break
5. Follow-through
- a. Maintain/reacquire sight picture in preparation for a second or subsequent shot
6. Proper position on shoulder
- a. Stock of the weapon to the pocket of the shoulder
  - b. Weapon held tight to the shoulder
  - c. Spot weld (cheek to stock comb)
  - d. Appropriate positioning of hands and arms

## SHOTGUN SHOOTING POSITIONS

The student will demonstrate commonly recognized shooting positions using a standard law enforcement shotgun with and without cover as instructed.

These positions will minimally include:

- A. Standing
- B. Kneeling

Performance Objective 7.11.2

## CURRICULUM

- A. The students will be required to demonstrate as instructed the following shooting positions
  - 1. Standing
    - a. Without cover
    - b. From position(s) of cover
  - 2. Kneeling
    - a. Without cover
    - b. From position(s) of cover
- B. Instruction should be reinforced regarding the distinction between cover and concealment



## HANDGUN USE - DAY RANGE

Given a daylight range exercise with a time limitation and an acceptable score established by the academy, the student using factory service ammunition or its equivalent will fire a minimum of sixty (60) rounds on a handgun course consisting of single and/or multiple silhouette targets. Thirty rounds shall be fired at ranges of one to seven yards using the service handgun. The remaining rounds must be fired from a distance of five to fifteen yards (or to twenty five yards if that distance can be accommodated on the range) using the service handgun and sight shooting.

During the course of fire the student will load, unload and reload the handgun using the loading device authorized by the academy.

Performance Objective 7.13.1

### CURRICULUM

- A. Display targets and explain scoring procedures
  1. Bring in targets
  2. Describe scoring method
  3. Explain possible scores
    - a. Passing
    - b. More proficient scores, etc.
- B. Go over course on range
  1. Walk through before firing
  2. Show them how back of range is set up
  3. Firing line
- C. Demonstrate commands, stance and positioning
  1. The technique and stance to be fired
  2. Load and be ready...the student will load (with the number of rounds as instructed) and holster the weapon
  3. Is the line loaded and ready? (Note: impress on the student that, if not ready, to shout loudly "Not ready.")
  4. The line is ready
  5. Fire (either verbal or by whistle)

6. Cease fire (stress that this command calls for immediate compliance)

NOTE: At the instructor's discretion, the commands (questions) "ready on right", "Ready on the left", can be employed.

It is wise to test students' comprehension of the commands by having them enact them according to the commands.

- D. Impress safety through demonstration, then have students demonstrate Back what they are doing
  1. Unload all weapons upon arrival at the range.
  2. If wearing holster, empty weapons will be holstered.
  3. Revolvers: if hand-carried, the cylinder will be open. Semi-automatics: if hand-carried, the magazine will be removed and the slide locked open.
  4. Weapons are never to be dry fired at any location on the range except upon direct command of the line officer.
  5. Go over rules of safety and conduct.
    - a. No handling of a weapon, dry firing, loading, etc., except upon direct command of the line officer.
    - b. Weapons, when in hand, will always be pointed down range (at the target area).
    - c. At all times the student will be attentive and alert to respond to commands and immediately obeys commands.
    - d. Should a weapon malfunction, jam or not discharge, the student will keep the gun pointed down range and raise the free hand and remain in that position until attended to by a line officer.
    - e. Should the report (sound) of the weapon upon firing give indication that an underpowered round has been discharged with the possibility the bullet is lodged in the barrel, the student will follow procedure in 5.d. (above, as for malfunction).
  6. Ear and eye protection will be worn at all times while on the firing range.
  7. Stress that there will be no exceptions to violations of safety rules and conduct.
  8. Student capabilities in these areas should be tested by having them demonstrate these safety skills.

- E. Have each student demonstrate skill by actually firing the range course, loading and unloading and reloading.
- F. The instructor shall give the following:
  - 1. Explanation of the course requirement.
  - 2. Commands
  - 3. Correction as required-individually.
- G. Student will shoot certain number of courses.
- H. First practice session extra attention should be paid to:
  - 1. Command
  - 2. Safety
  - 3. Scores
- I. The number of other sessions on this range is dependent upon the student achieving objective.
  - 1. Passing scores.
  - 2. Observation checklist.



## HANDGUN USE - NIGHTTIME/LOW LIGHT RANGE

Given a nighttime/low light range exercise , with a time limitation and an acceptable score established by the academy, the student will fire a minimum of sixty (60) rounds of factory service ammunition or its equivalent on a handgun course consisting of single and/or multiple silhouette targets. Thirty rounds shall be fired at ranges of one to seven yards using the service handgun. Thirty rounds shall be fired from five to fifteen yards using the service handgun and sight shooting.

During the course of fire the student will load, unload and reload the handgun using the loading device authorized by the academy.

Performance Objective 7.14.1

### CURRICULUM

#### A. Demonstration

1. The instructor should explain problems of night shooting, i.e., pupil (eye) dilation, perception problems, aiming problems, distances, etc.
2. The instructor should demonstrate use of flashlight.
3. The instructor should demonstration safety positions (loading, firing).
4. The instructor should demonstration types of loading and unloading (loading device as appropriate).

#### B. Display targets and explain scoring procedure

1. Bring in targets.
2. Describe scoring methods.
3. Explain possible score.
  - a. Passing.
  - b. More proficient scores.

#### C. Go over course on range

1. Walk through before firing.
2. Show them the course set-up (Note: Range should be started with flashlight.
3. Firing line.

E. Demonstrate commands, stance and positioning

1. The technique and stance to be fired.
2. Load and be ready...the student will load (with the number of rounds as instructed) and holster the weapon.
3. Is the line loaded and ready? (NOTE: Impress on the student who is not ready, to shout loudly, "not ready").

NOTE: At the instructor's discretion, the commands (questions) "Ready on the right", "Ready on the left", can be employed.

4. The line is ready.
  5. Fire (either verbal or by whistle).
  6. Cease fire (stress that this command calls for immediate compliance).
- F Unload all weapons upon arrival at the range.
- G. If wearing holster, empty weapon will be holstered.
- H. Revolvers: If hand-carried, the cylinder will be open. Semi-automatics: If hand-carried, the magazine will be removed and the slide locked open.
- I. Weapons are never to be dry fired at any location on the range except on the firing line and on command of line officer.
- J. Go over general rules of safety and conduct.
1. No handling of a weapon, dry firing, loading, etc., except upon direct command of the line officer.
  2. Weapons when in hand will always be pointed down range (at the target area).
  3. At all times the student will be attentive and alert to respond to commands and immediately obey commands.
  4. Should a weapon malfunction, jam or not discharge, the student will keep the gun pointed down range and raise the free hand and remain in that position until attended to by a line officer.
  5. Should the report (sound of the weapon upon firing give indication that an under-powered round has been discharged, with the possibility the bullet is lodged in the barrel, the student will follow procedure in 5.d. (above, as for malfunction).
  6. Ear and eye protection will be worn at all times while on the firing line.

## HANDGUN COMBAT - DAY RANGE

Given a daylight combat range exercise with a time limitation and an acceptable score established by the academy, the student will using the service handgun load, fire and reload the service handgun using factory service ammunition or its equivalent and the loading device authorized by the academy and fire a minimum of thirty (30) rounds on a handgun course consisting of:

- A. Multiple and/or single combat targets
- B. "Strong" and "weak" hand from position of cover

Performance Objective 7.15.1

### CURRICULUM

#### A. Introduction

1. Every officer should be sufficiently trained in combat firing.
2. With practice, accurate double-action shooting can be developed to a high degree of proficiency. Most gun battles involving law enforcement officers are fought within ten yards.
3. Although sighted, single-action firing may be more accurate, the circumstances of combat usually do not permit the luxury of fine sight alignment, target stance, trigger squeeze which are so necessary in target shooting.

#### B. Demonstration

1. The demonstration technique is employed in:
  - a. Weak and strong firing from position of cover
  - b. Kneeling.
  - c. Prone.
  - d. Standing.
  - e. Loading and unloading:
    - (1) Automatics - (explain) (demonstrate).
    - (2) Revolvers.

NOTE: As ranges vary in construction, variation of firing stances and techniques may have to be made.

2. Targets and scoring.
    - a. Bring in targets.
    - b. Describe scoring methods.
      - (1) Targets - score
      - (2) Positions
      - (3) Methods of going through course - walk, run, crawl, etc.
    - c. Explain possible score.
  3. Go to range, going over course. Walk through before firing.
  4. Explain method, scoring rings, body hits, vital area, wounding shots, misses, etc.
- C. Cover the commands used on the course
1. The technique and stance to be fired.
  2. Load and be ready...the students will load (with the number of rounds as instructed), and holster their weapons.
  3. Is the line loaded and ready? (NOTE: Impress on the student that if not ready, to shout loudly "Not ready" and raise non-gun hand.)
  4. The line is ready.
  5. Fire (either verbal or by whistle).
  6. Cease fire (stress that this command calls for immediate compliance).

NOTE: At the instructor's discretion, the commands (questions), "Ready on the right", "Ready on the left", can be employed.

- D. Stress important safety factors
1. Unload all weapons upon arrival at the range.
  2. If wearing holster, empty weapon will be holstered.
  3. Revolvers: if hand-carried, the cylinder will be open. Semi-Automatics: if hand-carried, the magazine will be removed and the slide locked open.
  4. Weapons are never to be dry-fired at any location on the range except on the firing line and on command of line officer.

5. Go over general rules: Safety and conduct.
  - a. No handling of weapon, dry firing, loading, etc., except upon direct command of the line officer.
  - b. Weapons when in hand will always be pointed down range (at the target area).
  - c. At all times the student will be attentive and alert to respond to commands and immediately obey commands.
  - d. Should a weapon malfunction, jam, or not discharge, the student will keep the gun pointed down range and raise the free hand and remain in that position until attended to by a line officer.
  - e. Should the report (sound) of the weapon upon firing give indication that an under-powered round has been discharged with the possibility that the bullet is lodged in the barrel, the student will follow procedure 5.d. (above, as in malfunction).
6. Ear and eye protection will be worn at all times while on the firing line.
7. Stress that there will be no exceptions to violations of safety rules and conduct.
8. Student compliance in these areas can be observed at the instructor's discretion by watching his/her activities.



## HANDGUN COMBAT - DAY RANGE

Given a daylight combat range exercise established by the academy, the student will load, fire, and reload the service handgun using factory service ammunition or its equivalent and the loading device authorized by the academy while experiencing physical activity often associated with an officer-involved shooting prior to and/or during the course of fire.

Performance Objective 7.15.2

### CURRICULUM

- A. Practice/demonstration
    - 1. Have each student demonstrate skill, by actually firing a prescribed course of fire
  - B. Go over course on range
    - 1. Walk through before firing.
    - 2. Show them the course set-up
    - 3. Firing line.
  - C. The instructor shall give the following:
    - 1. Explanation of the course requirements.
      - The course shall minimally include:
        - a. Close combat techniques
        - b. Loading and reloading
        - c. Physical activity consistent with that of an officer involved shooting situation either prior to and/or during the course of fire
- NOTE: The intention of this requirement is to cause the student to experience an increase in respiration and pulse rate as would be commonly associated with a stressful tactical event
- 2. Explanation of commands
  - 3. Provide individual correction as necessary
- D. Student will shoot a specified number of rounds and courses.



## HANDGUN COMBAT - NIGHTTIME/LOW LIGHT

Given a nighttime/low light combat range exercise with a time limitation and acceptable score established by the academy, the student will load, fire and reload the service handgun using factory service ammunition or its equivalent and the loading device authorized by the academy and fire a minimum of thirty (30) rounds on a handgun course consisting of:

- A. Multiple and/or single combat targets
- B. Position of cover

Performance Objective 7.16.1

### CURRICULUM

#### A. Introduction

1. Every officer should be sufficiently trained in nighttime/low light combat firing.
2. With practice, accurate double action shooting can be developed to a high degree of proficiency. Most gun battles involving law enforcement officers are fought within ten yards.
3. Although sighted, single action firing may be more accurate, the circumstances of combat usually do not permit the luxury of fine sight alignment, target stance, and trigger squeeze which are so necessary in target shooting.

#### B. Demonstration

##### 1. Introduction

- a. Night duty makes learning to shoot in darkened or low light conditions essential
- b. Limitations of nighttime shooting
  - (1) Unable to see sights.
  - (2) Target obscured.
  - (3) Night blindness, blinding lights from different sources.
- c. Use of flashlights
  - (1) Capabilities
  - (2) Limitations
  - (3) Positioning

- C. Display targets and explain scoring procedures
  - 1. Bring in targets.
  - 2. Describe scoring methods, scoring rings, body hits, vital area, wounding shots, misses, etc.,
  - 3. Explain possible score.
    - a. Passing score
    - b. More proficient score
  
- D. Go over course
  - 1. Course requirements:
    - a. Single and/or multiple combat targets
    - b. Firing from positions of cover
    - c. Loading and reloading under combat conditions
  - 2. Walk through before firing.
  - 3. Explain how course is different from day course.
  - 4. Discuss movements - methods of going through course - walk, run, crawl, etc.
  
- E. Explain the range commands, stance and positions
  - 1. The technique and stance to be fired.
  - 2. Load and be ready...the student will load (with the number of rounds as instructed) and holster their weapon.
  - 3. Is the line loaded and ready?
  - 4. The line is ready.
  - 5. Fire (either verbal or by whistle).
  - 6. Cease fire (stress that this commands calls for immediate compliance).

NOTE: Impress on the student that if not ready shout loudly, "Not ready."

NOTE: At the instructor's discretion, the commands (questions) "Ready on the right," "Ready on the left," can be employed.

Test students' comprehension of the commands by having them enact them according to the commands.

- F. Impress safety through demonstrating and having them demonstrate back what they are doing.
1. Unload all weapons upon arrival at the range.
  2. If wearing holster, empty weapon will be holstered.
  3. Revolvers: If hand-carried, the cylinder will be open. Semi-automatic: If hand-carried, the magazine will be removed and the slide locked open.
  4. Weapons are never to be dry fired at any location on the range except on the firing line and on command of line officer.
  5. Go over general rules of safety and conduct.
    - a. No handling of a weapon, dry firing, loading, etc., except upon direct command of the line officer.
    - b. Weapons, when in hand, will always be pointed down-range (at the target area).
    - c. At all times, the student will be attentive and alert to respond to commands and immediately obey commands.
    - d. Should a weapon malfunction, jam or not discharge, the student will clear the malfunction as instructed. If unable to clear the malfunction, the student should be instructed to alert the line officer
    - e. Should the report (sound) of the weapons, upon firing, give indication that an under-powered round has been discharged with the possibility the bullet is lodged in the barrel, the student will follow procedures as instructed
    - f. Ear and eye protection will be worn at all times while on the firing line.
    - g. STRESS: That there will be no exceptions to violations of safety rules and conduct.
    - h. Student capabilities in these areas should be tested by having them demonstrate these safety skills at the instructor's discretion.



## SHOTGUN COMBAT - DAY RANGE

Given a daylight shotgun combat range exercise with distances with a time limitation, distances and an acceptable score established by the academy, the student will fire at least six (6) rounds at single and/or multiple combat targets using combat positions and combat loading techniques.

Performance Objective 7.17.1

### CURRICULUM

- A. Prepare for the range exercise
  - 1. Identify equipment students will need to provide
  - 2. Identify course requirements
    - a. Distances and time limitations
    - b. Single and/or multiple targets
    - c. Combat positioning
    - d. Combat loading techniques
  - 3. Review range safety requirements
  - 4. Demonstrate course of fire
  - 5. Show targets and explain scoring procedure
- B. Practical application
  - 1. Practice course
  - 2. Qualification exercise



## SHOTGUN COMBAT - NIGHTTIME/LOW LIGHT

Given a nighttime/low light shotgun combat range exercise with distances and time limitations, and an acceptable score established by the academy, the student will fire at least six (6) rounds at single and/or multiple combat targets using combat positions.

Performance Objective 7.18.1

### CURRICULUM

- A. Prepare for the range exercise
  - 1. Identify equipment students will need to provide
  - 2. Identify course requirements
    - a. Distances and time limitations
    - b. Single and/or multiple targets
    - c. Combat positioning
    - d. Combat loading techniques
  - 3. Review range safety requirements
  - 4. Demonstrate course of fire
  - 5. Show targets and explain scoring procedure
- B. Practical application
  - 1. Practice course
  - 2. Qualification exercise



# CHEMICAL AGENTS CURRICULUM

## I. EVOLUTION OF CHEMICAL AGENTS

1. Nonlethal chemical agents have existed for thousands of years.
2. The first recorded uses of chemical agents occurred 2300 years ago.
3. About 311 B.C., Chinese armies of the time used stink pots during frontal assaults against their enemy. The stink pots were red pepper burned in oil. This created an irritating and choking smoke. The stink pots, if the wind was blowing the right direction and the wind velocity was the right speed, generated an irritating and suffocating smoke.
4. In 1959 the U.S.Army declassified CS and used it as a riot control agent (RCA).
5. In 1965 General Ordinance Equipment Corporation introduced "Mace" which was the first hand-held aerosol chemical agent.
6. On January 1, 1969 the California Tear Gas Act went into effect. It addressed sale, transportation, use of chemical agents and established chemical agent training standards.
7. In 1982 Oleoresin Capsicum was introduced into law enforcement by Lucky Police Products.



## II. LEGAL ASPECTS OF CHEMICAL AGENTS

### A. State laws

1. Laws pertaining to possession and use of chemical agent products
  - a. California law requires that all persons who purchase, possess or use any "tear gas" product complete an approved course of instruction.

NOTE: The term "tear gas" is specifically used in statutory law. This term, however, is actually incorrect because none of the substances described are gases in the scientific sense of the word. The term "chemical agent" more properly describes the substances described herein all of which are actually particulate matter or liquid derivatives.

- (1) The authority to establish training standards for peace officers has been designated to California Commission on Peace Officer Standards and Training (POST). (Penal Code Section 12403)
- (2) The authority to establish training standards for citizens has been designated to the California Department of Justice (DOJ). (Penal Code Section 12403.7)
- (3) It is a misdemeanor to possess tear gas in the State of California if the possessor is not certified by the state to carry tear gas. (Penal Code Section 12420)
- (4) Security guards must complete a course of instruction approved by POST in order to carry chemical agents. He/she may use chemical agents for defensive purposes only in the scope of the activity he/she has been hired for. (Penal Code Section 12403.5)
- (5) No person, including peace officers, shall take chemical agents into a jail or prison, or adjacent to a jail or prison, without the approval of the facility commander. (Penal Code Section 12404)
- (6) Civilians may obtain chemical agent certification in one of three ways:
  - (a) Attend a class (minimum two hours) and pass a written and practical application test.
  - (b) At the point of sale pass a written test provided by the Department of Justice and pass a practical application test.
  - (c) Watch a DOJ movie for civilian use and pass a practical application test.

- (d) A fee may be charged by the seller for the training and a fee must be paid to the Department of Justice for the certification. (Penal Code Section 12403.7)
- b. Tear gas products cannot be possessed by
  - (1) a convicted felon (Penal Code Section 12403.7)
  - (2) a person convicted of a crime involving an assault (Penal Code Section 12403.7)
  - (3) a person convicted of misuse of tear gas (Penal Code Section 12403.7)
  - (4) a person who is addicted to any narcotic drug (Penal Code Section 12403.7), or
  - (5) a minor (Penal Code Section 12403.8).
    - (a) In this section, a minor is described as a person "under the age of 18", however:
    - (b) a person between the ages of 16 and 18 may only possess tear gas:
      - 1) if they complete a course of instruction, and
      - 2) sign an affidavit stating they will use the tear gas only for self defense purposes, and
      - 3) have written permission from a parent or guardian.
- c. Under the law, citizens may use tear gas for self defense purposes only. "Self defense" means defense of yourself or others. (Penal Code Section 12403.7)
- d. Under the law, peace officers may use tear gas in a variety of other situations in addition to self defense. (Penal Code Sections 835a and 12403) Examples include but are not limited to
  - (1) crowd and riot control
  - (2) overcoming resistance
  - (3) affecting an arrest, and
  - (4) preventing escape

2. Laws regulating chemical agent products:

- a. The California Department of Justice has been designated the responsibility for determining which types and sizes of tear gas products may be lawfully possessed. (Penal Code Section 12403.7B)
- b. Products authorized for possession by citizens must contain a label that states "WARNING - The use of this substance or device for any purpose other than self defense is a felony under the law. The contents are dangerous - use with care."
- c. Every tear gas container or tear gas weapon (manufactured after January 1, 1984) approved for civilian possession must have a label that discloses the date on which the useful life of the product expires.
- d. Each tear gas product (including all munitions used by law enforcement agencies) shall bear the name of the manufacturer and a serial number. (Penal Code Section 12421)
- e. Any person who changes, alters, removes or obliterates the name of the manufacturer, the serial number or any mark of identification on a tear gas product is guilty of a felony. Possession of any such weapon shall be presumptive evidence that the possessor has changed, altered or obliterated the same. (Penal Code Section 12422)
- f. OC (oleoresin capsicum) devices which have not been approved by the Department of Justice and are sold as animal repellents are considered an economic poison. As such, they are regulated by the Food and Agricultural Code and may be illegal to possess.

B. Federal laws

1. Carrying or placing a tear gas device on an aircraft is a violation of federal law.
  - a. Civil penalty - up to a \$1000 fine levied by the Department of Transportation
  - b. Criminal penalty (for willful placement) - up to five years in federal prison and a \$25,000 fine or both
2. Federal law enforcement officers can carry, possess and use tear gas in the state of California for the official discharge of their duties and are not restricted by California statutes. (Penal Code Section 12403.1)



### III. TYPES OF CHEMICAL AGENTS

#### A. Major types of chemical agent substances

1. CN (chloroacetophenone)
2. CS (orthochlorobenzalmononitrile)
3. OC (oleoresin capsicum)

#### B. CN agents

##### 1. Description and characteristics

- a. Commercial color code - red
- b. Classification - lacrimator/lachrymator (tearing agent)
- c. Odor - sweet (similar to apple blossoms)
- d. Chemical makeup
  - (1) an organic compound
  - (2) In its pure form, it is a white, crystalline solid similar to talcum powder.
  - (3) Particles are one-half the thickness of a human hair.
- e. Types
  - (1) Chloroacetophenone - a solid form used in grenades and projectiles
  - (2) Ethylbromacetate - liquid form used in aerosol devices

##### 2. Physiological effects

- a. Irritation to the nose and throat (usually occurring within one to two seconds)
- b. Profuse tearing
- c. Burning sensation to the skin, especially if hot and perspiring
- d. Closure of eyes (usually occurring within one to two seconds)

##### 3. Psychological effects

- a. CN is the mildest of the chemical irritants and has the least psychological impact.

- b. Anxiety can be caused by the level of discomfort
- c. Effects can differ depending upon the compounds that the CN is mixed with (e.g., cosmetic kerosene used as a carrying agent).

4. Decontamination

- a. A person should be exposed to fresh air.
- b. The affected area can be flushed with water.
- c. No saives, ointments or moisturizing agents should be spread over an affected area as this could bond the irritant particles to the skin causing a chemical burn.
- d. Approximately one in every one thousand people will have an allergic reaction. The degree of reaction can vary significantly.
- e. If the physical effects of exposure to CN do not begin to diminish after decontamination measures are employed, medical attention should be obtained.

NOTE: Clothing can become contaminated as a result of use of the agent. As a result, it may be necessary to decontaminate the clothing by regular washing.

Officers using a chemical agent may themselves become contaminated as a result of handling an exposed subject. As a result, officers should avoid rubbing their eyes or nose and should wash their hands as soon as possible.

C. CS agents

1. Description and characteristics

- a. Commercial color code - blue
- b. Classification - irritant (also a lachrymator/lacrimator)
- c. Odor - pungent (pepper-like)
- d. Chemical makeup
  - (1) In its pure form, it is a fine, yellowish powder.
  - (2) Particles are about one to ten microns in size. (smaller than CN in its pure form)

2. Physiological effects

- a. Irritation to the nose and throat

- b. Profuse tearing
- c. Closure of the eyes
- d. Mucus flow/nasal drip
- e. Heavy salivation
- f. Stings soft body tissue/abrasions
- g. Tightness in chest/coughing

3. Psychological effects

- a. Anxiety
- b. Panic
- c. Disorientation

4. Decontamination

- a. A person should be exposed to fresh air.
- b. The affected area can be flushed with water.
- c. No salves, ointments or moisturizing agents should be spread over an affected area as this could bond the irritant particles to the skin causing a chemical burn.
- d. There is no record of an allergic reaction to CS. A person could have an allergic reaction, however, to the carrying agent.
- e. If the physical effects of exposure to CS do not begin to diminish after decontamination measures are employed, medical attention should be obtained.

NOTE: Clothing can become contaminated as a result of use of the agent. As a result, it may be necessary to decontaminate the clothing by regular washing.

Officers using a chemical agent may themselves become contaminated as a result of handling an exposed subject. As a result, officers should avoid rubbing their eyes or nose and should wash their hands as soon as possible.

D. OC agents

1. Description and characteristics:

- a. Commercial color code - black
- b. Classification - inflammatory agent

- c. Odor - pungent (pepper)
- d. Chemical makeup
  - (1) Concentration of capsaicin which is naturally found in cayenne peppers or synthetically manufactured
  - (2) May appear as a clear, amber or heavy dark red liquid depending upon the manufacturer.
  - (3) The agent is suspended in several types of solutions which act as carriers and are expelled by freon or similar type of propellant.

2. Physiological effects

- a. Severe twitching of the eyes
- b. Involuntary closure of the eyes
- c. Respiratory inflammation /shortness of breath
- d. Coughing
- e. Gagging sensation
- f. Exposed skin inflammation (redness, burning sensation)
- g. Temporary loss of upper body motor control
- h. Temporary paralysis of the larynx

3. Psychological effects

- a. Disorientation
- b. Anxiety
- c. Panic

4. Decontamination

- a. A person should be exposed to fresh air.
- b. The affected area can be flushed with water.
- c. Ice can be applied to exposed skin surfaces
- d. Soap (non oil-based) and water can be used to cleanse the affected areas

- e. No salves, ointments or moisturizing agents should be spread over an affected area as this could bond the inflammatory resin to the skin causing continuing discomfort.
- f. If the physical effects of exposure to OC do not begin to diminish after decontamination measures are employed, medical attention should be obtained.

NOTE: Officers using a chemical agent may themselves become contaminated as a result of handling an exposed suspect. As a result, officers should wash their hands thoroughly and avoid rubbing eyes, nose, etc.



#### IV. ORIENTATION TO CHEMICAL AGENT DELIVERY METHODS

- A. There are four ways in which chemical agents can be delivered. They are:
1. Pyrotechnics
    - a. Pyrotechnics is the burning of granulated chemical agent and a pyrotechnic mix to vaporize the agent and release it as a submicron aerosol cloud.
    - b. Also referred to as continuous discharge
  2. Blast dispersion
    - a. Blast dispersion is the use of explosives or other force to eject micropulverized chemical agent into the air.
    - b. Also referred to as instantaneous discharge or bursting
  3. Fogging
    - a. Fogging is the use of hot gases to vaporize a liquid chemical agent formulation which is subsequently released as a fog cloud.
    - b. Deployment devices are commonly referred to as "Pepper Foggers"
  4. Liquid/aerosol
    - a. The use of an expelling force to project a liquid/aerosol chemical agent formulation to a desired target
    - b. This is the most common method used by law enforcement.



## V. AEROSOL CHEMICAL AGENT DEPLOYMENT TACTICS

### A. Carrying the hand-held aerosol chemical agent device

1. The chemical agent may be carried on either the strong hand or weak hand side.

NOTE: Students should be advised that placement of the device on their utility belt may be governed by individual department policies.

2. Placement on the weak side allows for immediate (no obstruction) access to a firearm when needed.
3. Placement on the strong side allows the device to be concealed from the suspect's view when the officer is standing in a position of interview.
4. When working in plain clothes, the device should be carried in such a position as to be easily accessible when needed, while minimizing the potential for an accidental discharge.
5. Many different holsters are now available. It is important that the canister fit properly into the holster and is readily removable.
6. It is important to develop the skill to easily re-holster and secure the device.

### B. Deploying the hand-held aerosol chemical agent device

1. It may be tactically advantageous to conceal the device from the suspect's view until it is actually used.

NOTE: Instructors should be aware that display of the device before use may be a matter addressed by individual department policies.

2. After being withdrawn from the holster, the device needs to be rightside up in order to discharge properly and prevent loss of the propellant.
3. Hand-held chemical agent devices should be used at distances between 3 and 10 feet.

NOTE: Most hand-held chemical agent devices have a **maximum** effective range of approximately 8 to 10 feet. Some products have an effective range considerably under this distance. It is important for students to be aware of the capabilities of the device they are actually going to carry.

4. All devices are effected by the elements (i.e. wind, rain, temperature). These factors must be taken into account before use.

5. The target for all hand-held aerosol devices is the face of the suspect.

NOTE: Obvious care should be taken to avoid spraying nearby officers or bystanders

6. Officers should be prepared to dodge the attacker after application.

NOTE: No device is 100% effective. A determined assailant may be able to overcome the physical effects.

7. The officer must be prepared to take tactical advantage by engaging the suspect (e.g. controlling, handcuffing, etc.) when the suspect is effectively impaired. This opportunity may occur immediately or may take several seconds after the agent is used.
8. Each person may react differently to a chemical agent exposure. (e.g. some may flee, some may attack, some may appear unaffected, etc.) Effects vary depending upon psychological makeup, physical condition, level of intoxication, degree of exposure to the agent, etc. The same person may, in fact, react differently on different occasions.
9. Officers must be prepared to use other force options, as appropriate, if the subject is not affected by the agent.
10. Officers must be prepared to get some of the chemical on them during or after use of the product. It is important for officers to know how they will personally react to any agents they intend to carry.
11. CN and CS products are unlikely to work on animals. OC based chemical sprays, however, will usually work on animals. Some animals (e.g. trained attack dogs) may not be affected.

## **VI. CARE AND MAINTENANCE OF AEROSOL CHEMICAL AGENT DEVICES**

### **A. Storage of hand-held aerosol chemical agent devices**

1. Devices should be stored in areas that do not exceed 120 degrees.
2. At temperatures exceeding 120 degrees, the aerosol may expand and the container may explode releasing its contents.

### **B. Devices should be checked for leaks periodically.**

**NOTE:** The frequency of inspection may be governed by individual department policies, however, the inspections should be frequent enough to ensure that the product will operate effectively when needed.

### **C. Inspections of hand-held aerosol chemical agent devices should include:**

1. Exterior canister
2. Trigger/activation mechanism
3. Seams and seals
4. Expiration dates
5. Nozzle (e.g. for obstructions, blockages)
6. Sufficiency of the remaining contents

**NOTE:** Individual department policies may dictate when canisters should be replaced. Some devices are equipped with measuring devices on the exterior of the canister to assist with this determination.

### **D. Devices should be maintained according to the manufacturers instructions.**



## VII. DISPOSAL OF AEROSOL CHEMICAL AGENT DEVICES

- A. To dispose of an aerosol chemical agent device:
1. It should be emptied of carrier and agent.
  2. The device should then be pulled apart. The triggering mechanism removed from the body, wrapped in paper and placed in the trash.

NOTE: Disposal protocols may be a matter of individual department policies. Officers should be cautioned to check their department policy before disposing of any products. Some departments require that the empty device be returned to the agency in order to receive a replacement.

- B. An empty aerosol chemical agent device should not be left in an area accessible to children or untrained individuals.



## VIII. PRACTICAL APPLICATION (Learning Activity 13.35.01)

### A. Objectives of the field exercise:

The objectives of the field exercise are to provide students with an opportunity to

1. experience the effects of a nonlethal aerosol chemical agent
  2. demonstrate proper tactics for deploying a hand-held aerosol chemical agent device, and
  3. demonstrate personal decontamination techniques.
- B. The instructor should identify each chemical agent to be deployed, its effects, and other relevant information.
- C. The instructor should explain the method of deployment to be used.
1. Show examples of the chemical agents to be used.
  2. Instructors should demonstrate proper deployment techniques.
  3. Inert devices may be employed during the demonstration phase
- D. When deploying chemical agents, the following environmental conditions should be considered:
1. Wind
  2. Target distance
- E. Decontamination of persons exposed to nonlethal aerosol chemical agents
1. Remove the person from the contaminated area
  2. Expose the person to fresh air
  3. Flush the exposed area with cold water
  4. Avoid the use of soap or oil based products to clean the skin
  5. If symptoms persist, seek proper medical attention
- F. Student preparation for exposure to hand-held aerosol chemical agents
1. Proper clothing
  2. Removal of glasses/contact lenses
  3. Removal of heavy make-up

**G. Management of student safety**

1. Guidelines for the presentation of chemical agent training are identified in the document *POST Guidelines for Student Safety in Certified Courses*
2. POST requires each presenter of chemical agent training to develop specific safety rules particular to each training site and specific to the particular task being performed by students. These rules should be reviewed with students before any practical application occurs.

## IX. USE OF GAS MASKS

### A. Origin of gas masks

1. In 1915, the British developed and issued the first type of gas mask for protection against chlorine gas deployed by the German Army in France.
2. Original masks consisted of a cotton pad of sufficient size to cover a person's mouth and nostrils. These masks were secured in position by strings which were tied behind the head. The pad was soaked in a solution of soda ash (sodium bicarbonate) which reacted with the chlorine gas.
3. A short time later, a crude helmet mask was developed which consisted of chemically impregnated cloth sacks.
4. Next came a box respirator-type mask consisting of a canister connected to a face piece with a hose. The face piece was equipped with a rubber mouthpiece and a nose clip.
5. This mask was followed by the American Tissot Mask which is similar to the box respirator mask, except that the canister was carried in a canvas sack worn over the user's shoulder.
6. The most efficient mask was developed by the Germans, and with some improvements, is essentially the same type of mask in use today. This type was referred to as the "snout-type" mask.
7. The U.S. military also developed their own line of similar masks. Designated as the M-9 through M-17 series, they are the masks most commonly used by civilian law enforcement agencies.

### B. Basics of a gas mask

1. A modern day gas mask has three essential components:
  - a. A lens which allows a good field of vision.

NOTE: A mask should be evaluated for the amount of peripheral vision it will allow. This can be tested by having the user extend their arms outward while wearing the mask to determine how much can be seen without physically having to move their head. Good peripheral visibility is desirable.

- b. A surface that covers the face sufficiently to enclose the mouth, nostrils, and eyes while permitting a good seal.
  - c. A filtering device which filters out solid particles and micro-droplets of chemical agents

NOTE: The filter will not filter out smells, but will filter out solid particles and liquid droplets. Most law enforcement filters will not filter out true gases (e.g. carbon monoxide) or chemical gases present in locations such as clandestine drug laboratories.

Likewise, these masks do not provide a oxygen source and are thus ineffective when the oxygen level in the environment is below the amount necessary to sustain life.

C. Gas mask filters and canisters

1. Self-contained oxygen breathing apparatus were first developed for industrial use in 1854, but were both cumbersome and expensive.
  - a. Today, all industrial gas masks (respirators) must be capable of at least five hours of use against toxic gases.
  - b. This industrial mask should not be confused with law enforcement gas masks which are specifically designed to provide protection against chemical agents.
2. Mechanical filters were developed to remove minute particles from the air. The use of activated charcoal, mechanically strong soda lime, and other absorbents are the basis for present day gas masks.
  - a. There is a filter available for every known toxic gas
  - b. **The types of filters used in law enforcement gas masks are not intended for use around toxic gases**
  - c. There must be sufficient oxygen present in the contaminated atmosphere to support life (approximately 19%). If the oxygen content falls below 16%, a person cannot survive.
  - d. There are many masks and filtering canisters still around that are not capable of filtering CS. Filters made after 1960 for military use will filter CS particles.
3. Life and storage of filters
  - a. There is no way to pre-determine the life of a filter because life is directly dependent upon individual usage and storage.
  - b. Most filters in use today will normally last for several years.
  - c. On canister-type filters, there will be gradual deterioration, unless the canister has been fractured, punctured, or broken.
  - d. With proper care, a filter can last almost indefinitely.
  - e. Filters should be stored sealed in a cool, dry location.

D. Pre-use inspections

1. Check the appearance of the entire mask for damage
2. Check for missing, cracked or scratched lenses
3. Check the condition of intake and exhaust valves/covers
4. Check for worn or broken head straps
5. Check for appropriate filter and expiration date, if known.
6. Check to see if mask is appropriate size, if applicable

E. Fitting the mask

1. Loosen all adjusting straps
2. Place chin in mask chin rest
3. Raise head harness over back of the head
4. Tighten head straps as appropriate from bottom to the top
5. Check for air tight fit by completely blocking air intakes with palms of the hands, inhaling deeply, and holding breath for 10 seconds. If the mask pulls against the face and remains there while holding the breath, proper fit is indicated
6. If proper fit does not occur, repeat the tightening of the head harness. If leaks continue, inspect mask and replace if necessary

F. Clearing the mask

1. To clear the mask, cover exhaust valve outlets and blow out vigorously several times
2. Have each student demonstrate and practice masking, clearing and removing

G. Cleaning the mask

1. Gas masks should be cleaned at least twice per year if handled on a regular basis and after each exposure.

NOTE: Newer types of masks (e.g. non-rubber composition) are now available which require special care and servicing. Instructors should refer students to the manufacturers instructions.

Routine cleaning procedures for most masks involve the following steps:

- a. Remove the filter(s)
- b. Wash the mask with mild soap and water or dip the mask into a one percent solution of calcium hypochloride.
- c. Rinse thoroughly with warm to hot water
- d. Dry thoroughly with warm to hot air current
- e. Inspect for any chemical agent residue
- f. Reclean, if necessary
- g. Replace filter(s)

H. Storage of the mask

1. Inspect mask at least twice each year to verify that it is serviceable
2. If mask is found to be defective, it should be repaired or replaced
3. The mask should be stored in container which protects it from the elements (heat and moisture)

## **X. PRACTICAL APPLICATION (Learning Activity 13.35.02)**

### **A. Objectives of the field exercise**

The objectives of the field exercise are to provide students with an opportunity to:

1. Properly use a gas mask in an actual chemical agent environment
2. Experience the effects of a nonlethal riot control agent
3. Demonstrate personal decontamination techniques
4. Be oriented to the types of riot control agents, tactical agents, and deployment systems commonly utilized by law enforcement agencies

### **B. Conducting the field exercise**

1. The instructor should identify each chemical agent demonstrated, its effects, and its color code or numerical identifier
2. The instructor should explain the methods of deploying chemical agents
  - a. Show examples of chemical agents in grenades
  - b. Show examples of chemical agents in projectiles and various launching devices
  - c. The instructor should discuss other delivery options (e.g., pepper fogger), if not available for demonstration.
3. The instructor should demonstrate the deployment of chemical agents
  - a. Demonstrate how to activate and throw grenades
  - b. Demonstrate how to load a launcher and fire a projectile
4. Prior to deploying chemical agents, the following environmental conditions should be discussed with students:
  - a. Effect of wind
  - b. Thermal turbulence
  - c. Mechanical turbulence

**NOTE:** Instructors should emphasize that escape routes are necessary when riot control agents are deployed

5. Decontamination of persons exposed to riot control chemical agents
  - a. Remove from contaminated area
  - b. Expose the person to fresh air
  - c. Flush exposed area with cold water
  - d. Avoid the use of soap or oil based products to clean the skin
  - e. If symptoms persist, seek proper medical attention
6. Student preparation for exposure to chemical agents
  - a. Proper clothing
  - b. Removal of glasses/contact lenses
  - c. Access to a serviceable gas mask
7. Managing student safety
  - a. Guidelines for the presentation of chemical agent training are detailed in the document *POST Guidelines for Student Safety in Certified Courses*
  - b. POST requires each

**SUPPORTING MATERIAL**

**AND**

**REFERENCES**

This section is set up as reference information for use by training institutions. These materials can be used for instruction, remediation, additional reading, viewing, or for planning local blocks of instruction. This list is not an endorsement of any author, publisher, producer, or presentation. Each training institution should establish its own list of reference materials.

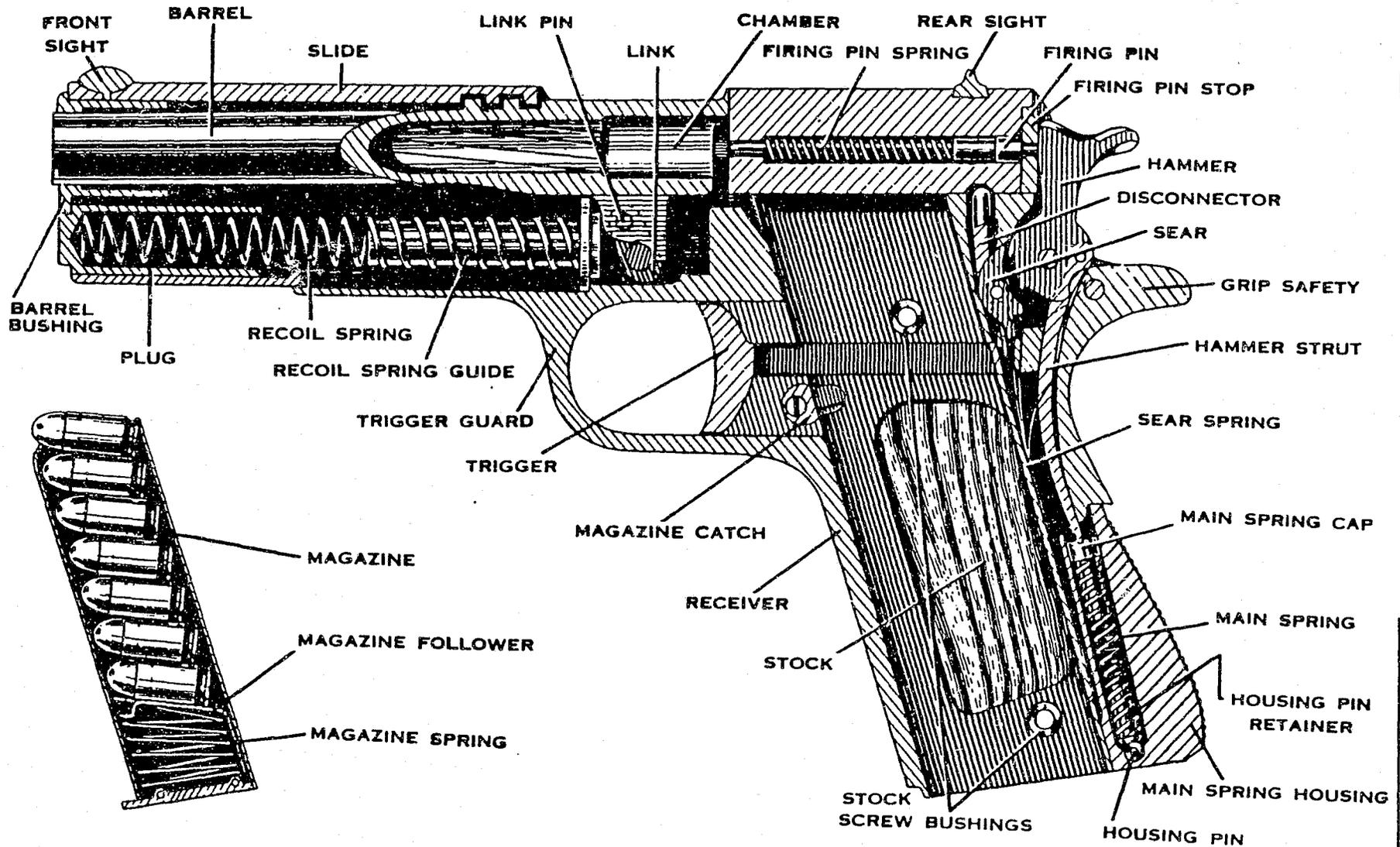
TOPICAL REFERENCES

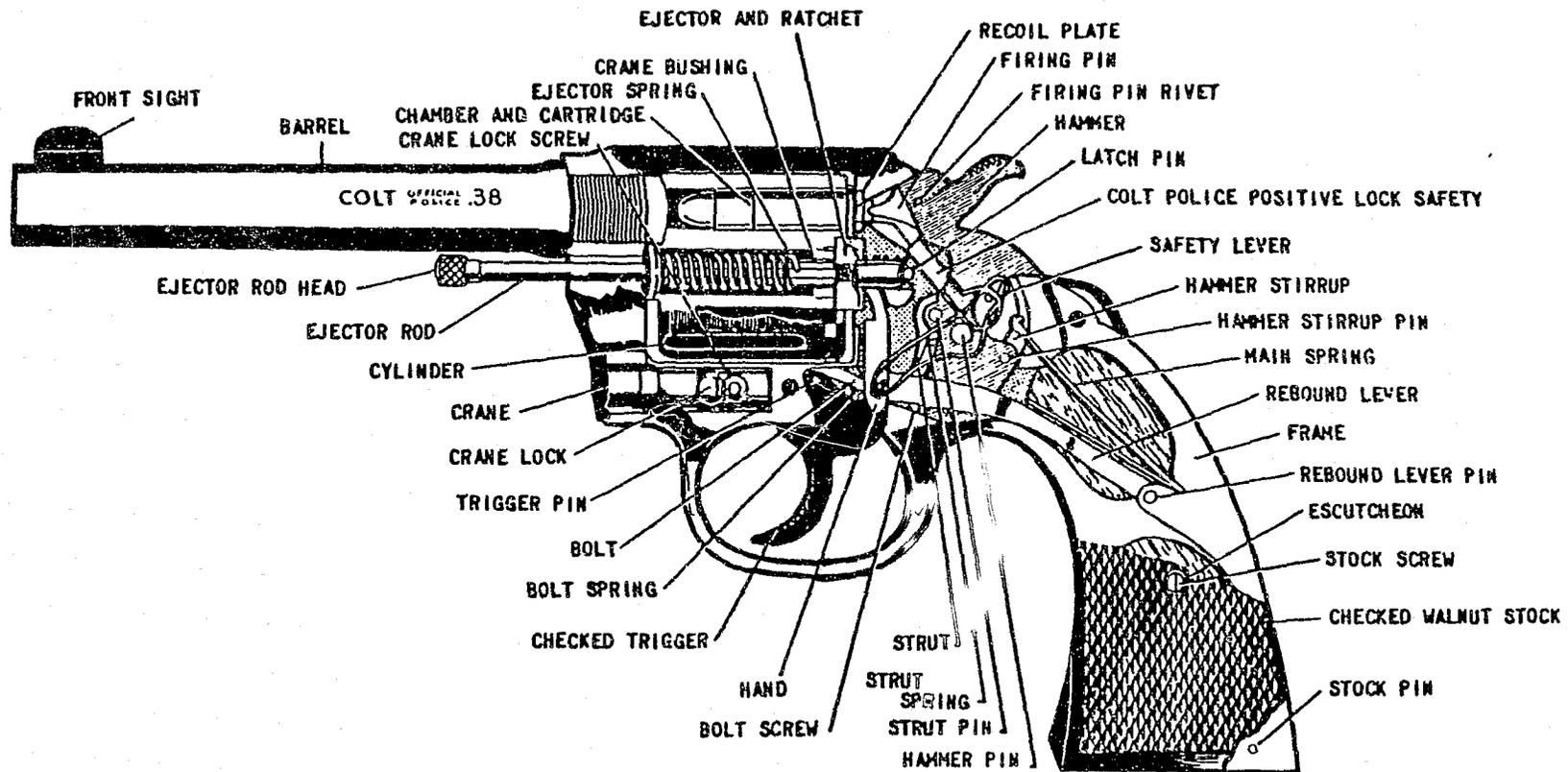
Illustrations

# COLT GOVERNMENT MODEL AUTOMATIC PISTOL

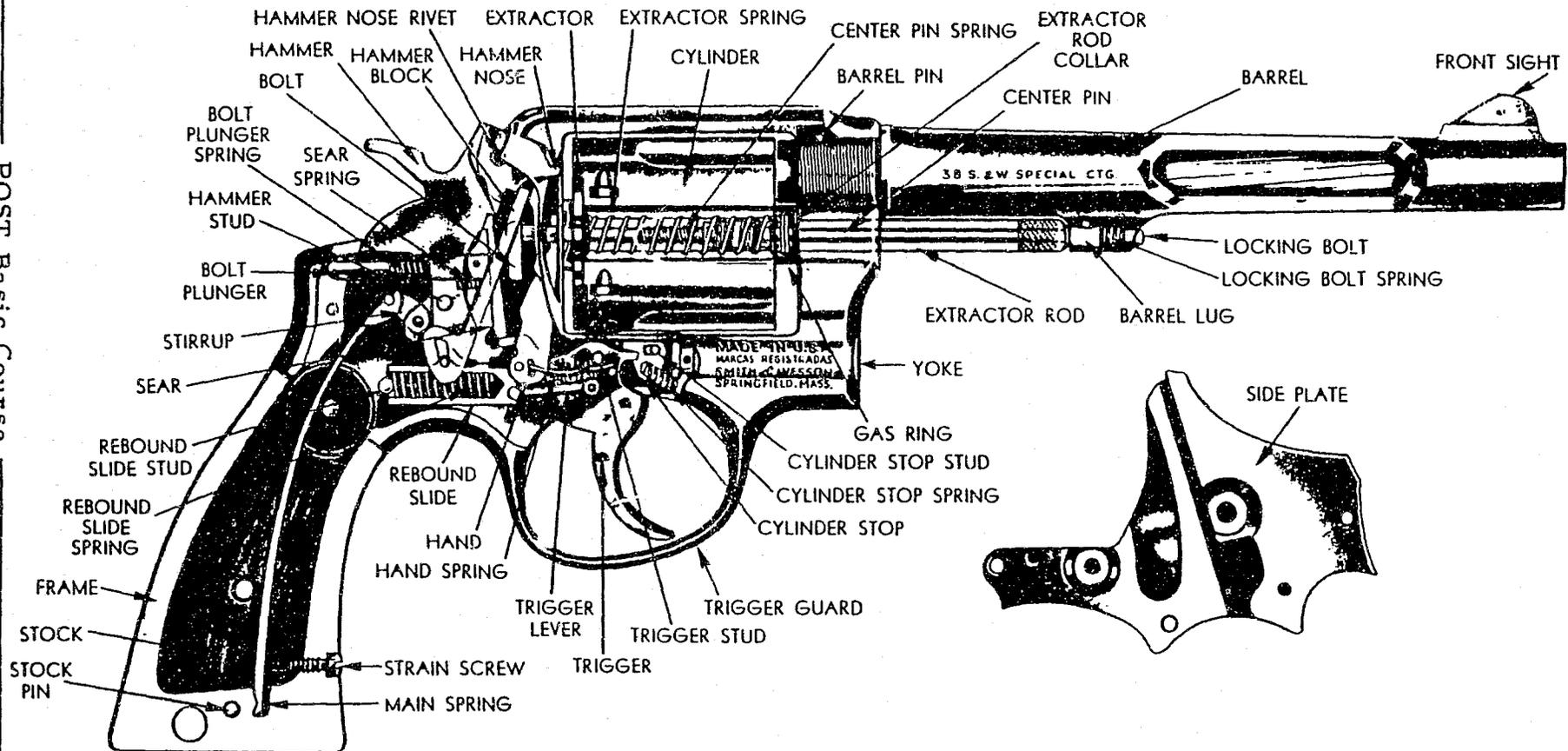
## CALIBER .45

POST Basic Course





# CUTAWAY VIEW OF THE 38 MILITARY AND POLICE REVOLVER

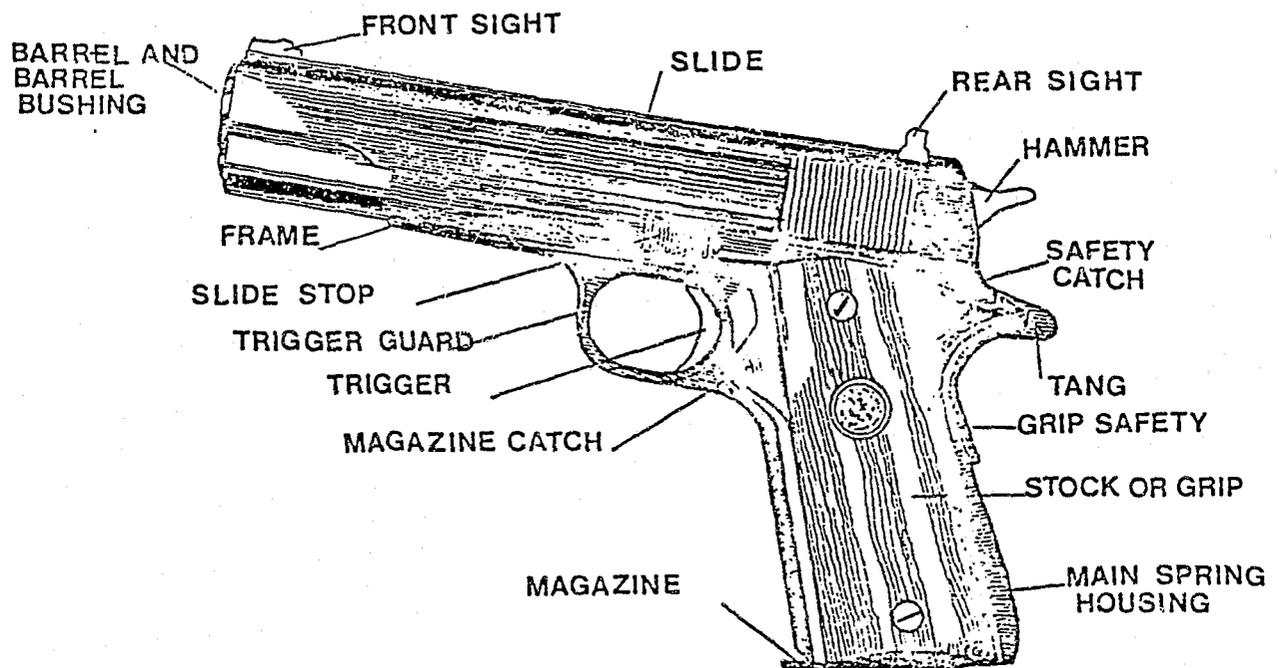


POST Basic Course

SMITH & WESSON



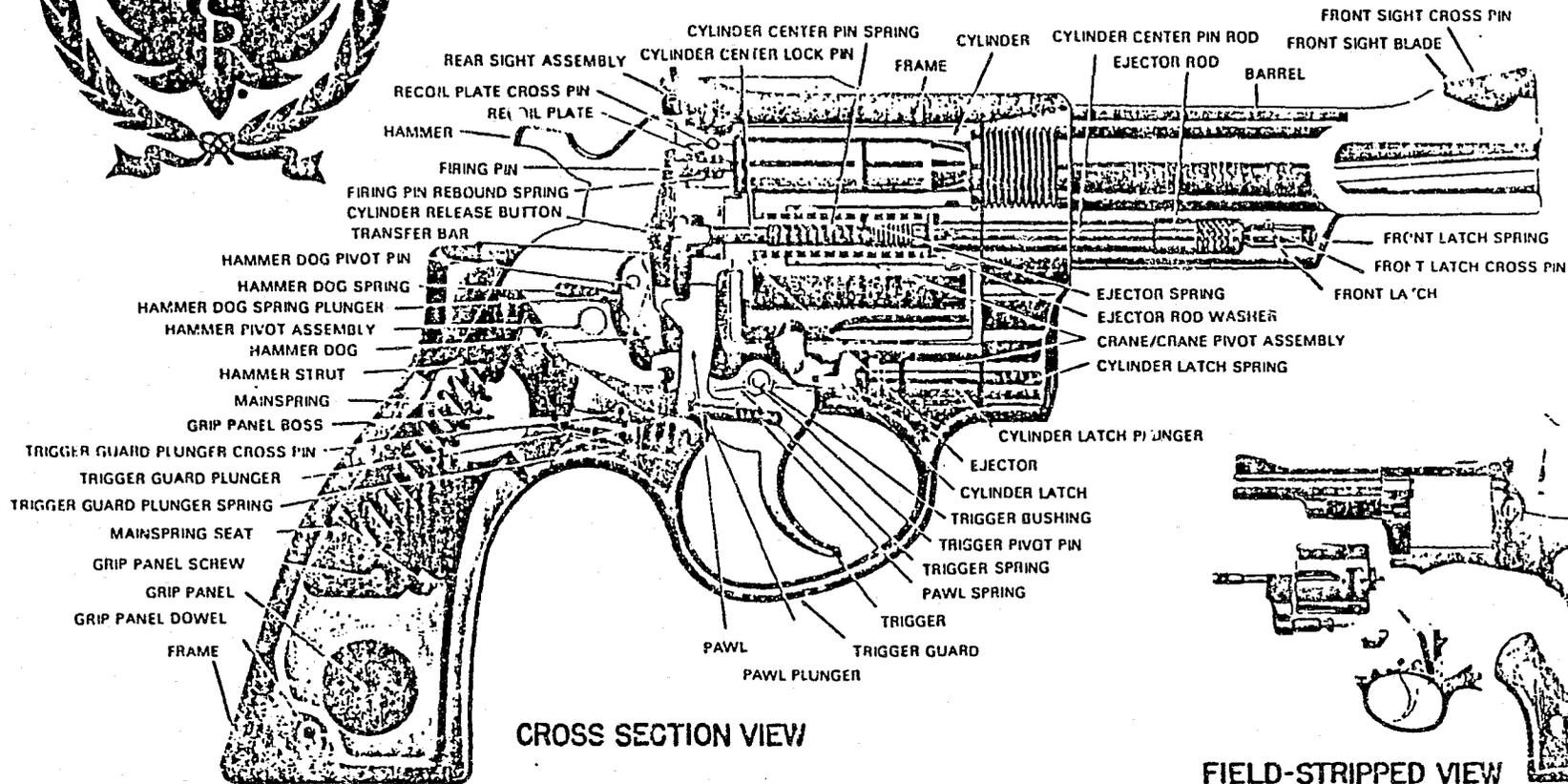
SPRINGFIELD, MASS.





# RUGER. SECURITY-SIX® DOUBLE ACTION REVOLVER

POST Basic Course



**STURM, RUGER & CO., INC.**  
**Southport, Connecticut, U.S.A.**



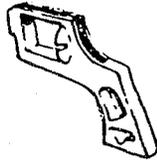
**THE BARREL**

with sights, gives the bullet direction. The spiral rifling imparts a spin which stabilizes the bullet in flight like a football.



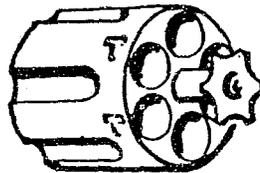
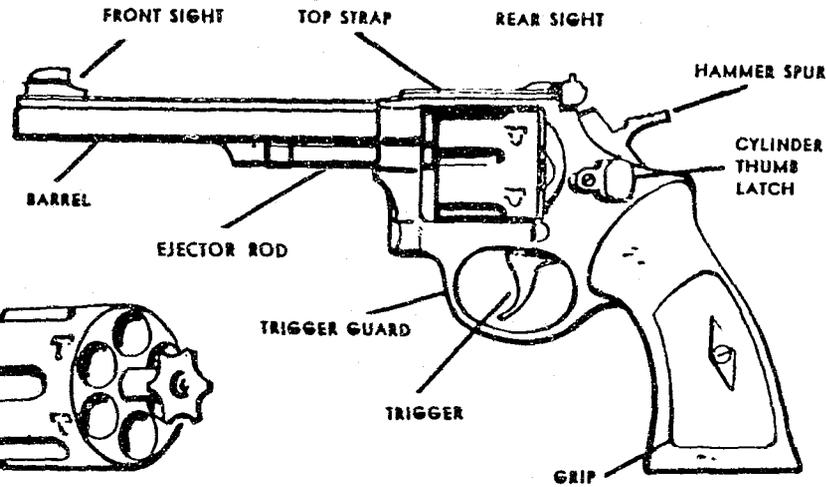
**THE ACTION**

is the heart of the gun. It contains parts which cock the hammer, move the cylinder or slide and fire the gun.



**THE FRAME**

forms the backbone to which all other groups are attached. It also gives the pistol its basic outline or silhouette.



**THE CYLINDER**

brings a new loaded chamber into line with

the barrel and hammer. The group contains the extractor.

**REVOLVER**

## CARE AND CLEANING OF THE REVOLVER

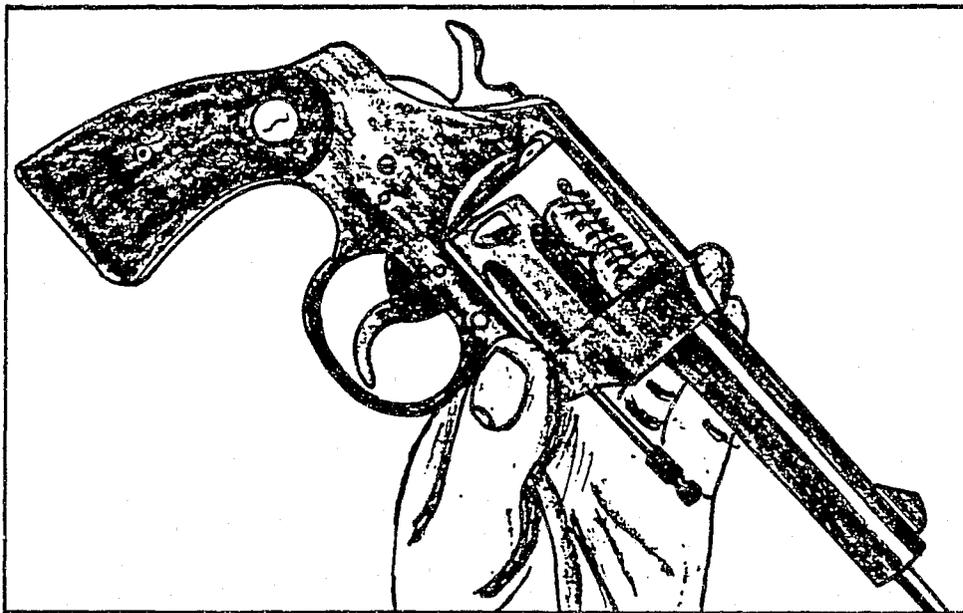
Although sturdily constructed and not prone to get out of order, the modern revolver must be maintained properly if it is to give long-time satisfactory service. Good maintenance calls for periodic inspection and the adoption of a thorough and systematic cleaning procedure.

The accompanying illustrations show how a typical swing-out-cylinder revolver is inspected and subjected to a routine cleaning and oiling.

Aside from the minor adjustments outlined, repairs and a periodic internal cleaning and inspection of the revolver should be entrusted to a competent gunsmith.

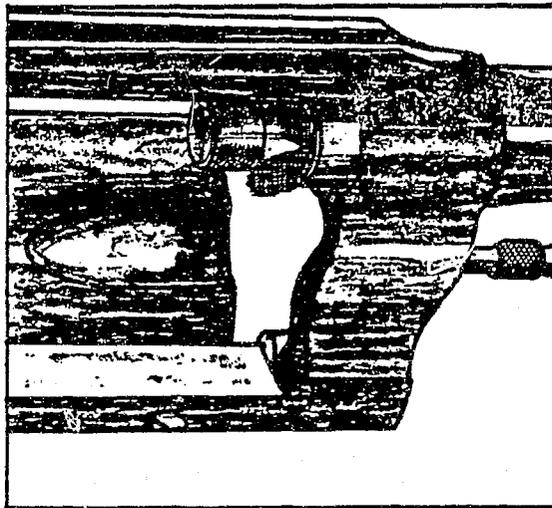
If a revolver is used for home protection purposes, it should be fired and given a thorough cleaning at least once a year. Revolvers carried on the person should be checked daily for cylinder rotation, firing pin protrusion, ejector rod operation, bore cleanliness, cylinder locking and alignment, and hammer fall. This inspection can be methodically done in less than a minute.

Before any inspection or cleaning is done, the revolver should be unloaded.



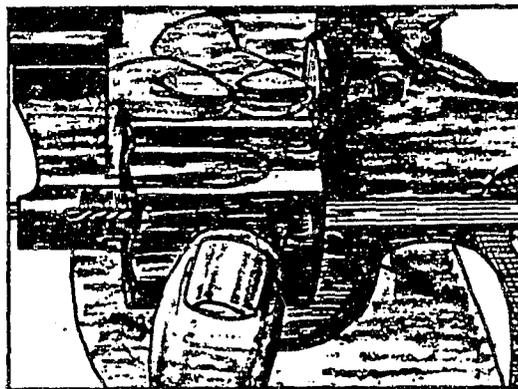
Bore should be thoroughly scrubbed with proper caliber bristle or nylon brush (use bronze bristle brush if leading is present) dipped in bore solvent. Brush should clear bore at end of each stroke as attempt to reverse brush within bore will only bind it.

## CARE AND CLEANING OF THE REVOLVER



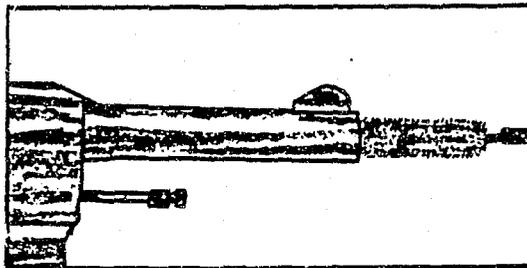
Barrel throat or bore leading which resists the ordinary bronze brush can be removed with special wire gauze-head cleaning tool (illustrated). Fine steel wool wound on jag tip of cleaning rod is also effective in removing lead.

## CARE AND CLEANING OF THE REVOLVER



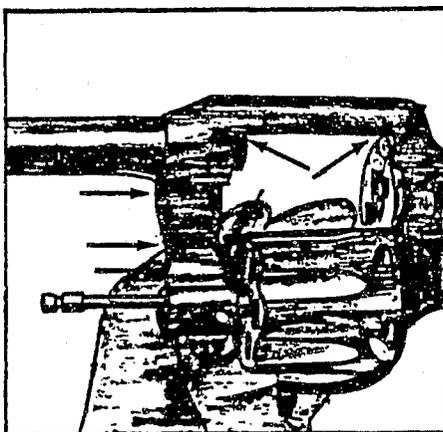
A thorough cleaning with bronze bristle brush dipped in bore solvent will remove ordinary fouling from individual chambers. A chisel shaped piece of wood is used to clean collected grease, etc., from locking notches (arrow) in the cylinder. Stubborn chamber residue is best removed by scrubbing with tightly fitting bob of fine steel wool wrapped around roughened end of wooden dowel or jag tip of cleaning rod.

## CARE AND CLEANING OF THE REVOLVER



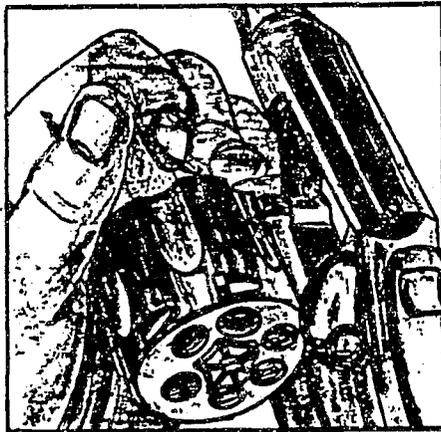
Use solvent-moistened cloth bob or cleaning patch on jag tip to impart final polish to bore. After final inspection, apply very light coat of protective lubricant to bore if gun is to be maintained in "ready to use" status. Clean and wipe each chamber of the cylinder with patch or bob.

## CARE AND CLEANING OF THE REVOLVER



Use bristle brush or clean toothbrush with solvent to clean interior surfaces of frame and crane assembly indicated by arrows. Accumulated powder fouling, gummed lubricant, lead particles, or lint induce formation of corrosion and lock-work malfunctions.

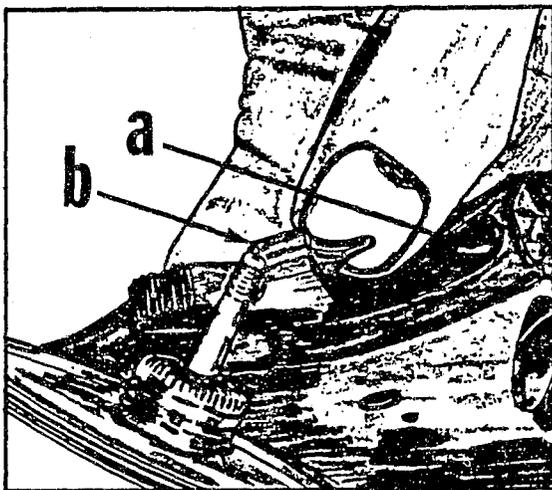
## CARE AND CLEANING OF THE REVOLVER



Push ejector mechanism back and forth vigorously. It should operate freely. Clean entire assembly with brush and place drop of lubricant on ejector rod and spline shaft. Push back and forth again, then wipe off all excess lubricant. Check to see that ejector head is aligned properly to bottom fully in cylinder recess.

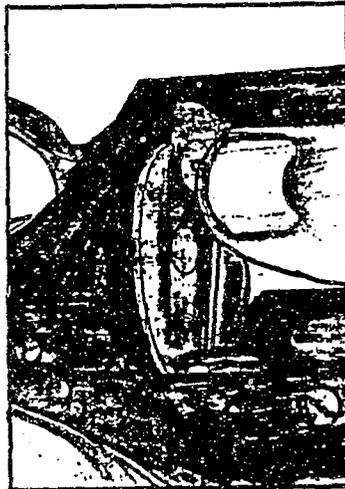


## CARE AND CLEANING OF THE REVOLVER



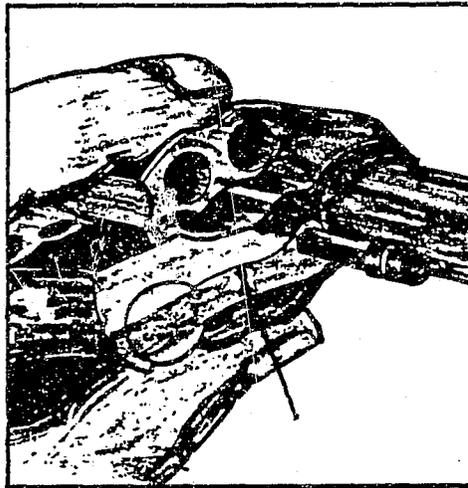
Firing pin well in frame (a) should be free of foreign matter. Clean with toothpick or pointed plastic rod. Place drop of lubricant on firing pin (b) and test for vertical movement with fingertip. Firing pins of most modern center-fire revolvers are pinned to hammer and are capable of slight movement in vertical plane. This movement is necessary to prevent pin breakage due to misalignment with firing pin hole in frame.

## CARE AND CLEANING OF THE REVOLVER



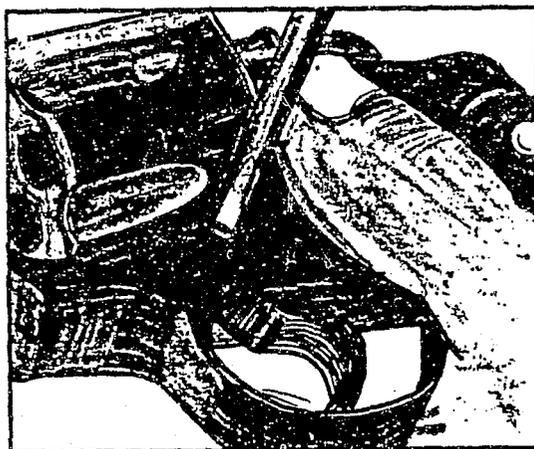
In center-fire revolvers, tip of firing pin should be smoothly polished hemisphere. Chipped or broken pins should be replaced. Badly worn pins may be source of misfires due to insufficient protrusion and should be replaced.

## CARE AND CLEANING OF THE REVOLVER



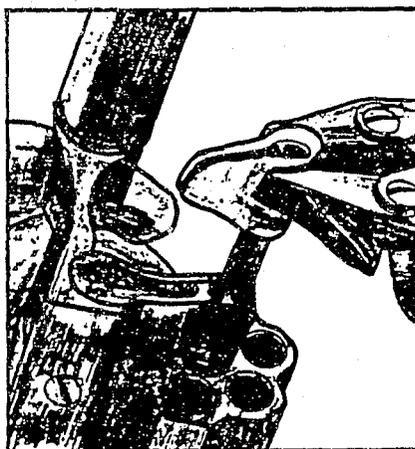
With hammer cocked, check cylinder for abnormal looseness. Slight movement will normally be present but movement sufficient to cause obvious misalignment of chambers with bore or failure of cylinder locking mechanism to function are serious defects indicating need for major repair. Excessive looseness or gap between frame and crane assembly (arrow) indicates need for major repair. Slight movement will normally be present.

## CARE AND CLEANING OF THE REVOLVER



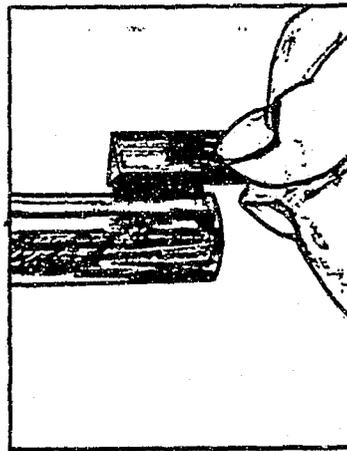
Use small screwdriver to verify tightness of frame and grip screws. Unsightly burring of screw heads can be prevented by selection of screwdriver blade to match width and length of slots. Note: Strain screw in front strap of S & W revolvers should be kept tight in a service weapon.

## CARE AND CLEANING OF THE REVOLVER



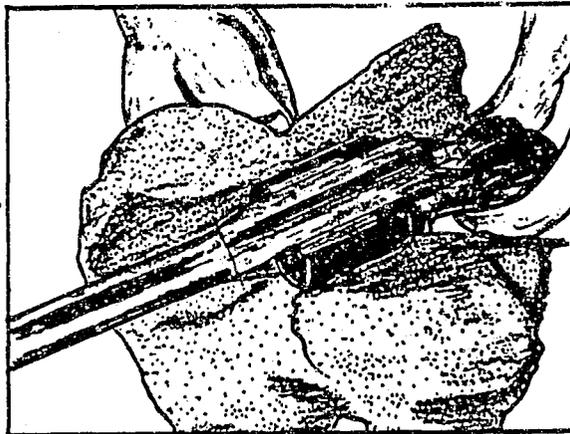
With S & W revolvers, verify tightness of ejector rod using flat jaw pliers. Prevent marring of rod by masking plier jaws with thick cloth or paper. It is a good idea to place two or more empty cartridges in chamber when tightening rod in this manner.

## CARE AND CLEANING OF THE REVOLVER



Burrs on front sight are removed by judicious use of fine hone. Square edges should be maintained. Bright spots can be darkened with "touch-up" quick blue preparation.

## CARE AND CLEANING OF THE REVOLVER



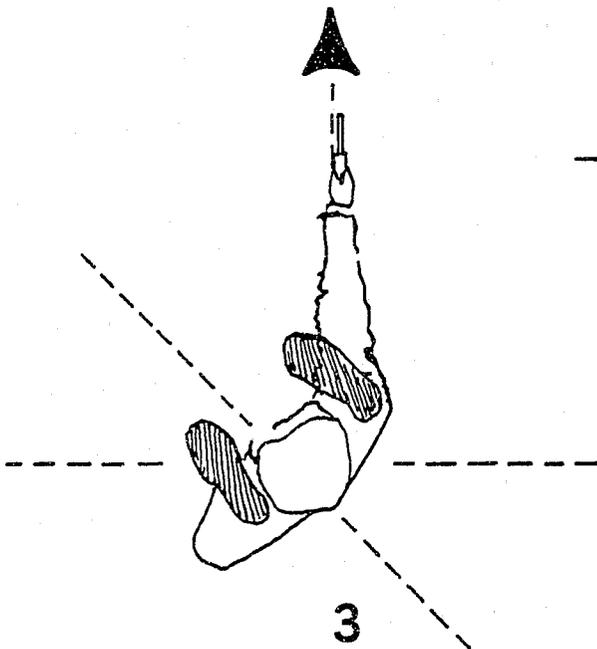
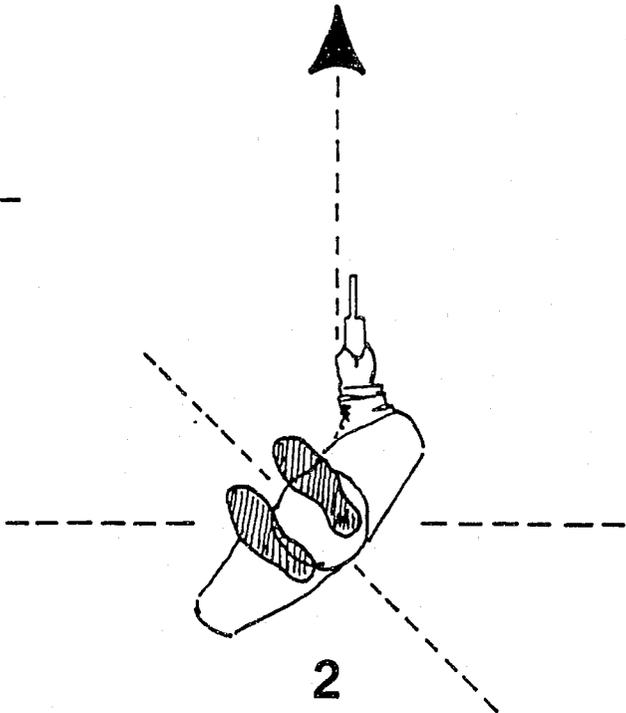
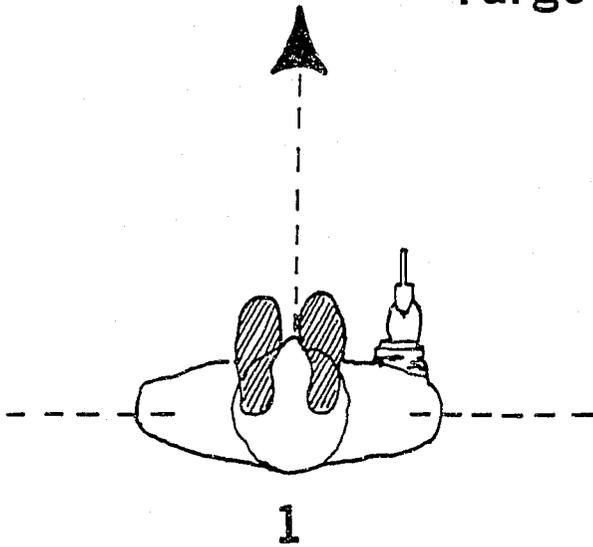
Removal of heavy rust in spots will require use of fine steel wool in combination with penetrating lubricant or kerosene, steel wool will remove blurring and must therefore be used with care. Light rust film can often be removed by brisk rubbing with coarse textured cloth moistened with solvent or penetrating lubricant. When gun is to be holster carried or stored elsewhere for instant use, adequate rust protection is obtained by thorough wiping with silicone-treated gun rag or by waxing with high grade automotive paste wax. If revolver is to be stored for long period of time, exposed surfaces including bore and chambers may be given coating of rust inhibiting grease. Less messy storage procedure is to wrap gun in special Vapor Phase Inhibiting paper or envelopes which eliminates necessity for greasing gun. Paper wrapped gun should then be placed in sealed box.

## CARE AND CLEANING OF THE REVOLVER

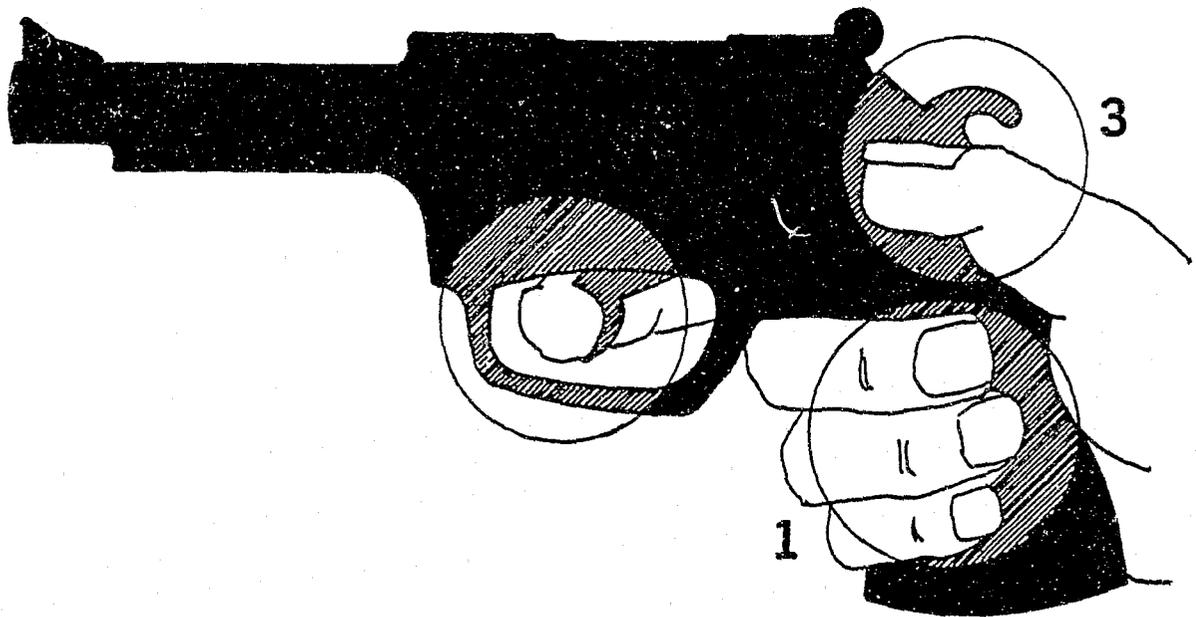


Lint and fuzz accumulated in muzzle end of holster can and does attract moisture which in turn rusts muzzle of gun or gathers in the bore. Remove this with wire brush on end of cleaning rod or, better yet, cut off or make hole in end of holster so that lint or other foreign matter falls through.

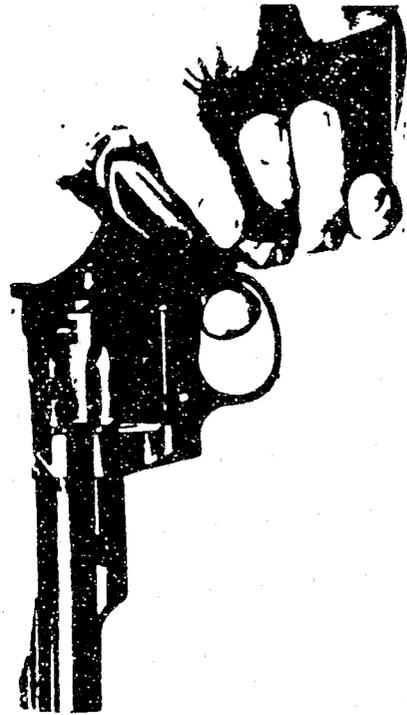
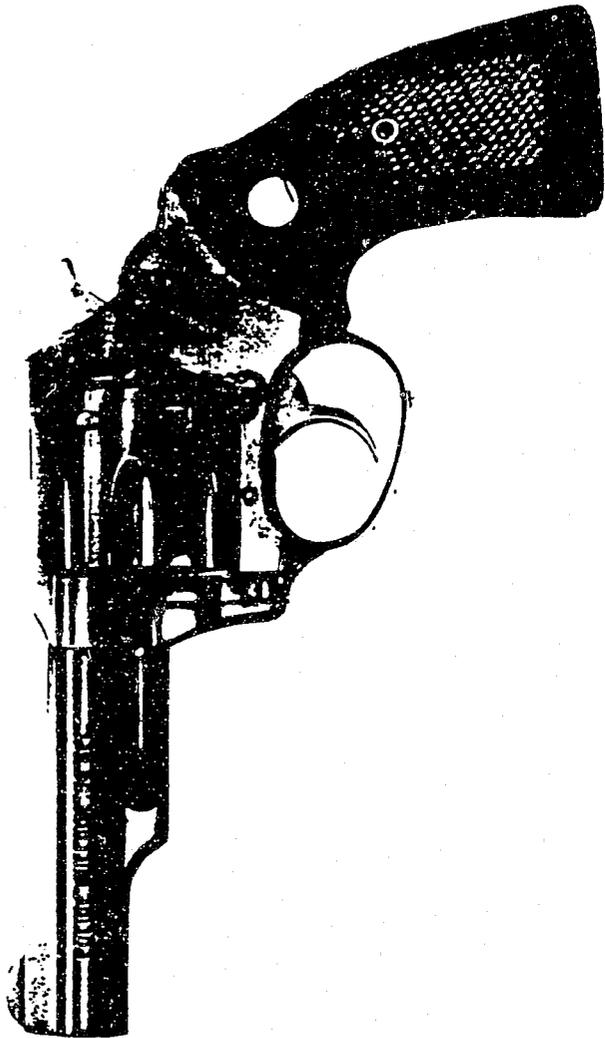
Target Area

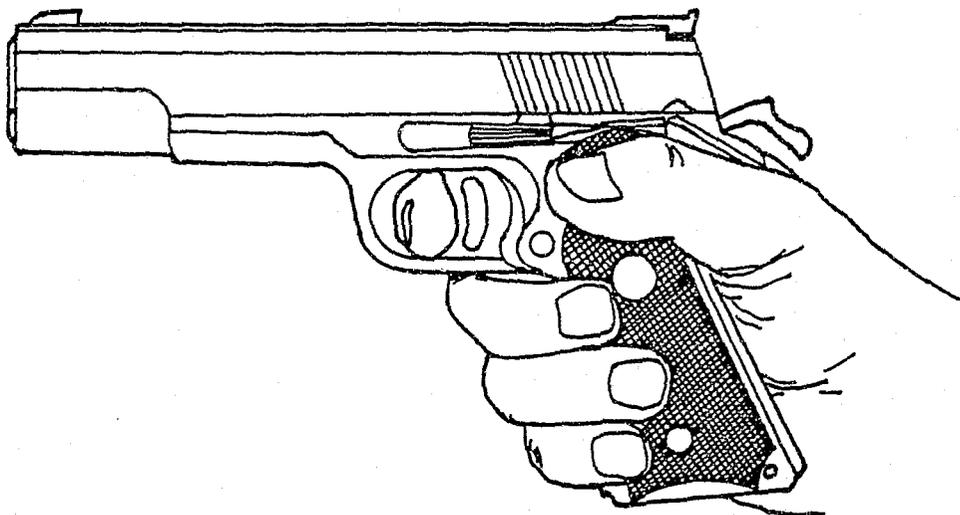
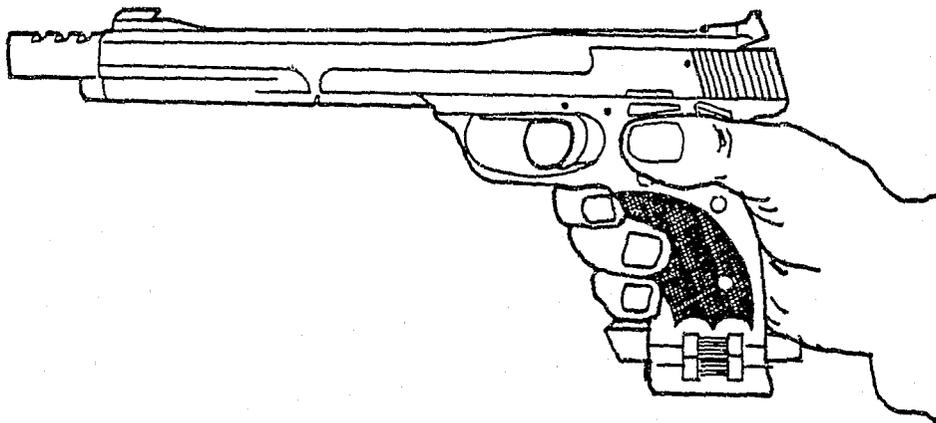
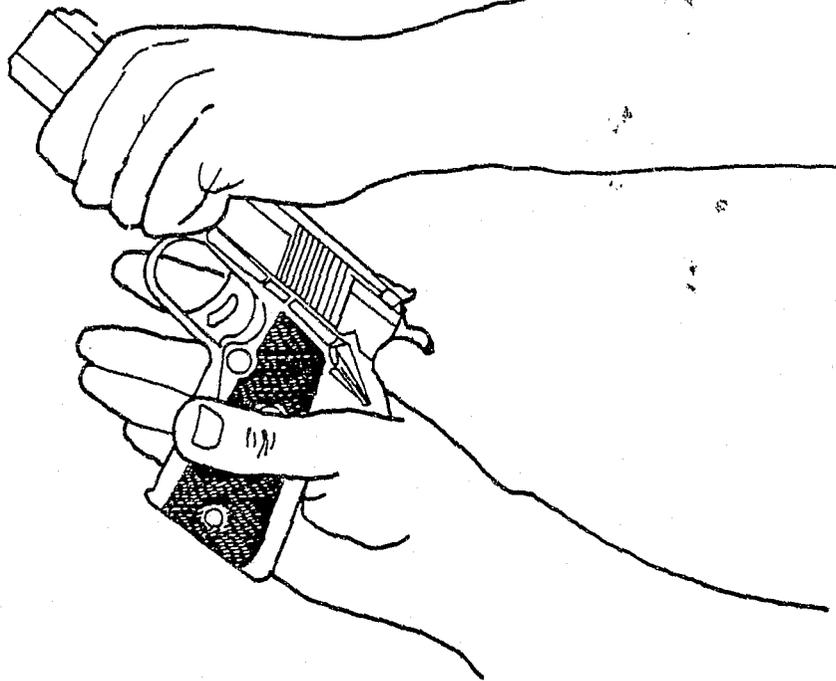


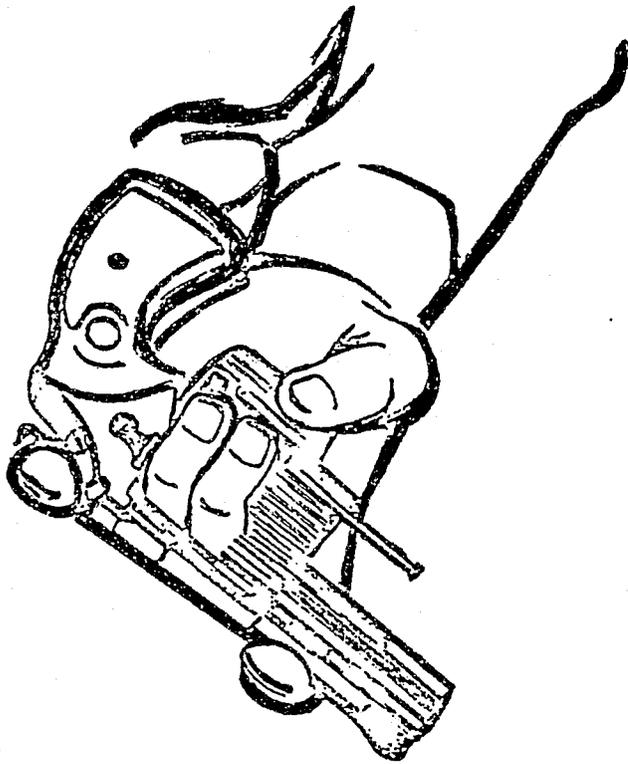
## Major Grip Hazards



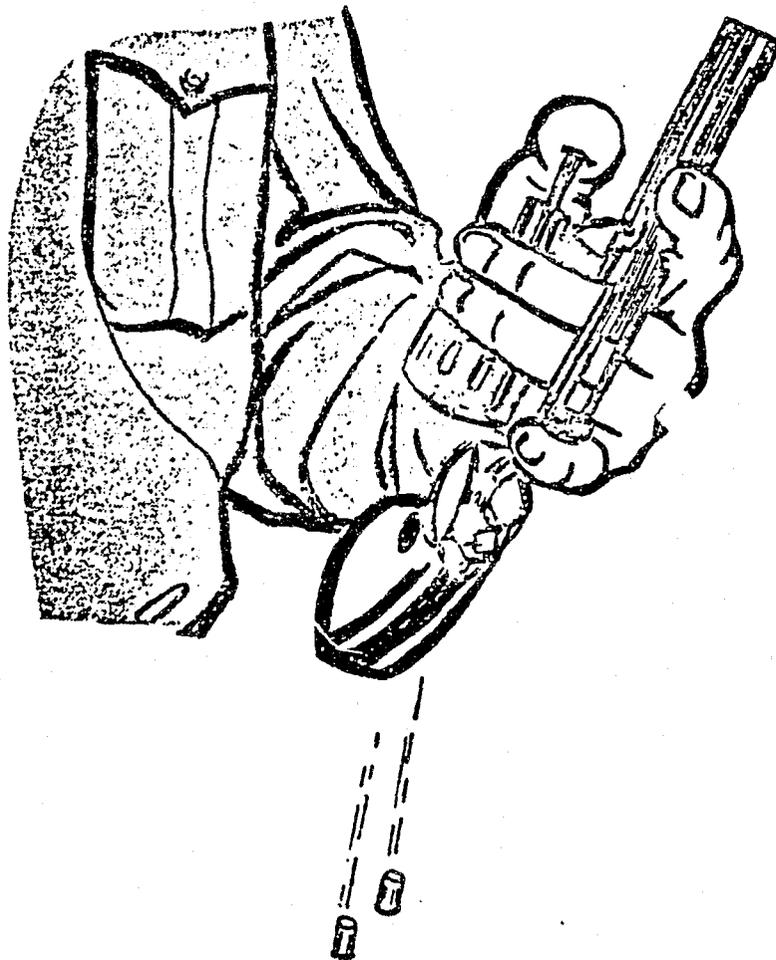
1. Fingertips digging into stock;
2. Faulty trigger finger placement; and
3. Thumb not returned to the same position after each shot, or digging in with excessive pressure.



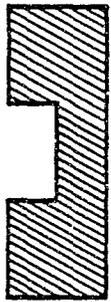
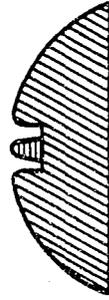
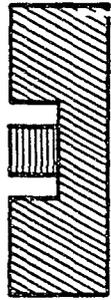


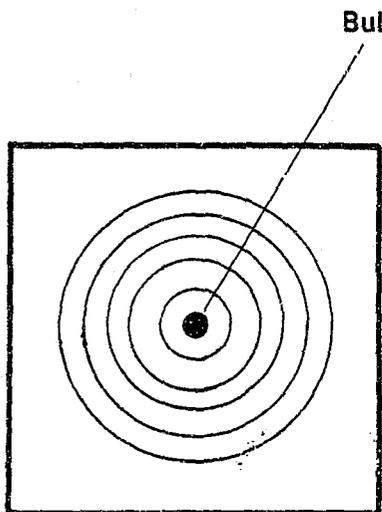


GRIP WHILE LOADING



**GRIP WHILE UNLOADING**

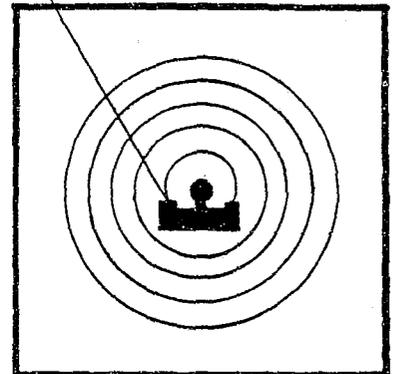




Target

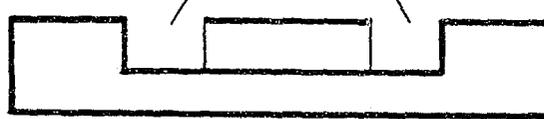
Bull

Combined Target  
and Sights



Sight Picture

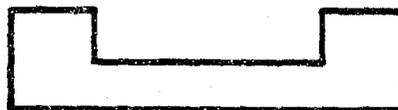
Equal Spacing



Level



Front Sight

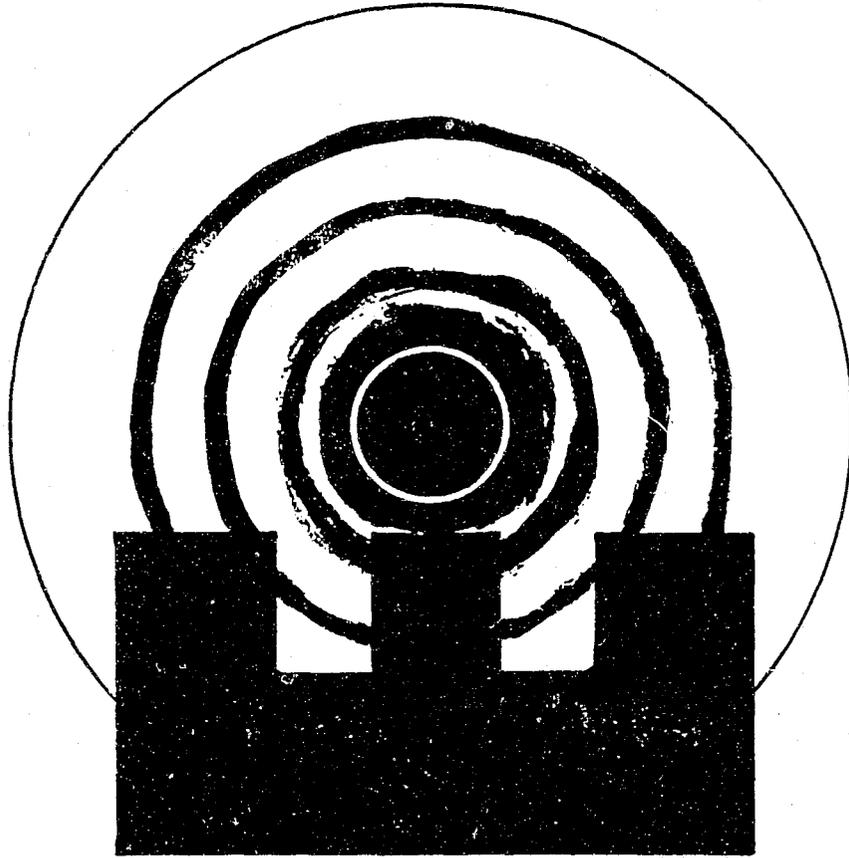


Rear Sight



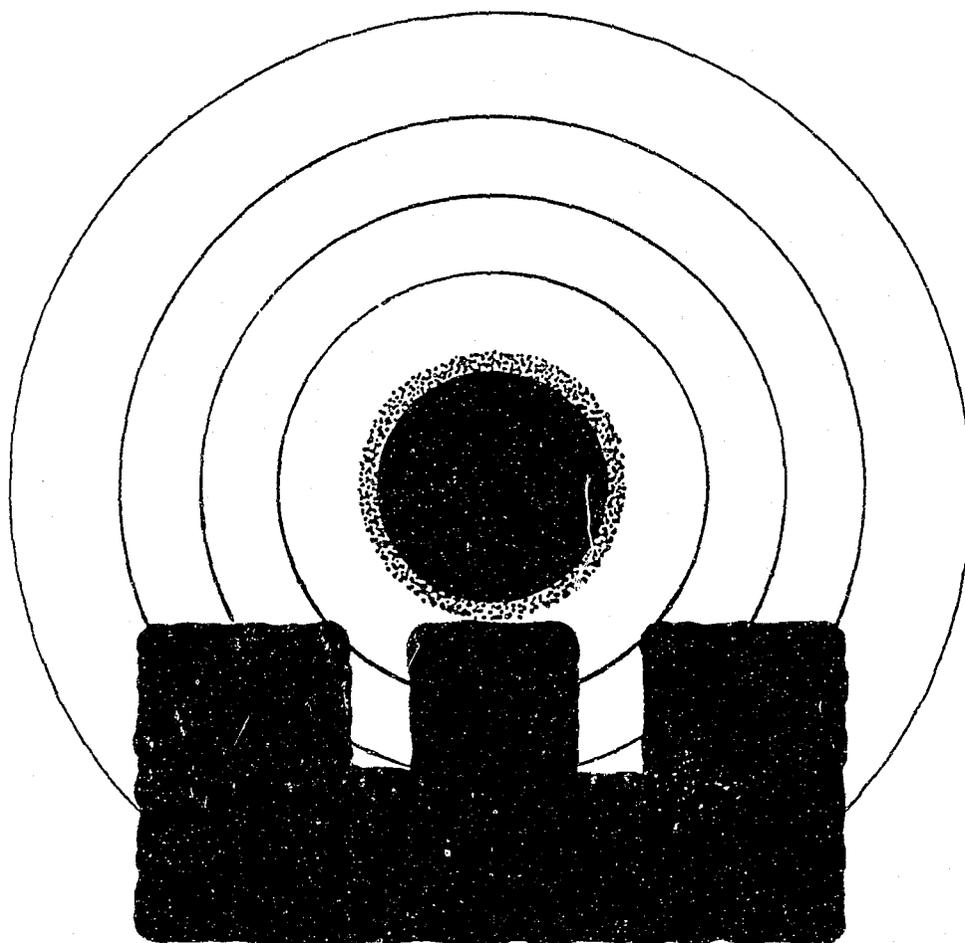
Combined Sights

## Sight Picture and Sight Alignment



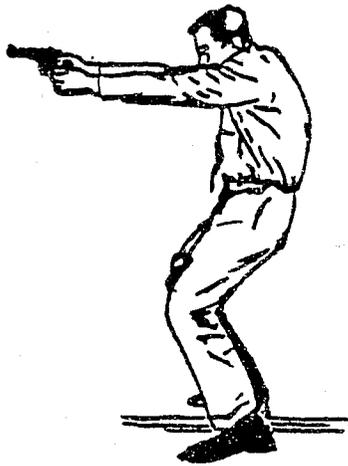
**CORRECT**

**Sight Picture in focus  
(target blurred)**

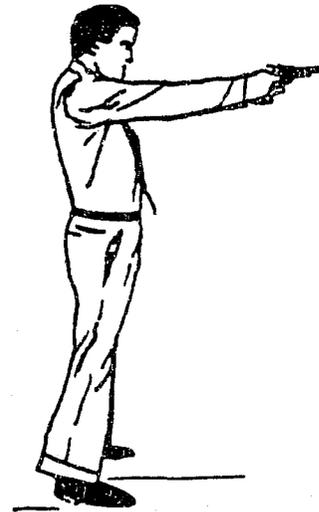


**INCORRECT**

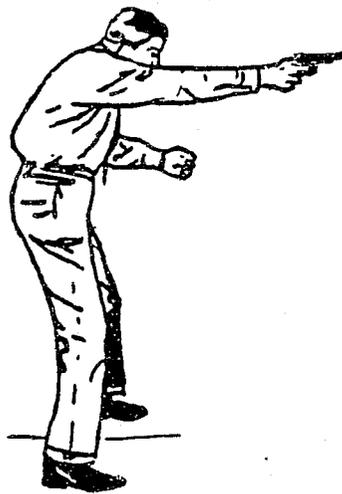
**Target in focus  
(sight picture blurred)**



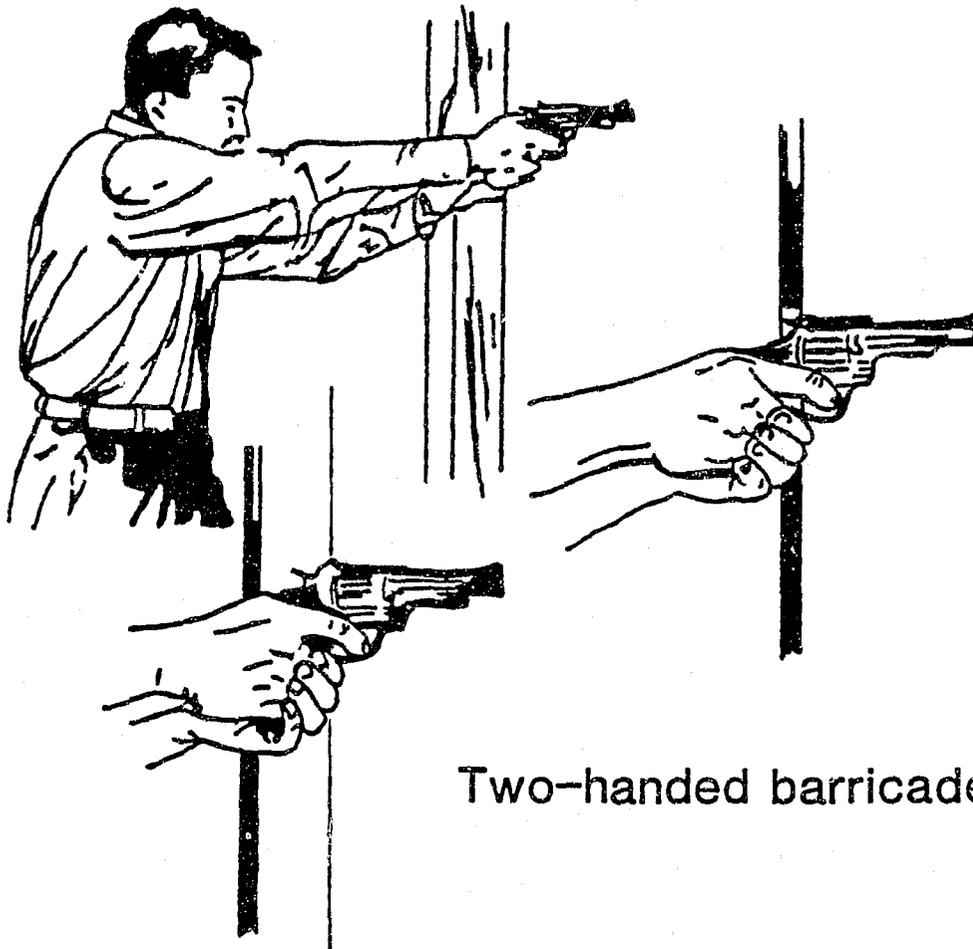
Point shoulder crouch



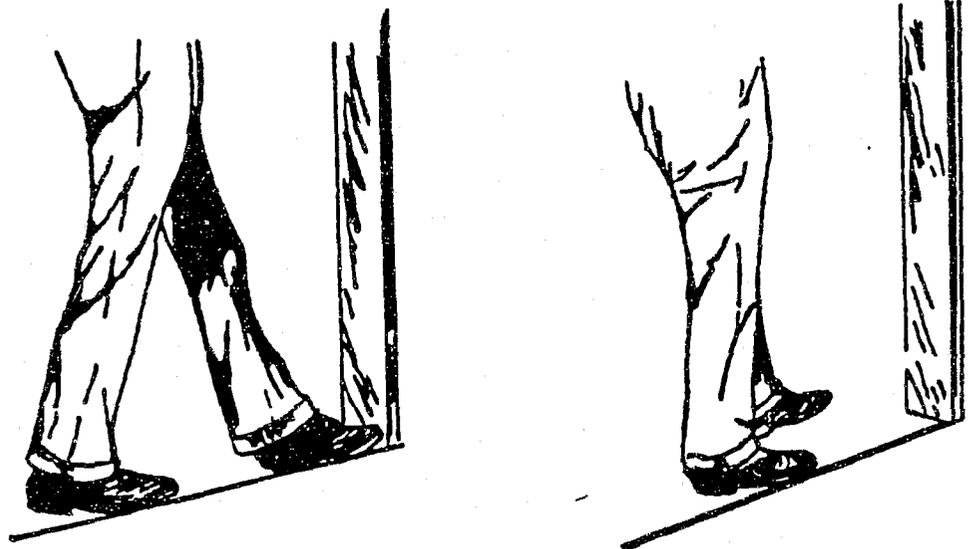
Point shoulder

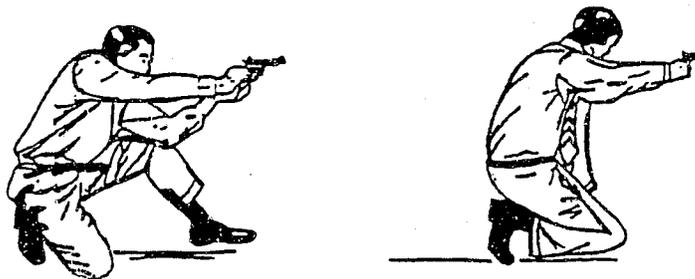


One-hand point shoulder

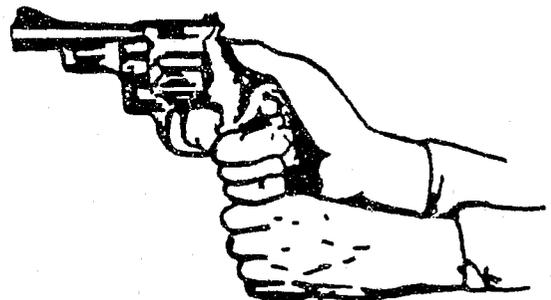
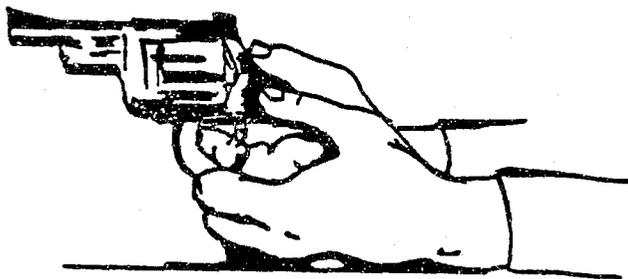
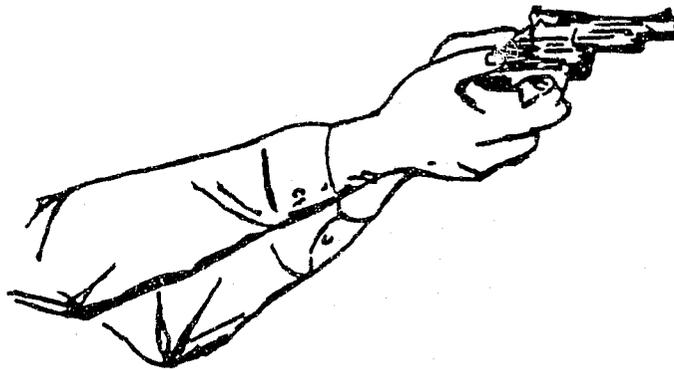
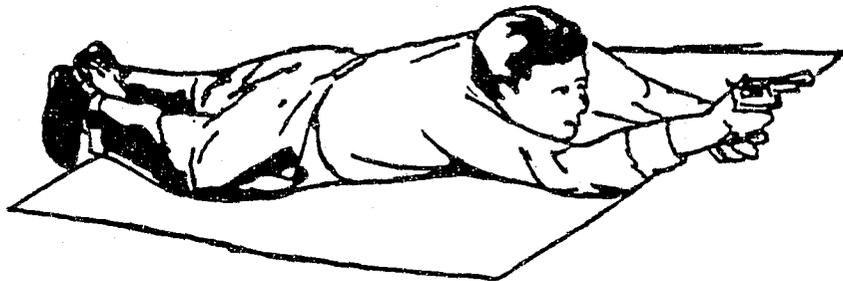


Two-handed barricade

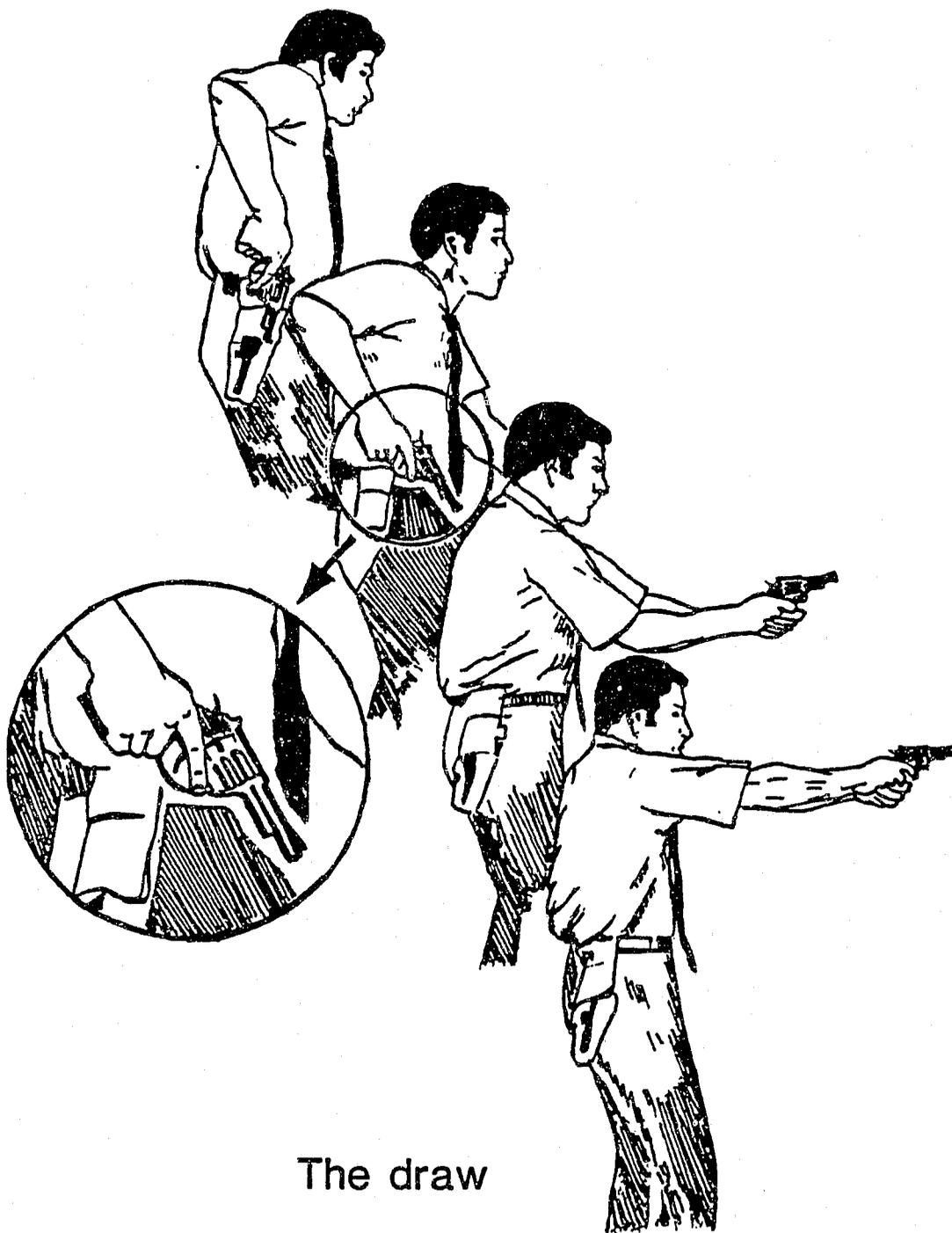




**Kneeling**



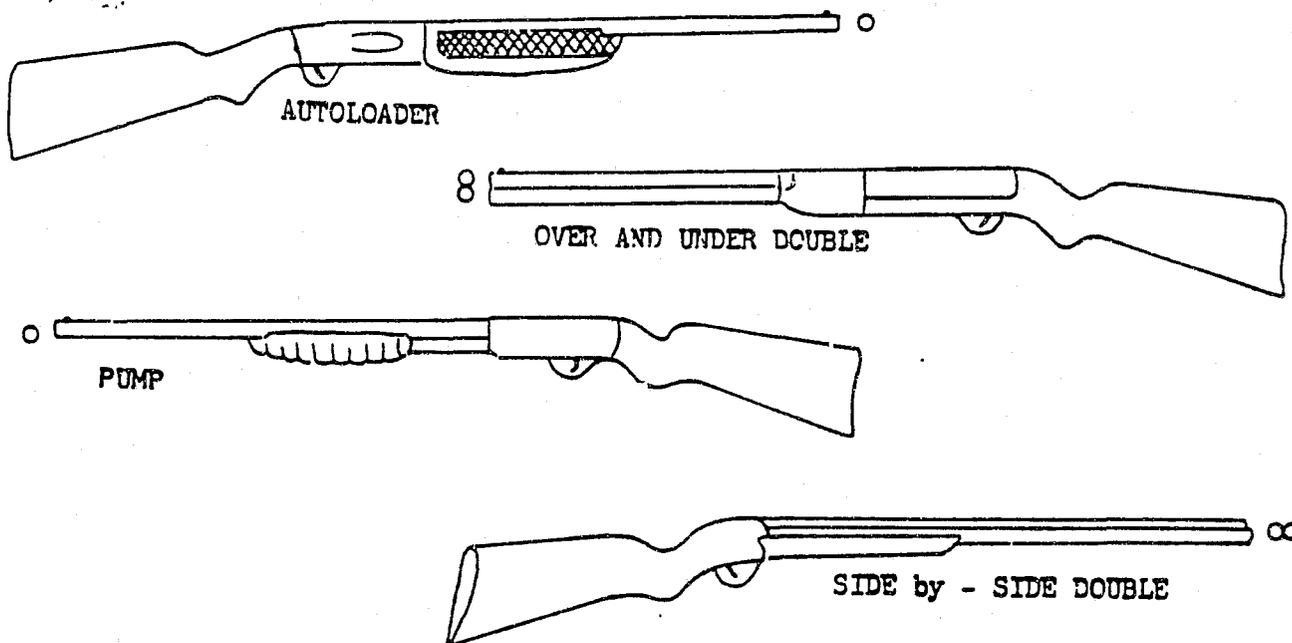
Two-handed prone



The draw

## MEET THE SHOTGUN

Most well made shotguns fall into one of four (4) classifications. Side by side, double barreled, over-and-under double barreled, pump action repeating, and autoloading repeating.



Where rifles and handguns are rated for size in terms of "caliber" (bore diameter) such as .22 caliber, .30 caliber, and so on, shotguns are rated in terms of "gauge." Gauge was first established as a statement of the number of lead balls the diameter of the bore which would weigh a pound. Beginning with the smallest, shotgun gauges are: 28 gauge, 20 gauge, 16, 12 and 10 gauge.

The .410 is actually a caliber since it is a measurement of the bore diameter. However, ammunition for this gun is of the shot shell variety.

## SHOOTING POSITIONS

Combat positions (hip position) should not be used when your intended target is more than 60 feet from officer.

Shooting buckshot in the shotgun from the shoulder, it is only necessary to point gun and slap the trigger with the trigger finger.

Spot-shooting, using the front and rear sights with the rifled projectile, you must follow through as if you were shooting a rifle. Align your sights properly, and squeeze the trigger.

Guns that do have disconnecter incorporated in their mechanism (L.A.S.D. issue Ithaca Model 37) must not be taken for granted. If the weapon is functioning properly, the trigger must be released and pulled for each successive shot that is fired.

Weapons should be in good repair at all times. Check your weapon, check your ammunition.

BE SAFE

BE CAREFUL

BE ALIVE

RECOIL

Theory tells us that for every action there is an equal and opposite reaction. Though that statement of fact is correct in every detail, if left to stand alone without further explanation, it seems to indicate some discomfort involved in shooting the shotgun.

What actually happens when the weapon is fired? What happens to the powerful force released? It is almost wholly absorbed by the weight of the weapon, the action in autoloaders, and by the weight and flexibility of the shooter's body. It boils down to two equal amounts of force working in opposite directions. The force that drives the shot out of the barrel has only about an ounce of weight to move. The same amount of force acting in the opposite direction has six pounds of shotgun plus the weight of the shooter's body to move.

Since any given amount of energy will perform only a specific amount of work before it is absorbed, the seeming violence of the explosion is reduced to a mere rush by the time it reached the shooter's shoulder.

Experienced shooters know that recoil can never be severe as long as the shotgun is properly placed and held against the shooter's shoulder.

Hold the butt of weapon firmly to your shoulder. Keep the elbow raised!!!

## CARRY POSITIONS

Any situation where the use of the shot gun is contemplated, the officer should pump a shell into the chamber, with the safety on. Carry the weapon at high port.

The officer must always be aware of where the weapon is pointed and the safety should remain on safe until immediate use is contemplated.

When backing up your partner, always consider the angle of fire and the position of your partner, with a minimum of ten feet between suspect and officer with shotgun.

The magazine shall be loaded and the chamber shall be empty, when the shotgun is carried on a tour of duty. The only time that a shell will be chambered is during an emergency when the gun is in hand and under the control of the officer.

At ranges of 7 yards or less, the 12 gauge buckshot charge is capable of smashing through and penetrating objects inside an auto.

Special weapons within the Department are considered to be right hand weapons. The right side of the weapon would be the side opposite a right hand shooter, shooting from the shoulder.

Under 15 feet, the shotgun loaded with buckshot, has about the same effect as a rifle, because the charge of shot does not have a chance to spread; however, close range shotgun wounds are more lethal.

## WINCHESTER MODEL 12

### SAFETY AND INSPECTION

1. Making the weapon safe - The right side of this weapon is the side where the ejection port is located.

Check to see if the weapon is on "safe." The cross bolt safety is located in the forward portion of the trigger guard. When the button is actuated to the right, it is on "safe."

This weapon has no disconnecter. Bottom of weapon up and muzzle pointed in safe direction, you can view the portion of magazine tube as it connects the receiver. If the magazine is loaded, the brass shell base will be visible. Shells are held in the magazine by the carrier.

2. Shell loading - The action of the weapon during loading maneuvers will be closed and the safety on. To close the action, push the forearm all the way forward. In this position, the weapon is locked. Hold the weapon in your shooting hand in a firing position. With your weak hand, push the shell against the carrier, forcing it up and slide the shell forward into the magazine. The carrier acts as a shell stop. To chamber a round, activate the slide release button, located to the rear and left of trigger guard and bring the forearm all the way to the rear. A round will drop into the receiver and by moving the forearm all the way forward, it will be chambered.

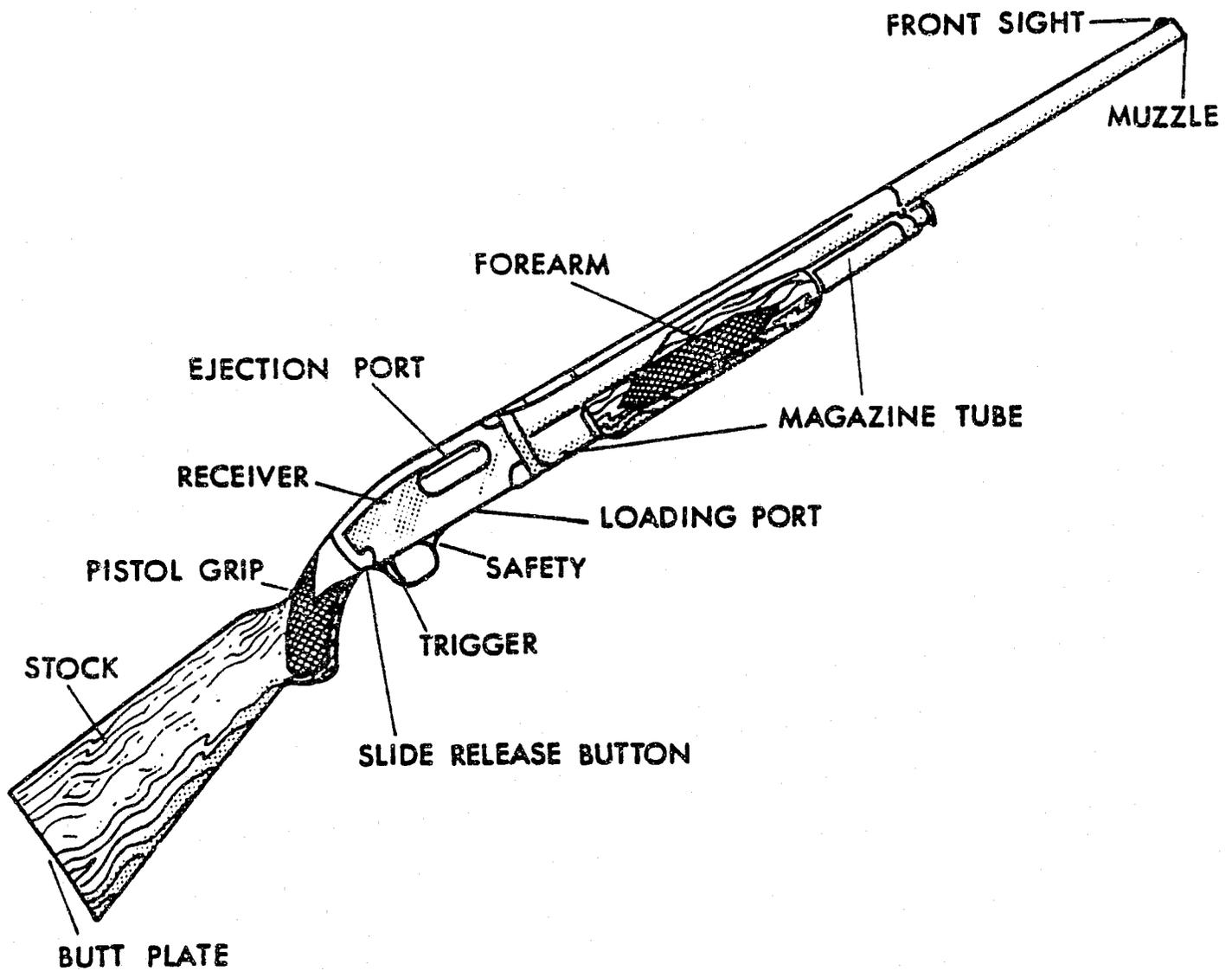
#### Unloading magazine

With safety on, invert gun and push carrier down. With carrier down any shells in the magazine tube will be forced out into the loading port of the receiver. Care must be exercised to control the shells as they leave the magazine.

#### Unloading chamber

Depress the slide release button and move forearm slowly to the rear. Cover the ejection port with one hand and remove the round when the action is opened.

# Winchester Model 12



## ITHACA - MODEL 37 SHOTGUN

### SPECIFICATIONS

1. Gauge -12 Gauge
2. Barrel Length -16 $\frac{1}{2}$  inches
3. Ammunition Capacity -Total (5) rounds (4 rounds in the magazine and one round in the barrel chamber)
4. Weapon Weight -6 pounds
5. Choke -Cylinder bore
6. Hammerless -
7. Action -Pump Repeating

### OPERATION PROCEDURE

1. Examination of the weapon and making it safe - Push the cross bolt safety, located at the rear of the trigger guard, (diagrams "A" and "D") from left to right. This can only be accomplished when the weapon is cocked.

Hold and balance the weapon in the palm of either hand with the bottom side of the weapon facing up. The receiver, chamber and magazine (Diagram "G") can be inspected from this position, to determine whether there are cartridges in the weapon.

2. Shell removing - Pressing on the front end of the shell stop, which is located inside of the receiver and on the left side (Diagram "B"), the shells may be removed from the magazine, one by one.

To remove a shell from the chamber, press back on the action-slide release lever which is located in front of and on the right side of the trigger guard (Diagram "B") and pull the forestock-slide (Diagram "C") slowly to the rear. The shell in the chamber will be removed by the movement of the action and it will drop out of the receiver opening on the bottom of the weapon.

3. Shell loading - The action must be fully closed. Place a shell in the bottom opening of the receiver and push the shell forward into the magazine and past the shell stop (Diagram "B").

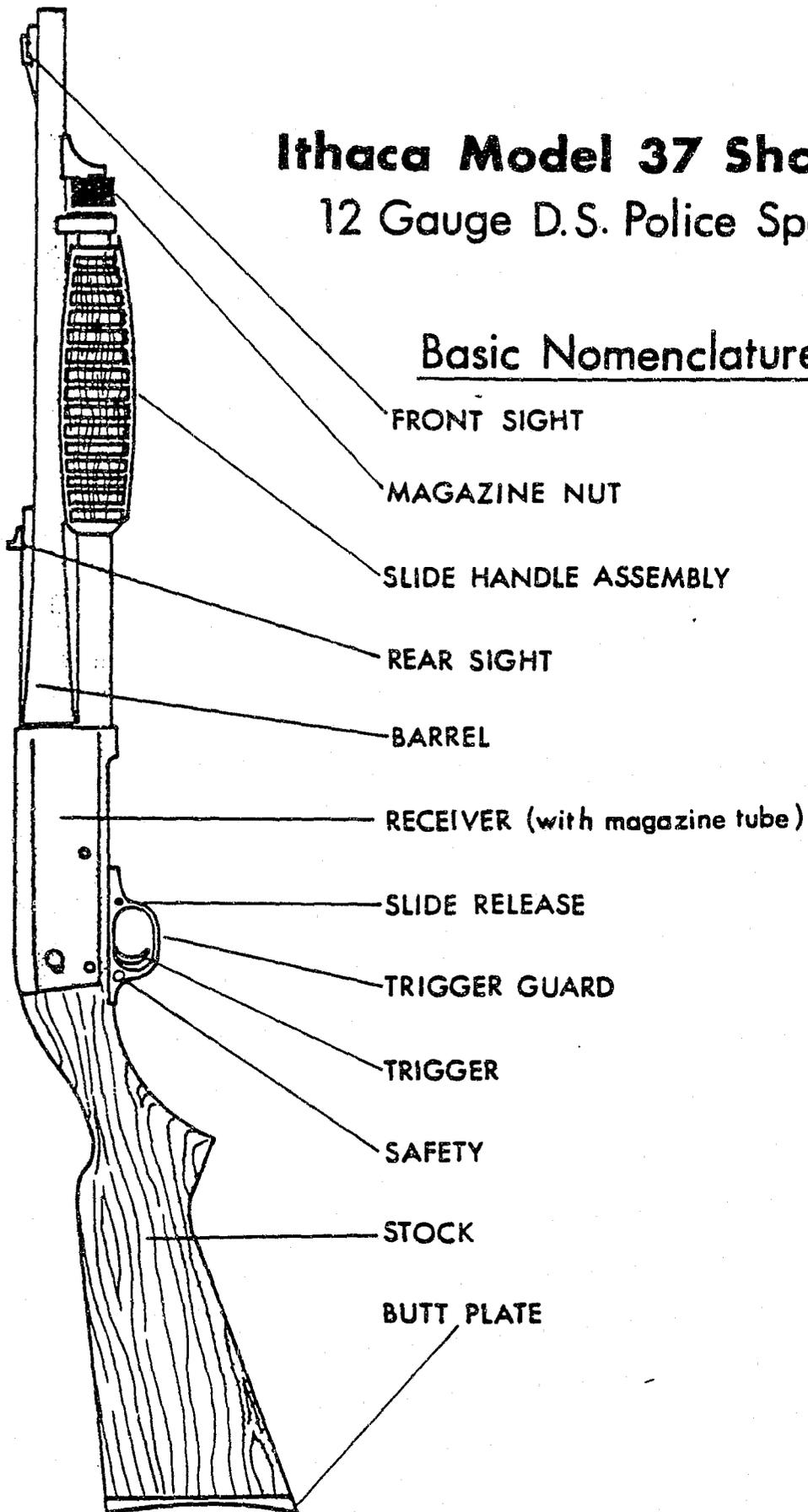
To chamber a shell, remove the shell from the magazine through the activation of the action. Another shell may then be inserted into the magazine and the weapon will be loaded to its full capacity.

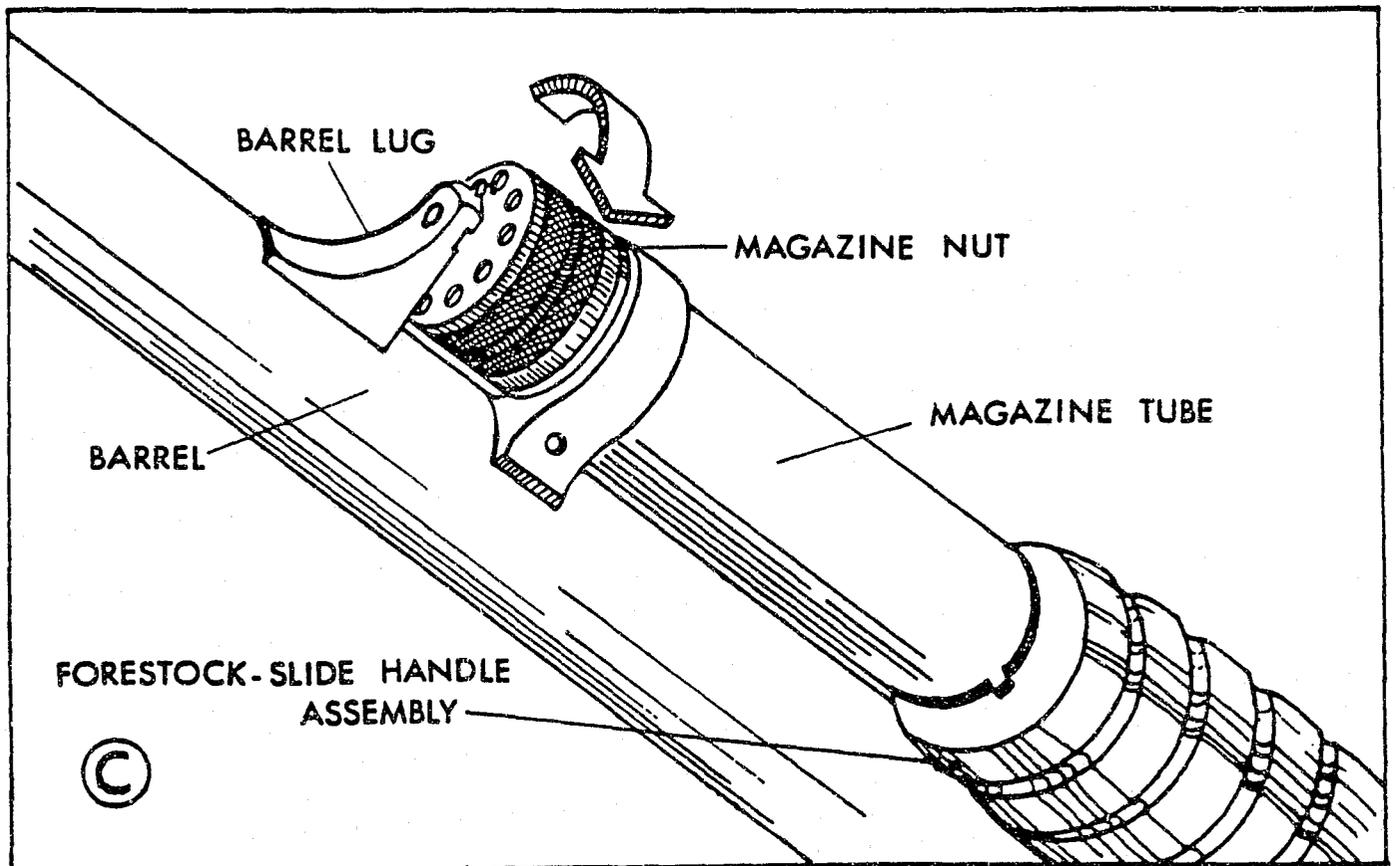
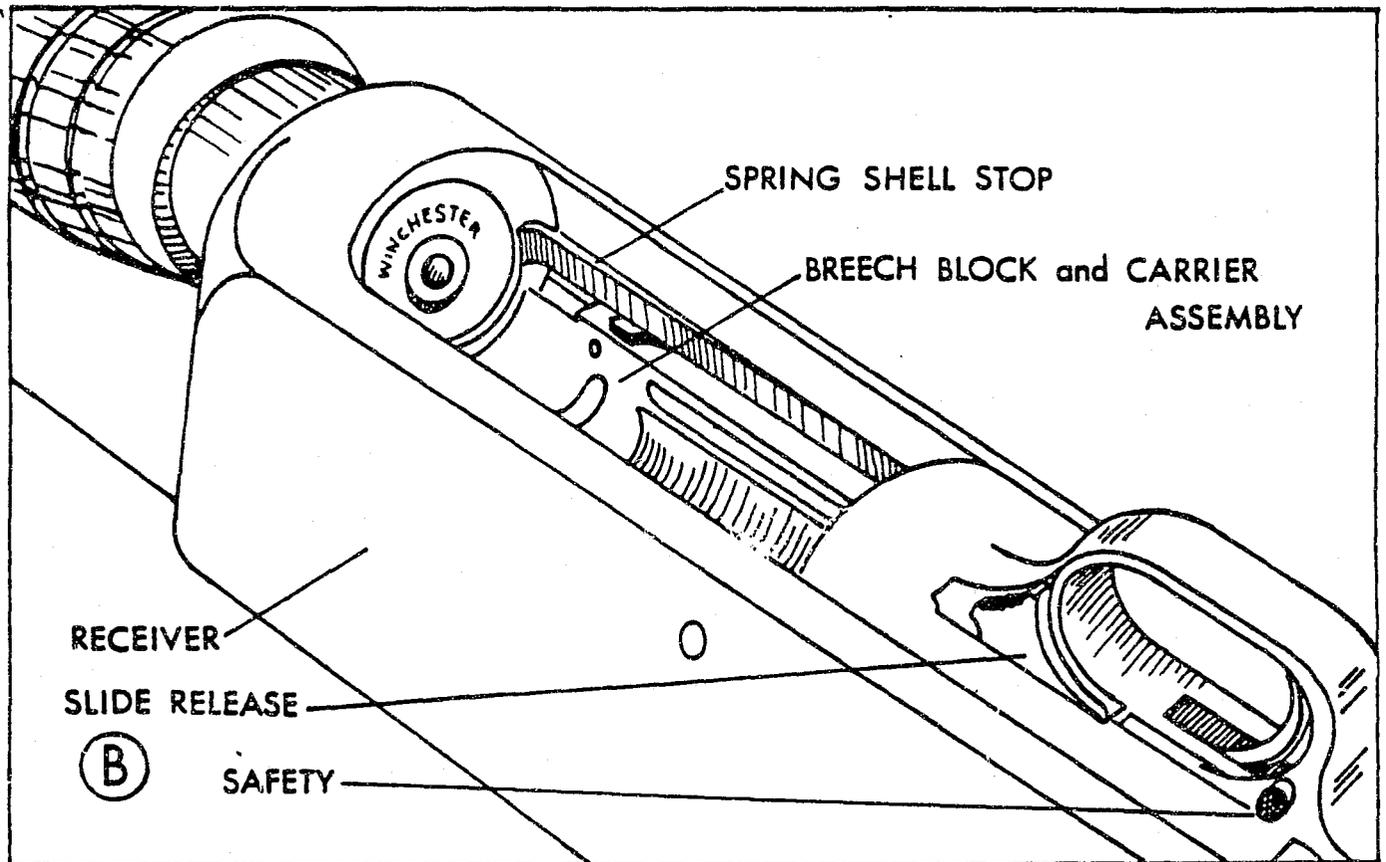
4. Removing the barrel: Remove all shells from the chamber and magazine. Open the action by bringing the forestock-slide all the way to the rear. Unscrew the magazine nut (Diagram "C") by turning it to the right, as far as it will go. Rotate the barrel a quarter turn to the left (Diagram "D") and pull the barrel out of the receiver.
5. Replacing the barrel: To replace the barrel, reverse the removing procedure, but DO NOT USE excessive force to tighten the magazine nut.
6. Cleaning, care and use of the weapon:
  - a. Always take the barrel out of the receiver and clean same from the breech end (Diagram "E".)
  - b. Do not load deformed shells into the weapon.
  - c. In case a shell from the magazine will not chamber or eject, the barrel must be removed from the receiver and the bad shell can then be extracted.
  - d. The Model 37 has front and rear sights that have been adjusted at the factory for a distance of 100 yards. The front sight is luminous, an aid in firing the weapon in darkness. The front sight blade can be removed by pressing down on the detent, which is located in front of the blade (Diagram "E".)

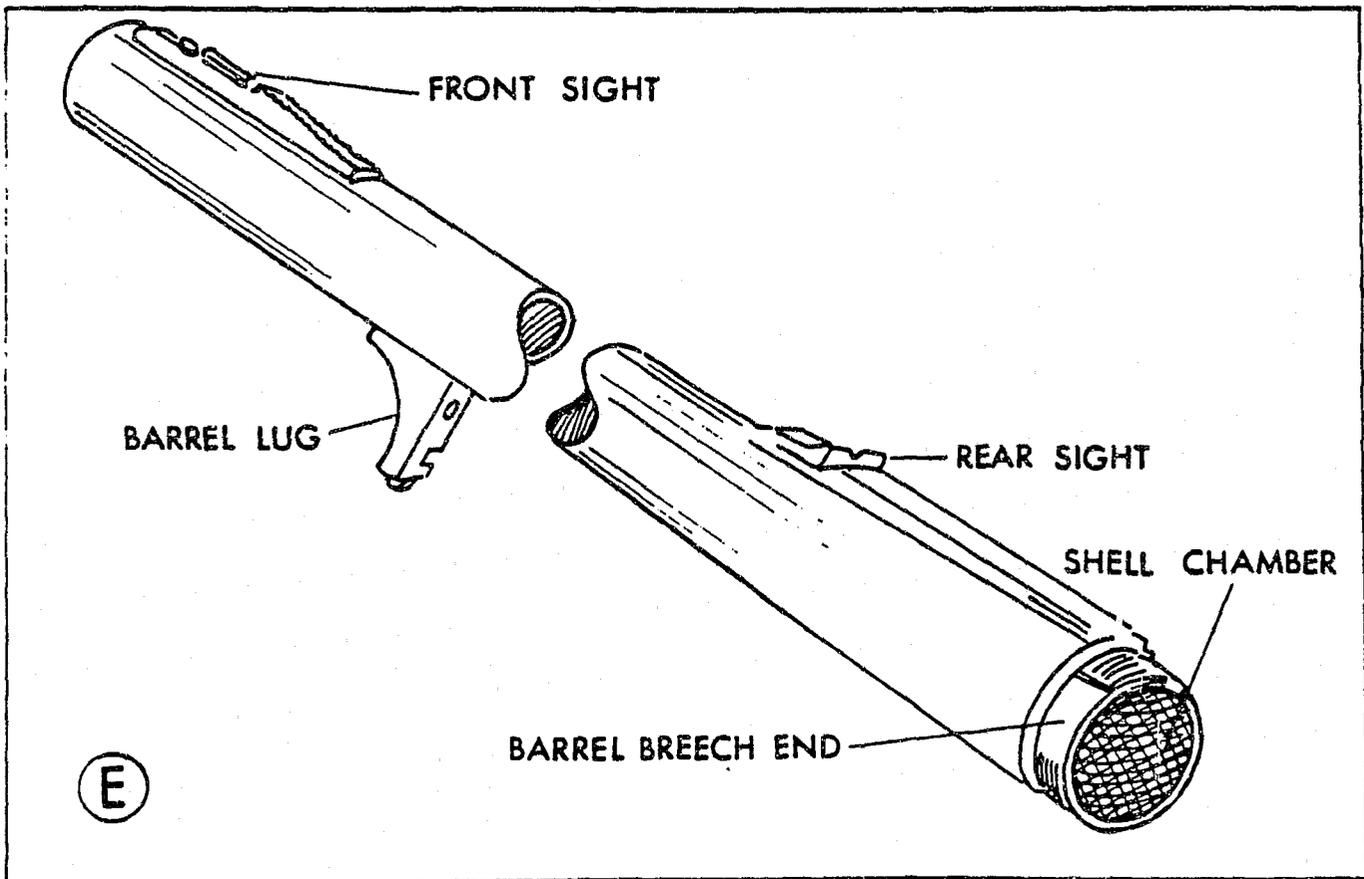
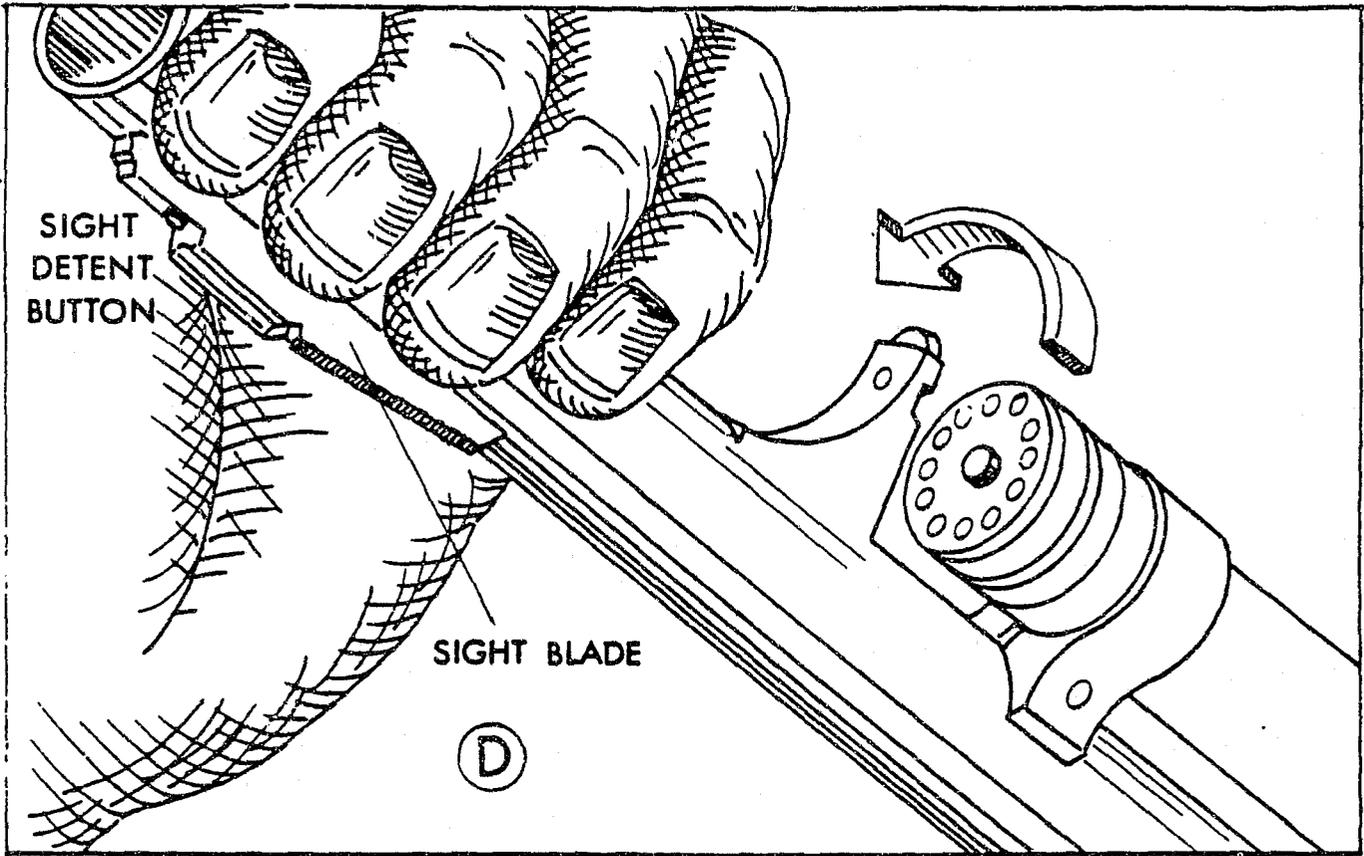
# Ithaca Model 37 Shotgun

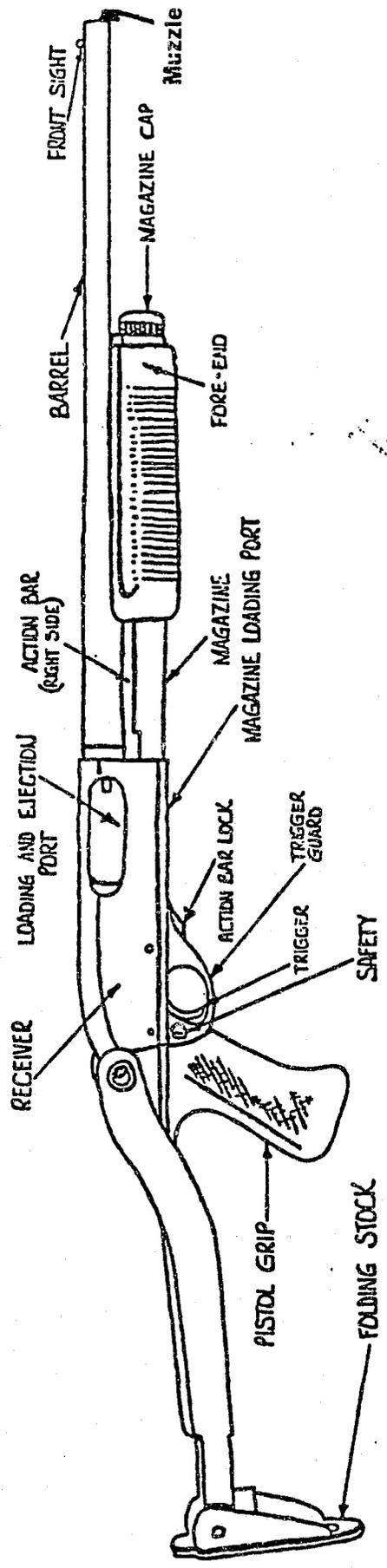
## 12 Gauge D.S. Police Special

### Basic Nomenclature

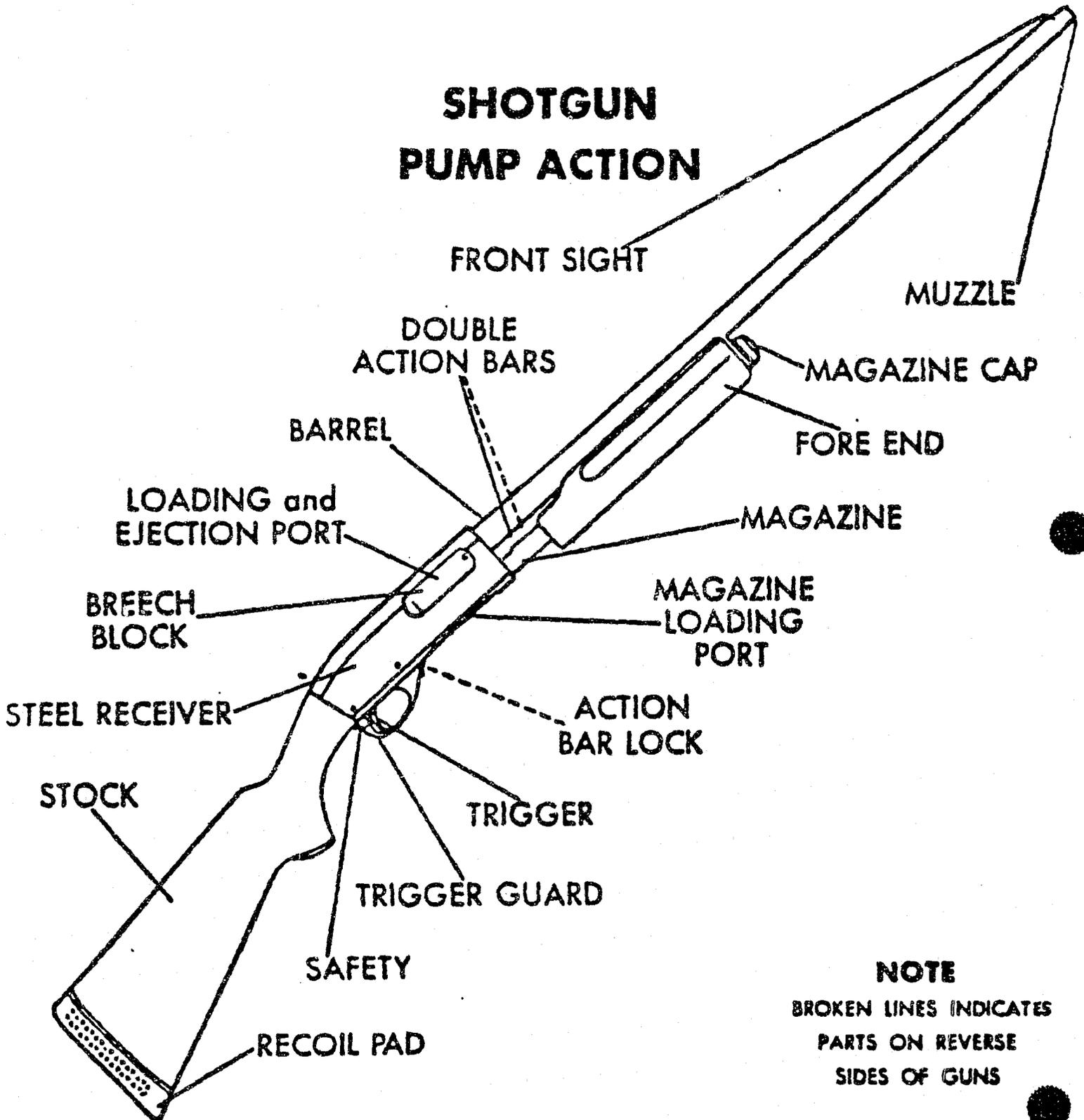






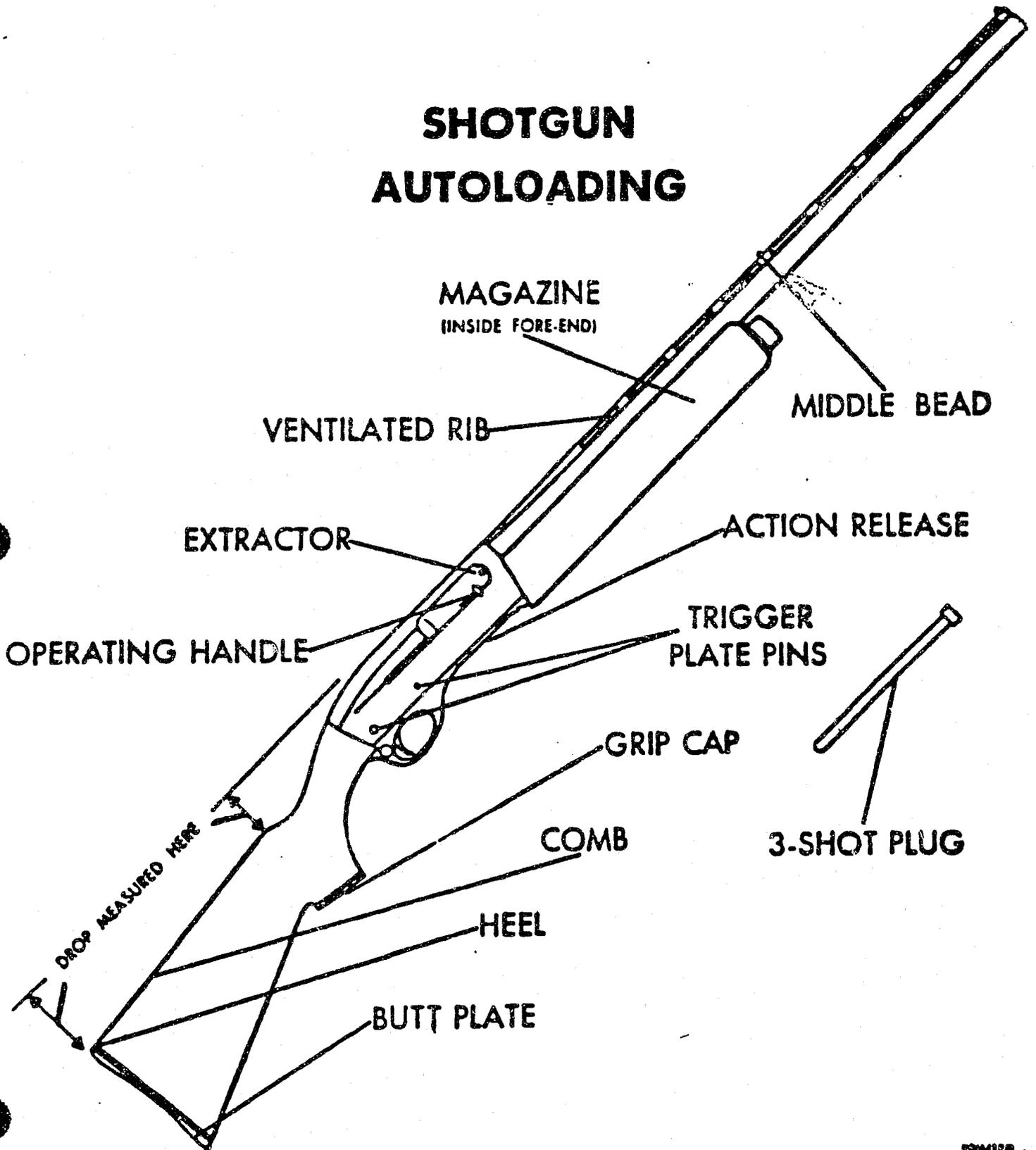


# SHOTGUN PUMP ACTION



**NOTE**  
BROKEN LINES INDICATES  
PARTS ON REVERSE  
SIDES OF GUNS

# SHOTGUN AUTOLOADING



410 Bore 3" Case

WINCHESTER WESTERN COMPRESSION-FORMED, SUPER-X

Shot Wgt.	Primer	Powder	Charge (grains)	Wad Column	Velocity (fps.)	Pressure (LUP's)
*11/16 oz.	Win. 209	296	13.5	Win. WAA41	1135	10,800
11/16 oz.	Win. 209	296	13.5	Fed. 410SC	1135	10,800
11/16 oz.	Fed. 410	296	14.0	Win. WAA41	1135	10,000
11/16 oz.	Fed. 410	296	14.0	Fed. 410SC	1135	10,600

This load will duplicate the ballistics level of the factory Winchester Western Super-X Load

REMINGTON-PETERS SP PLASTIC

Shot Wgt.	Primer	Powder	Charge (grains)	Wad Column	Velocity (fps.)	Pressure (LUP's)
11/16	CCI 157	296	16.0	Rem. SP4103	1135	8,700

Winchester Western uniform, chilled lead shot provides consistent shot patterns and better penetration. Strict

quality control throughout the manufacturing process assures the ultimate in performance.

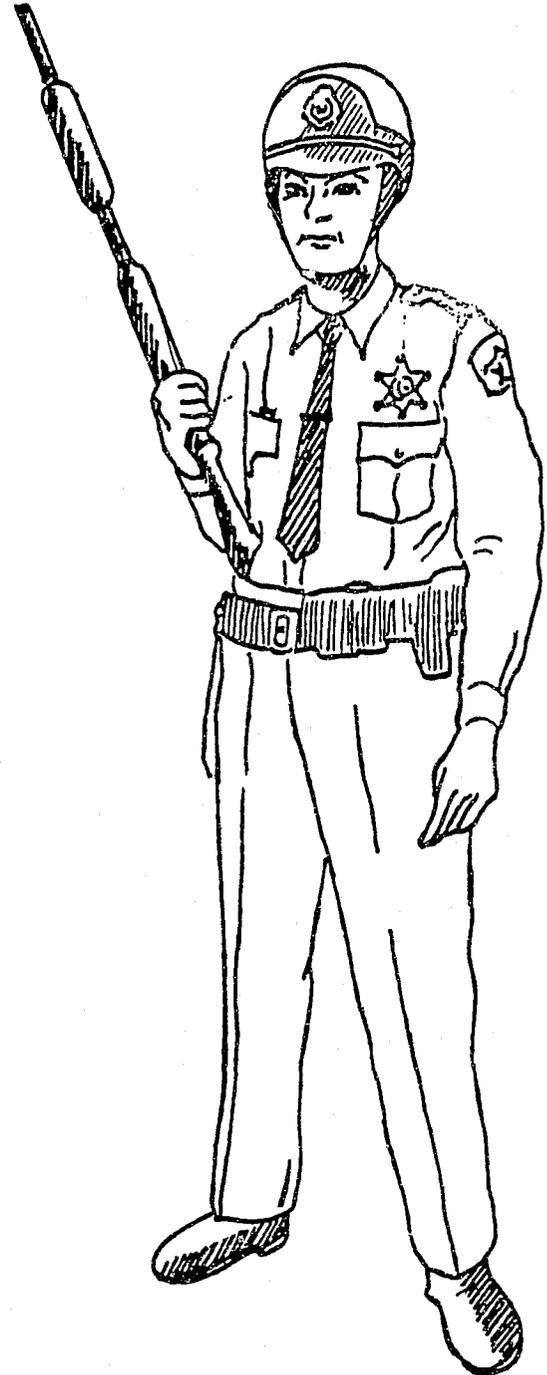
Component Shot Chart — Diameter in Inches

12 ● .05	9 ● .08	8 ● .09	7½ ● .095	6 ● .11	5 ● .12	4 ● .13	2 ● .15	BB ● .18	No. 4 Buck ● .24	No. 00 ● .33
APPROXIMATE NUMBER OF PELLETS TO THE OUNCE									APPROXIMATE NUMBER TO THE POUND	
2360	600	405	345	220	170	135	90	50	340	130

# Carry Positions



High Point



Ready-at-ease

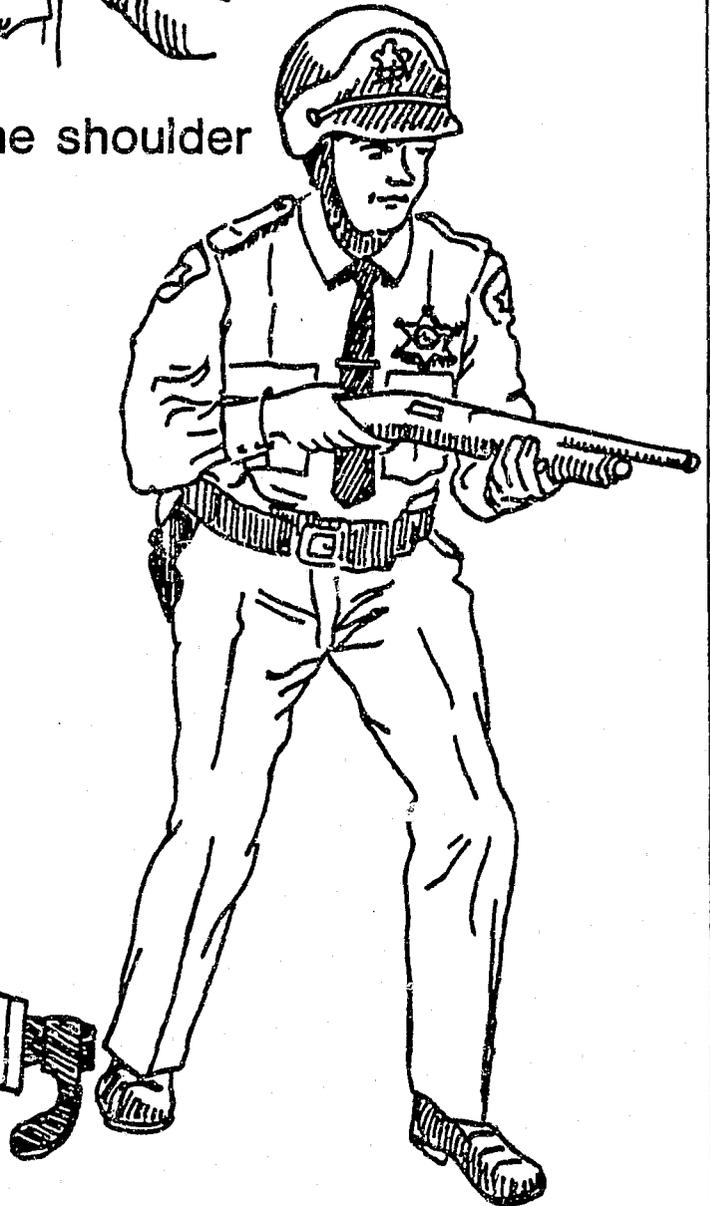
# Shooting Positions



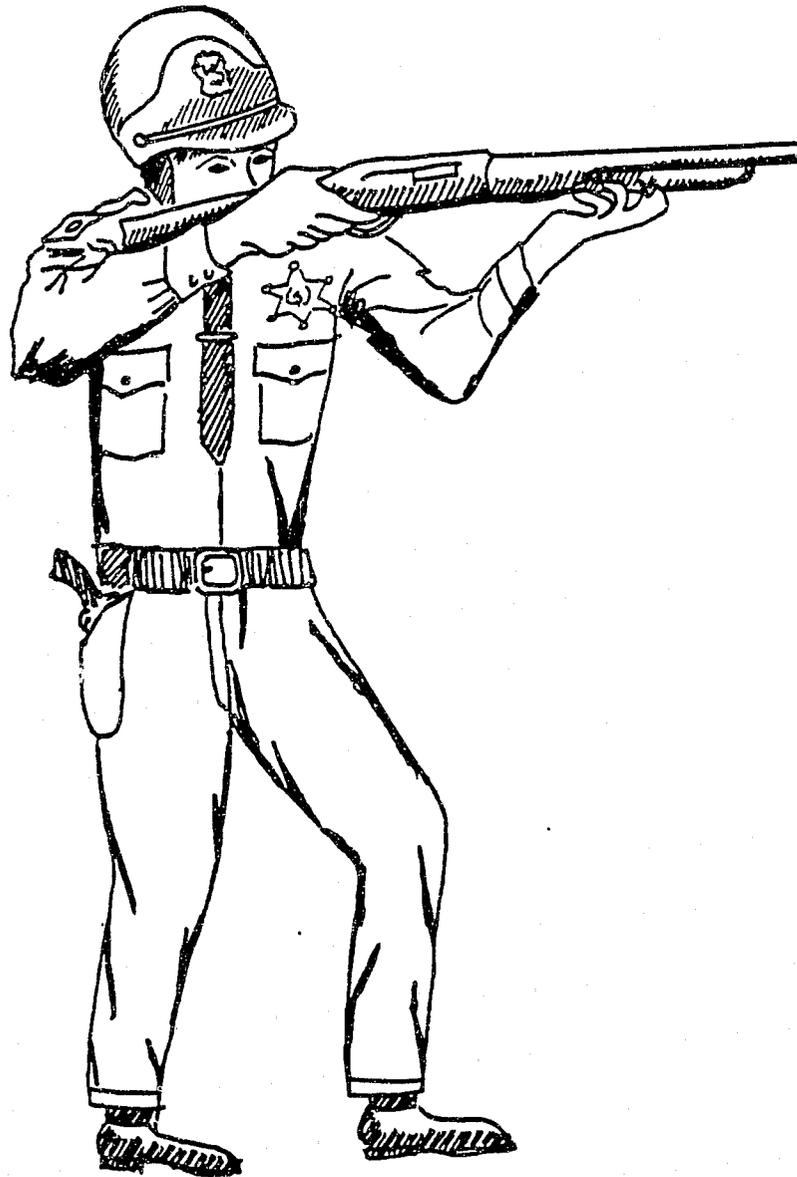
From the shoulder



Combat No. 1



Combat No. 2

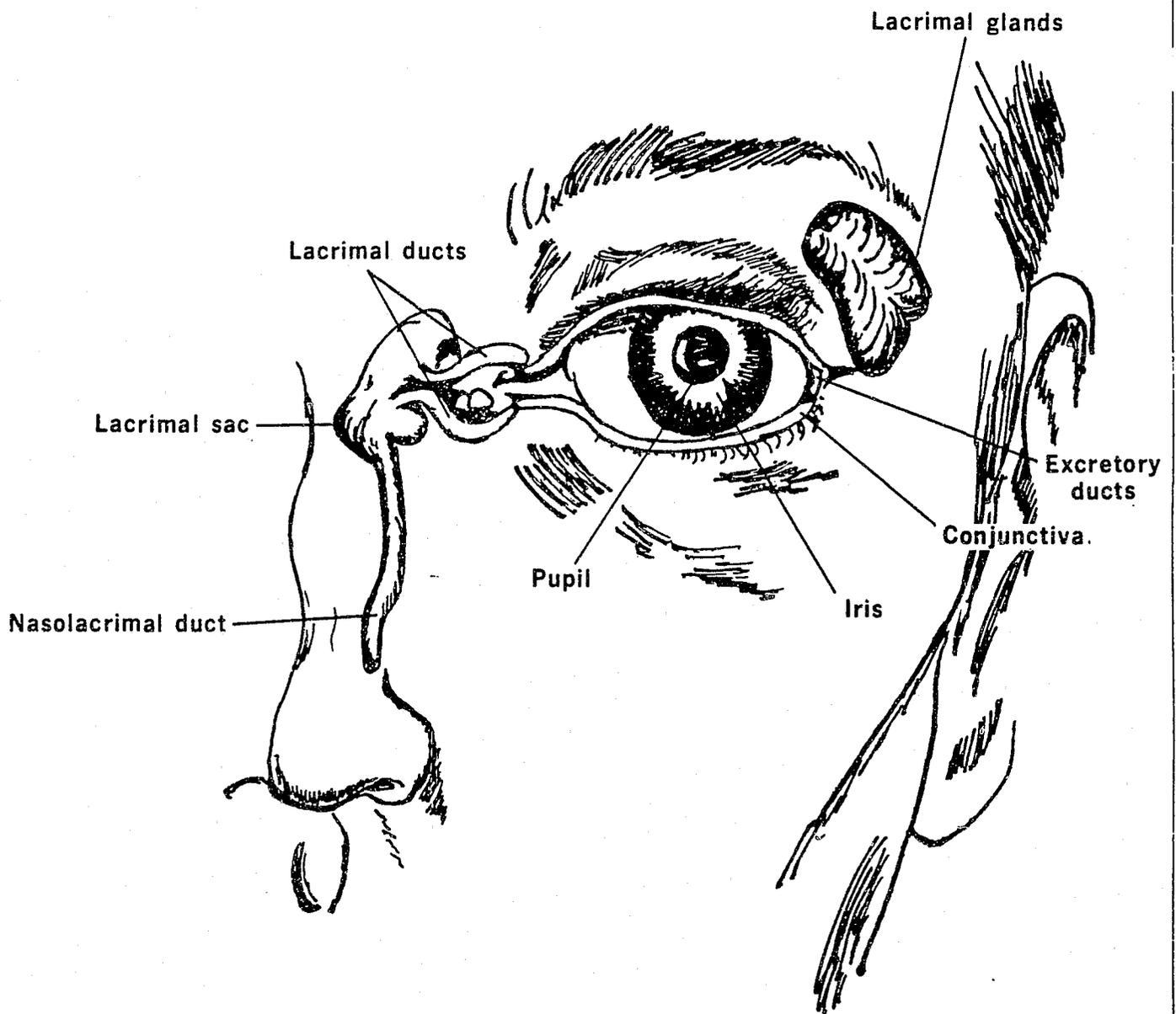


Shooting the Police Shotgun from the shoulder

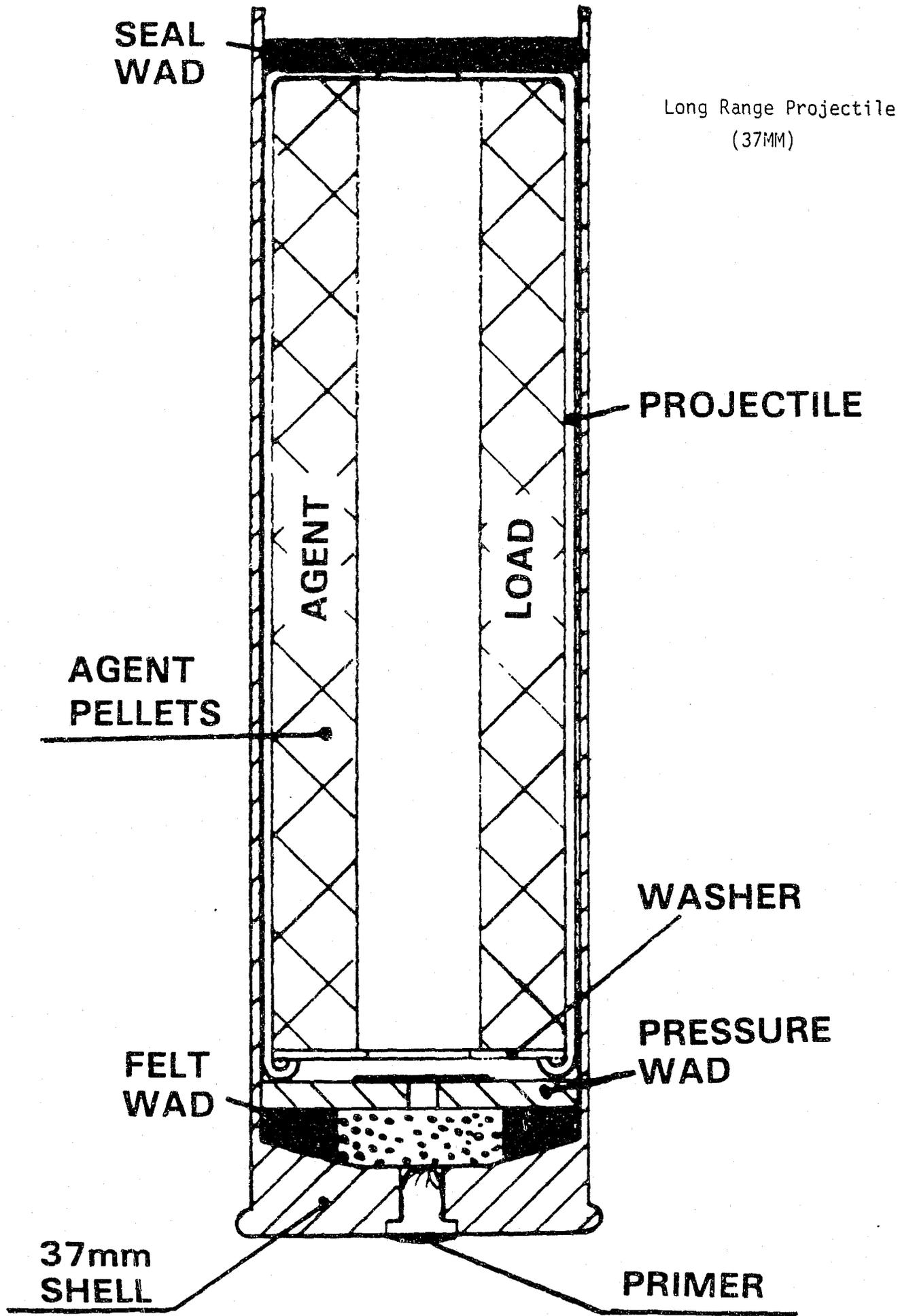


Shooting the Police Shotgun from the hip

# THE EYE AND THE LACRIMAL APPARATUS



## THE LACRIMAL APPARATUS



SEAL  
WAD

Long Range Projectile  
(37MM)

PROJECTILE

AGENT

LOAD

AGENT  
PELLETS

WASHER

PRESSURE  
WAD

FELT  
WAD

37mm  
SHELL

PRIMER

**PROJECTILE**

Long Range Rubber  
(37M:1)

**AGENT  
PELLETS**

**AGENT  
LOAD**

**IGNITION**

**END  
PLUG**

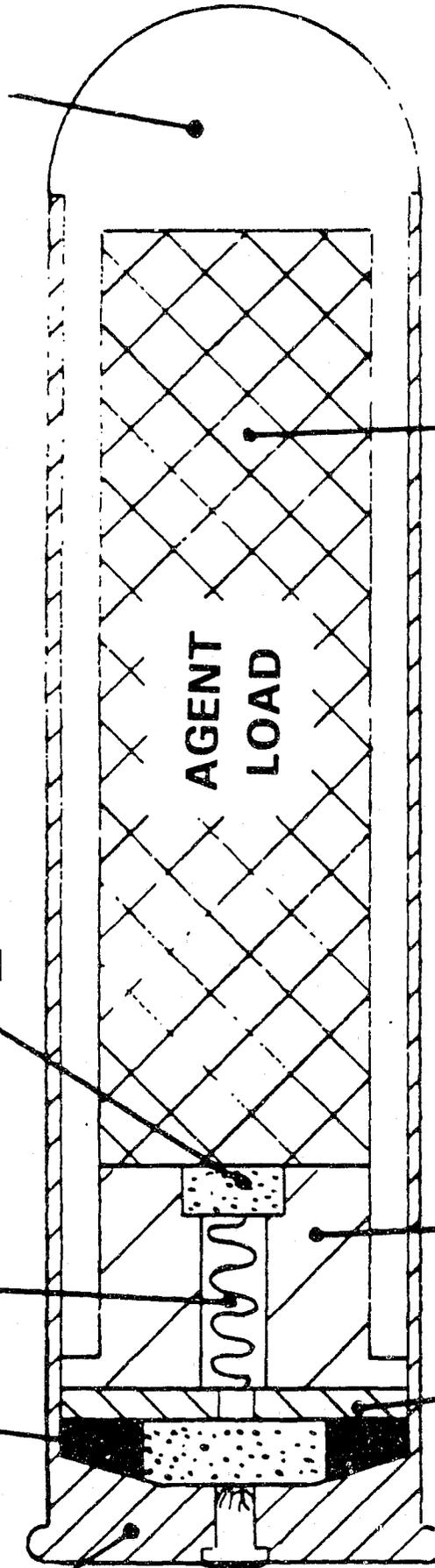
**DELAY**

**PRESSURE  
WAD**

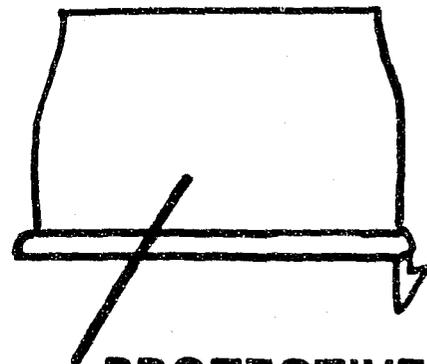
**FELT  
WAD**

37mm

**PRIMER**

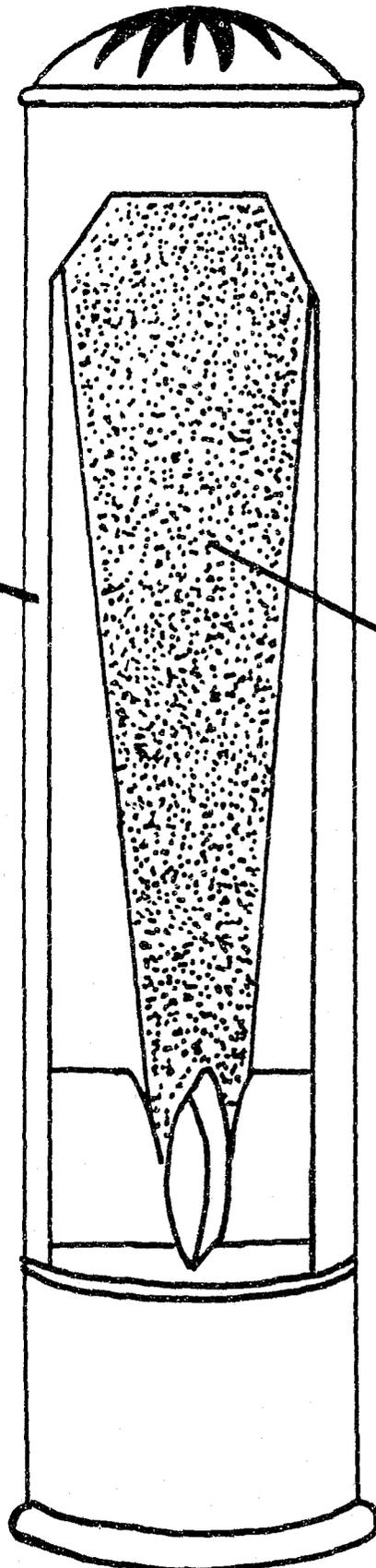


Liquid-Filled  
Barricade Penetrating Projectile  
(37MM)



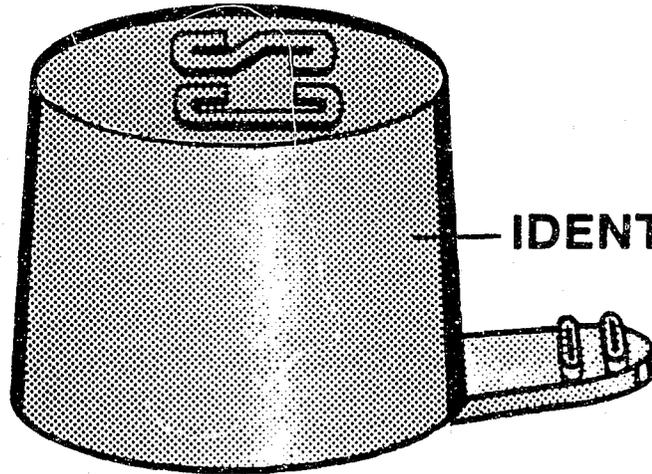
**PROTECTIVE  
CAP**

**37mm OUTER  
CASING**



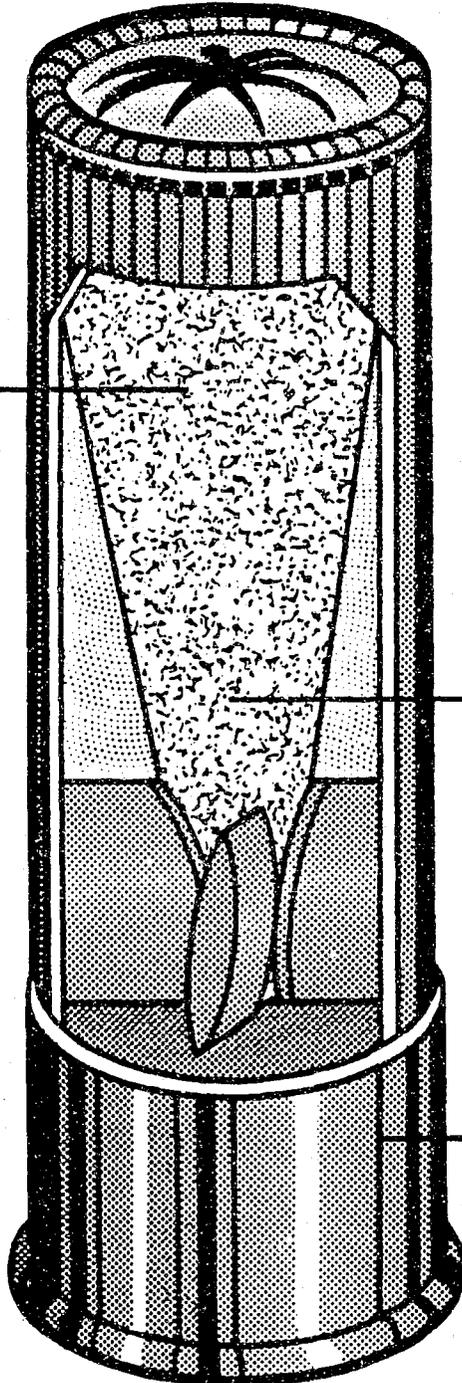
**LIQUID  
AGENT**

Liquid-Filled  
Barricade Penetrating  
Non-burning Projectile  
(37MM)



IDENTIFICATION CAP

LIQUID AGENT  
(INSIDE PROJECTILE)



PROJECTILE

STANDARD 12-GAUGE  
SHELL CASE

Blast Type Grenade

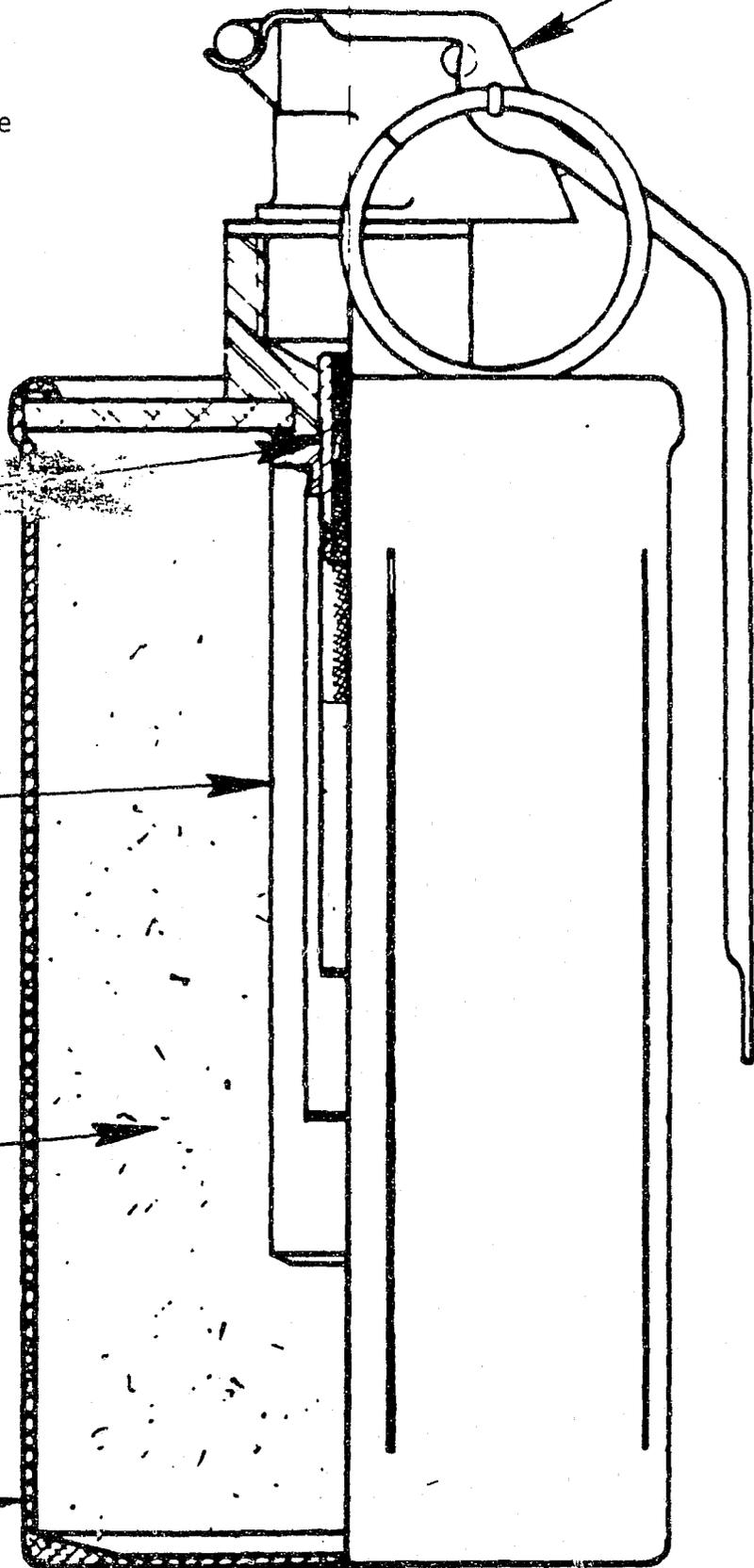
FUZE

3 SECOND  
DELAY

BLAST  
TUBE

270 GRAM  
PAYLOAD

ALUMINUM  
CONTAINER



"Baseball" Rubber Grenade

FUSE MECHANISM

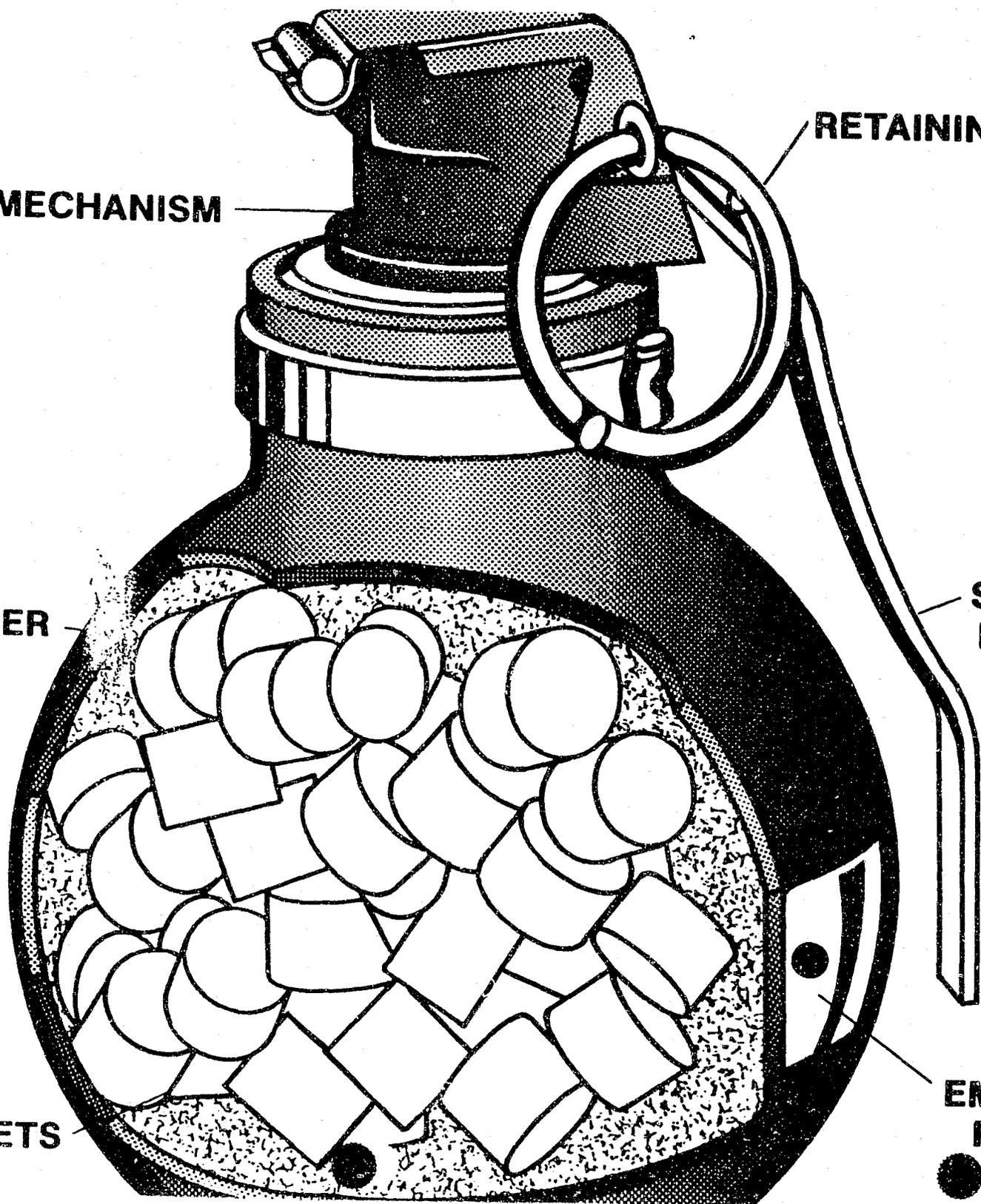
RETAINING PIN

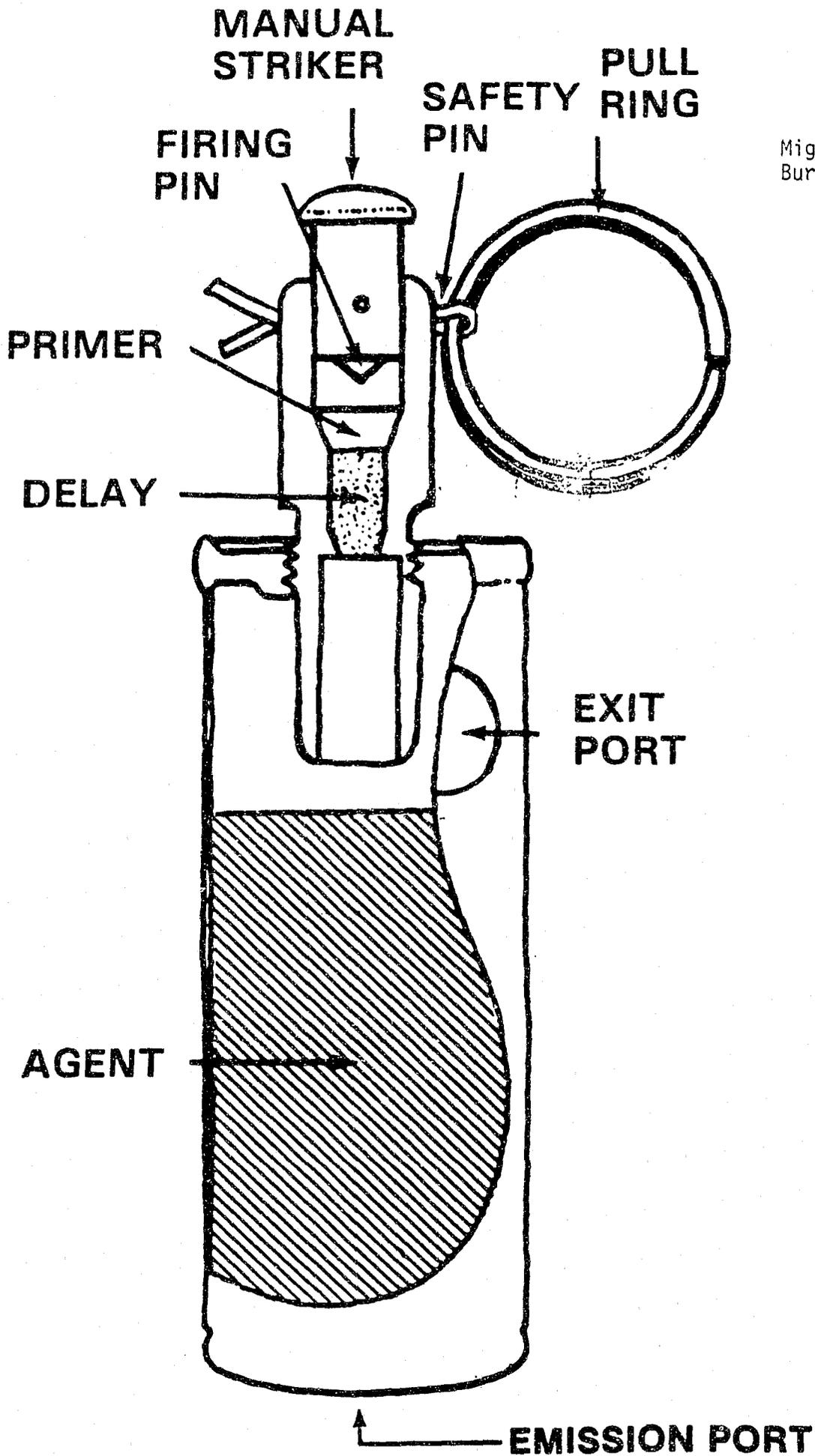
RUBBER  
CONTAINER

SAFETY  
LEVER

AGENT/FUEL PELLETS

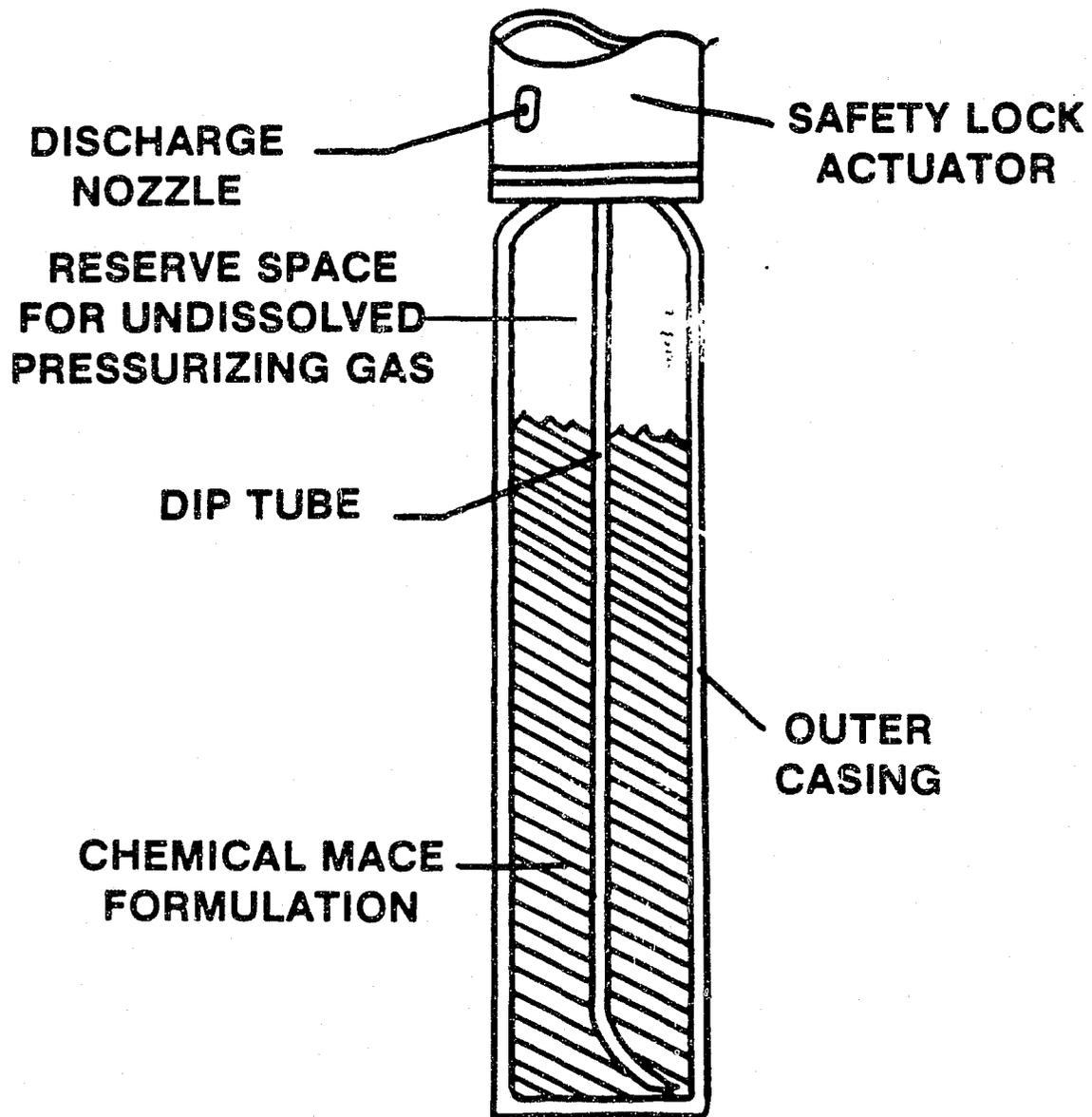
4  
EMISSION  
PORTS





Mighty Midget  
Burn-type Grenade

Hand Held "Mace" Dispenser  
(Aerosol Stream)



# FIRST AID CHART

FIRST AID FOR RIOT CONTROL AGENT SYMPTOMS		
Area Affected	Symptoms	First Aid
		Remove affected person from the contaminated area to an open, up wind position. Remain calm, restrict activity. Major discomfort should disappear within 15 or 20 minutes.
Eyes	Burning sensation, heavy flow of tears. Involuntary closing of eyes.	Keep eyes open facing wind. Do not rub eyes. Tearing helps clear the eyes. If particles of agent are lodged in eyes, wash out with copious amounts of cool water. Tears can be blotted away.
Skin	Stinging or burning sensation on moist skin areas. Blisters from very heavy concentrations.	Sit and remain quiet to reduce sweating. Expose the affected areas to the air. Gross contamination can be relieved by flushing with clear water for at least 10 minutes. For CS, a solution of 5 or 10% sodium bicarbonate ( $\text{NaHCO}_3$ ) or sodium carbonate ( $\text{Na}_2\text{CO}_3$ ) or a specially prepared skin wash solution (6.7% $\text{NaHCO}_3$ , 3.3% $\text{Na}_2\text{CO}_3$ and 0.1% benzalkonium chloride in water) are superior to water and need be used only in small amounts.
Nose	Irritation, burning sensation. Nasal discharge.	Breathe normally. Blow nose to remove discharge. Nose drops should help if discomfort is severe.
Chest	Irritation, burning sensation. Coughing, feeling of suffocation. Tightness in chest, often accompanied by a feeling of panic.	The victim should relax and keep calm. Talking reassuringly to the victim will help to relieve his discomfort and prevent panic.

For severe or prolonged effects, complications, and contamination of wounds, obtain medical aid as soon as possible.

**PROPERTIES of the CHEMICAL AGENT**

**CS**

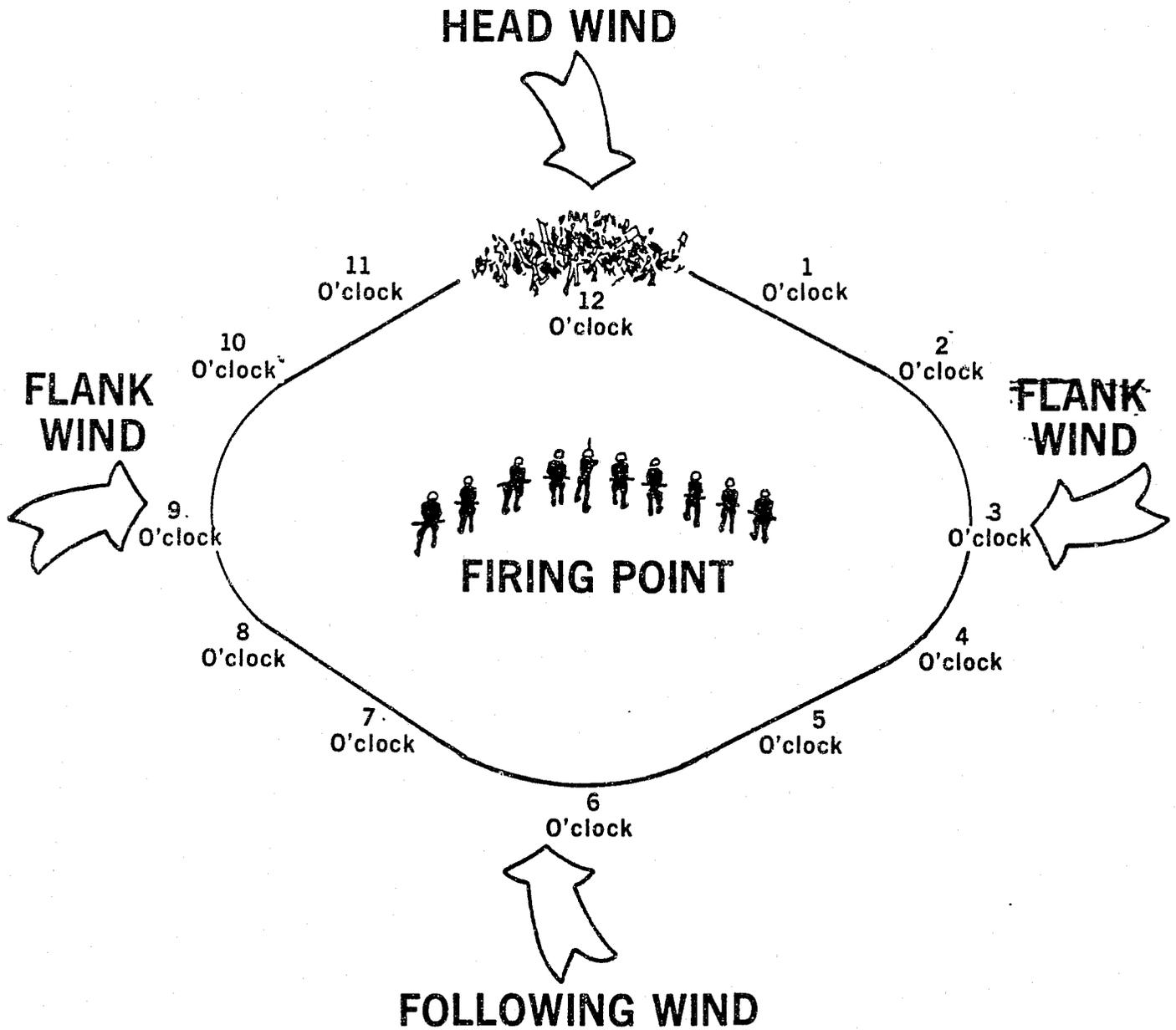
- 1. CS is a WHITE CRYSTALLINE SOLID**
- 2. CS has pungent PEPPER-LIKE ODOR**
- 3. CS is a WHITE CLOUD at point of release**
- 4. CS is disseminated by burning, explosion, and aerosol**
- 5. CS is faster acting, more POTENT and less TOXIC than CN**

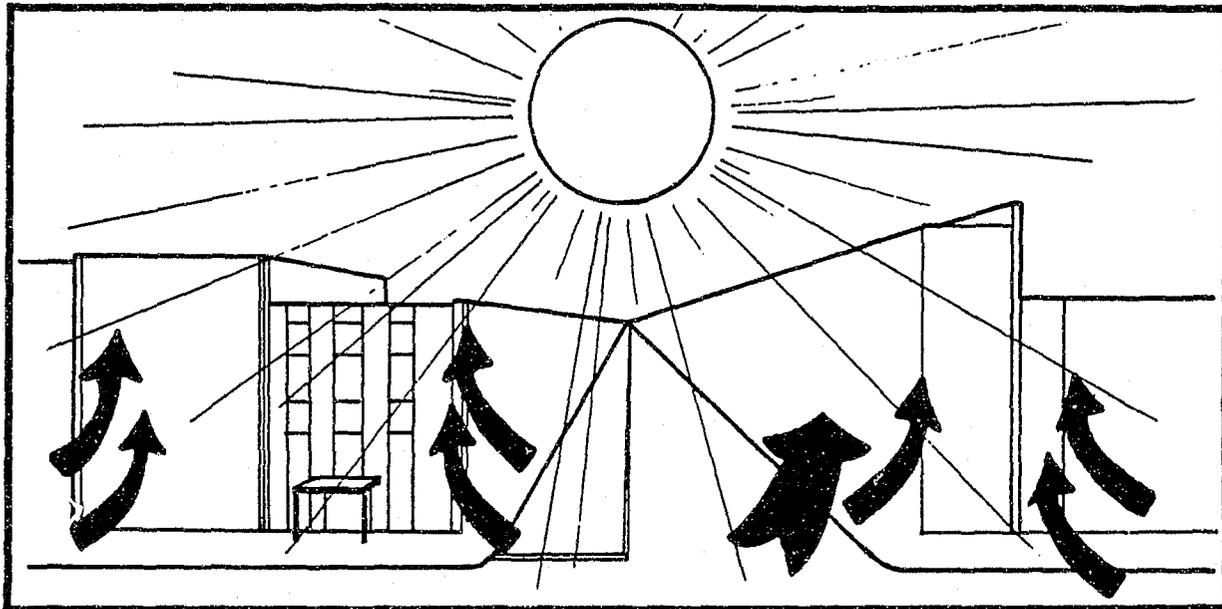
## PROPERTIES of the CHEMICAL AGENT

# CN

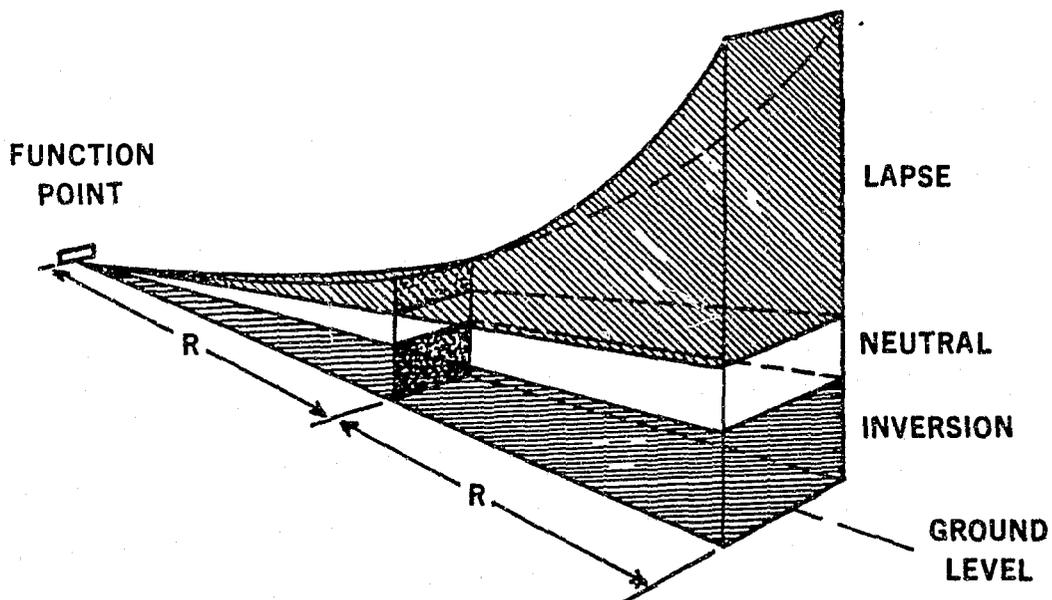
1. **CN is a WHITE CRYSTALLINE SOLID**
2. **CN is used sometimes in LIQUID form**
3. **CN odor, if any, of CN may be faint and agreeable**
4. **CN may appear as BLUISH white cloud at point of release**
5. **CN solid lacrimators are dispersed as mixture of vapor and fine particle smoke by burning type munitions such as projectile and grenades**

# SYSTEM FOR DESIGNATING WIND DIRECTION



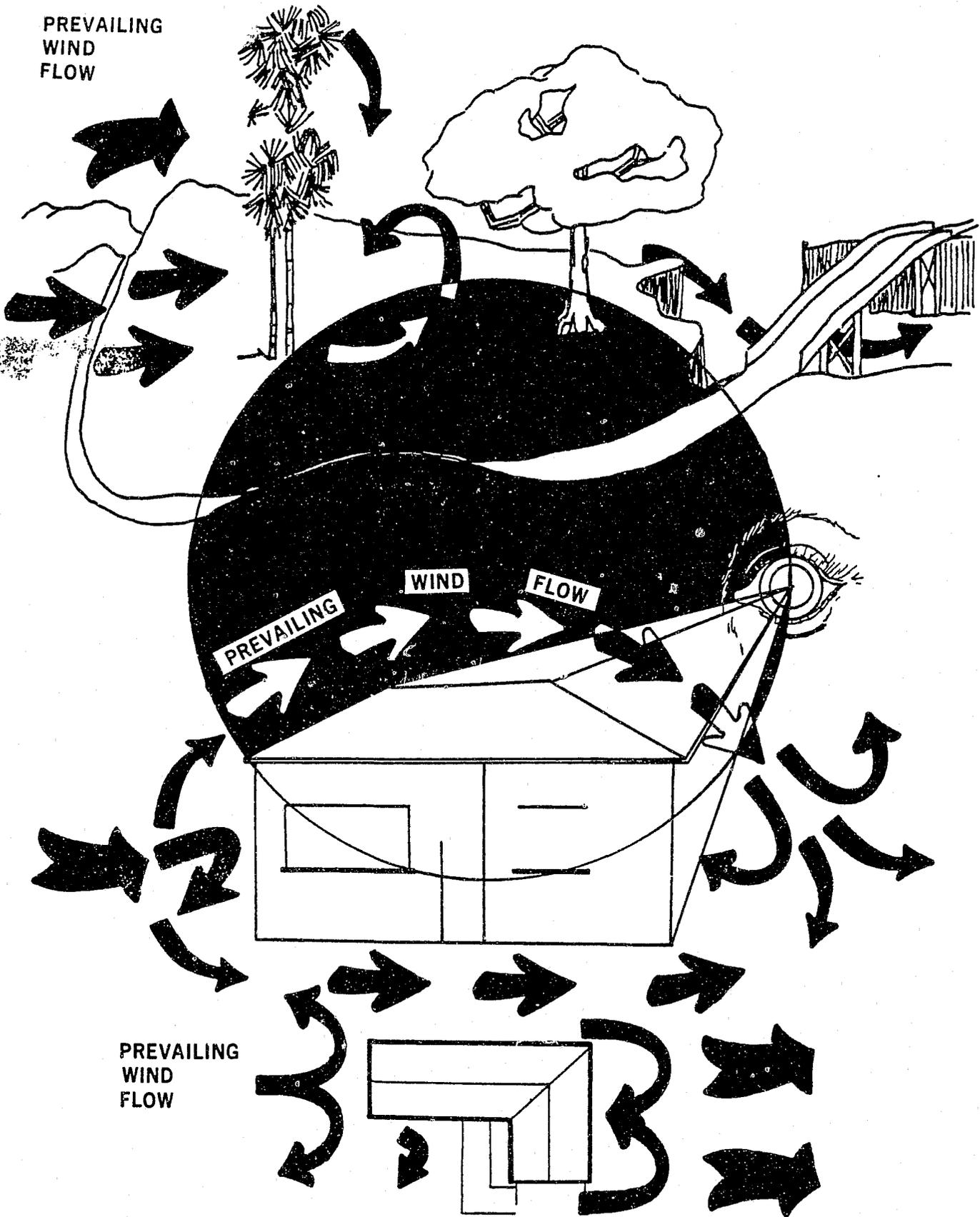


- THERMAL TURBULENCE



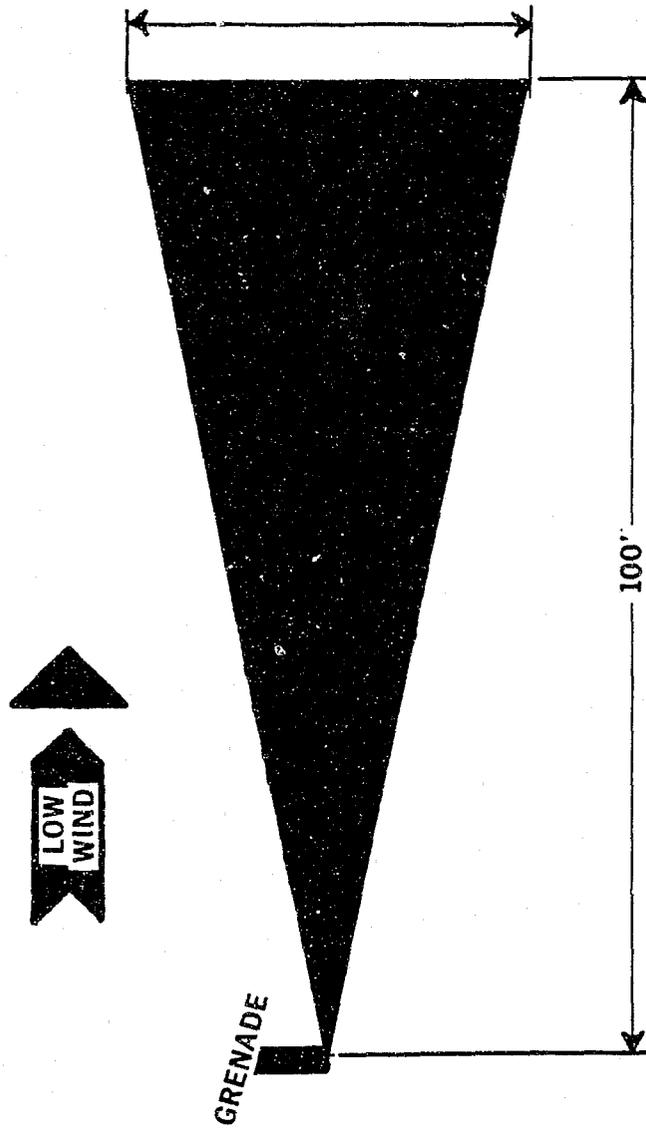
**- EFFECT OF THERMAL GRADIENT ON CONCENTRATION**  
 (Considerations in the Use of Irritants in Law Enforcement, August 1968)

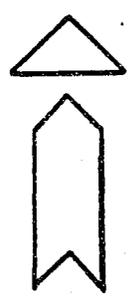
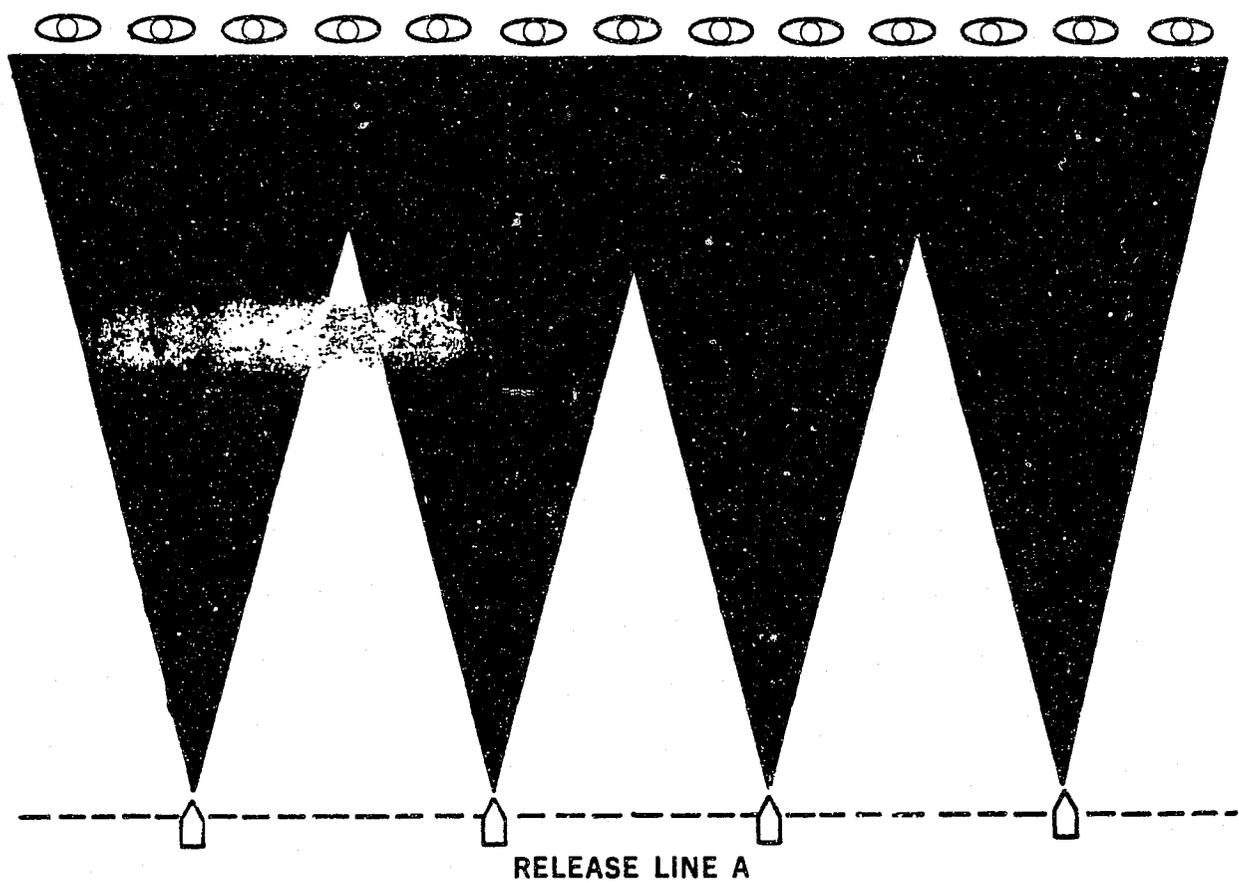
PREVAILING  
WIND  
FLOW



- MECHANICAL TURBULENCE

**LATERAL SPREAD OF THE AGENT CLOUD  
UNDER NORMAL CONDITIONS**



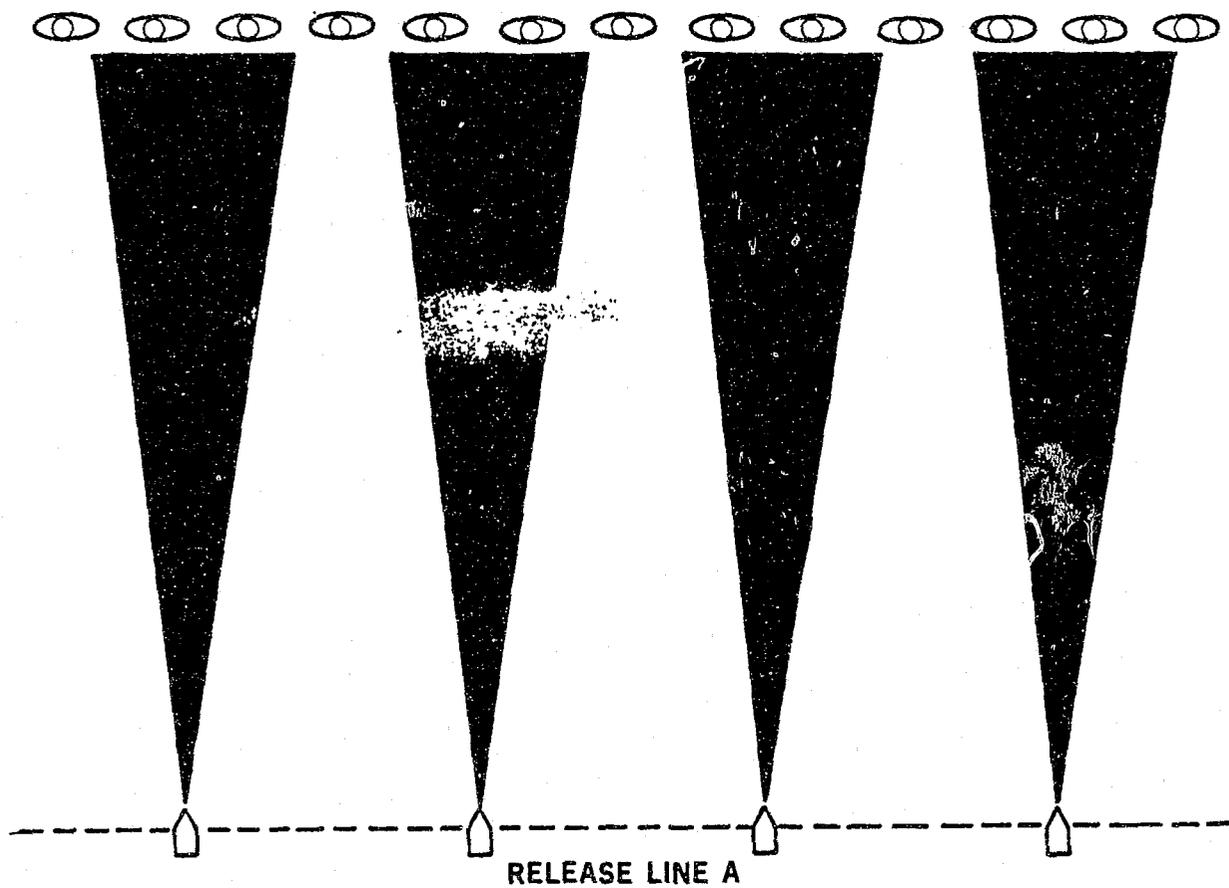


LOW WIND .

POLICE LINE



-WIND SPEED EFFECT ON MUNITIONS PLACEMENT.  
IDEAL RELEASE PATTERN.

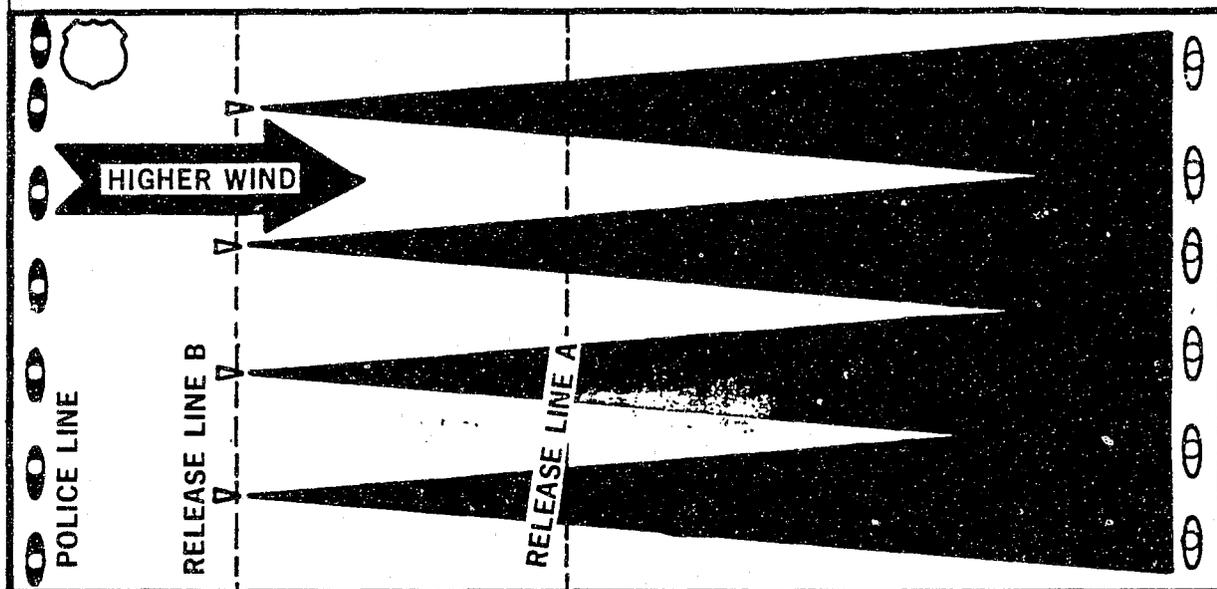


HIGHER WIND

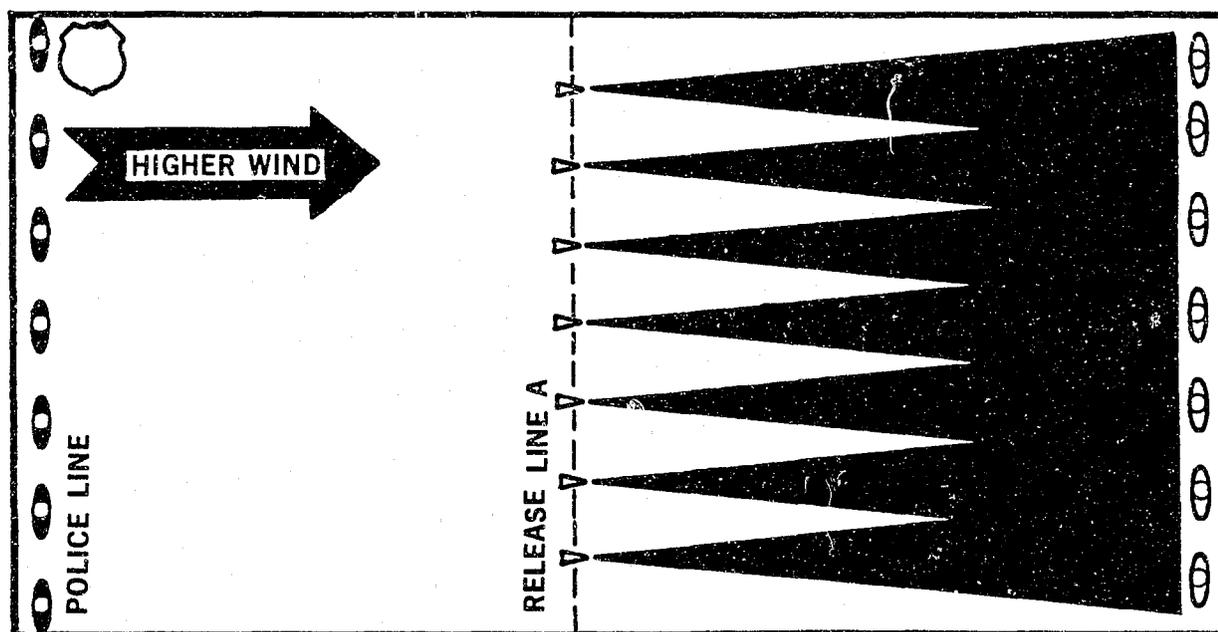
POLICE LINE



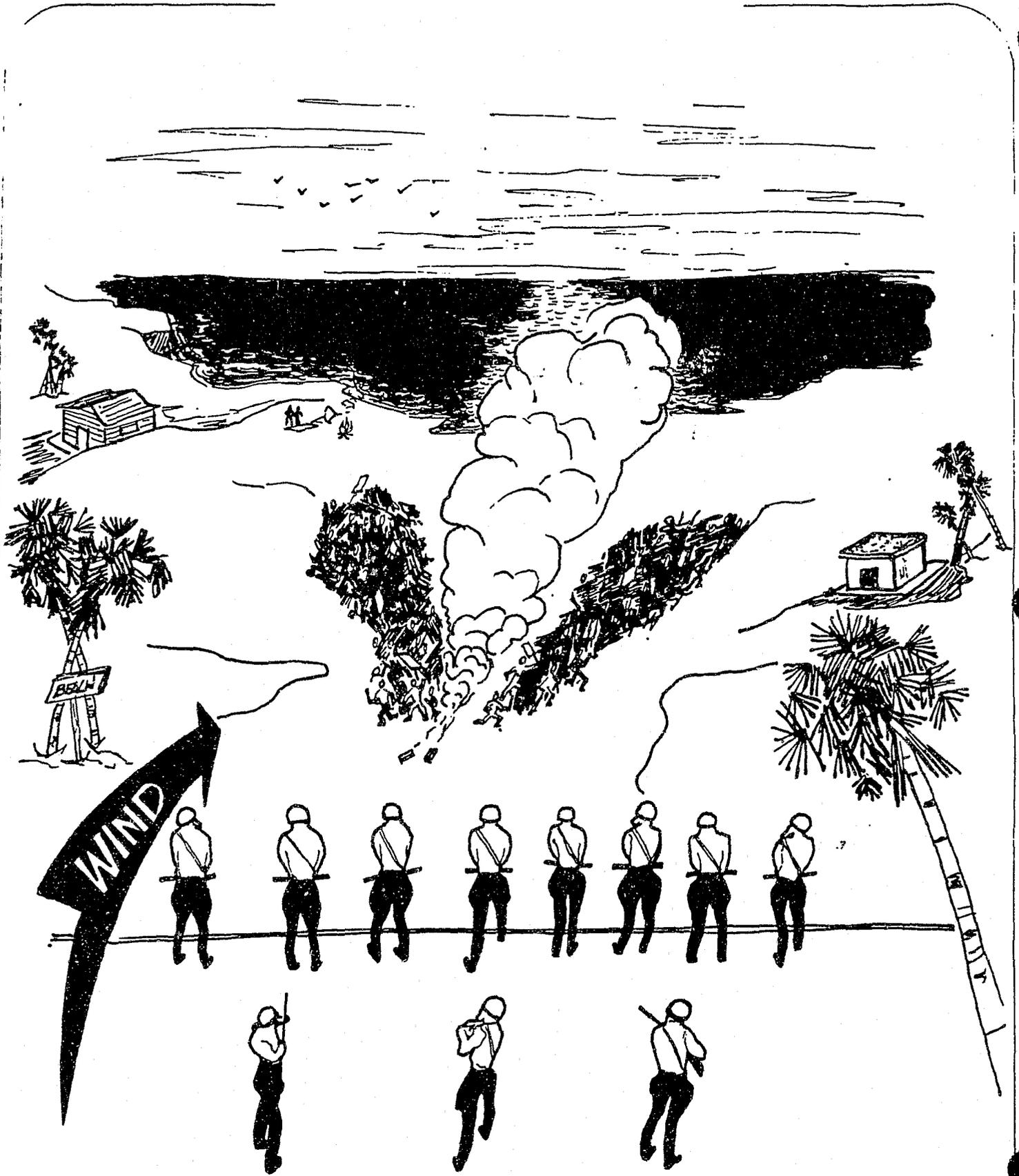
**-WIND SPEED EFFECT ON MUNITIONS PLACEMENT.  
INADEQUATE COVERAGE CAUSED BY INCREASED WIND SPEED.**



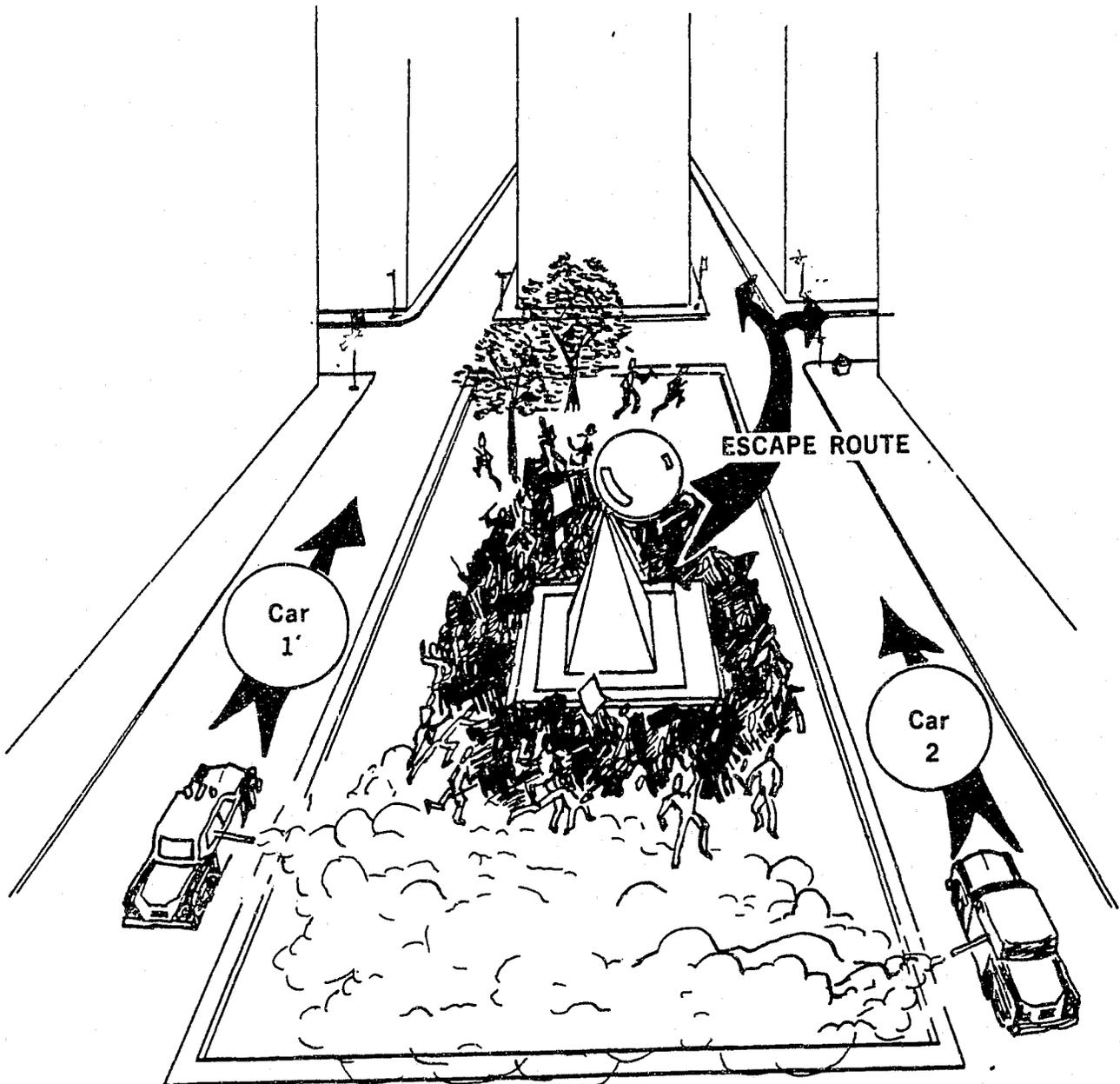
-WIND SPEED EFFECT ON MUNITIONS PLACEMENT  
INADEQUATE COVERAGE CORRECTED BY ADJUSTING RELEASE  
LINE LOCATION



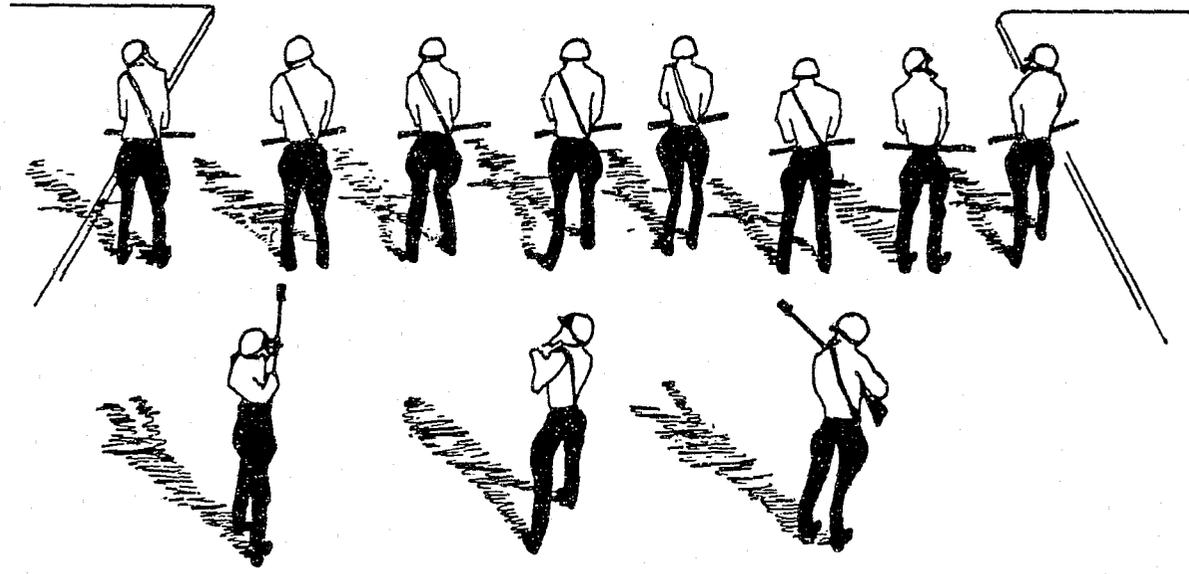
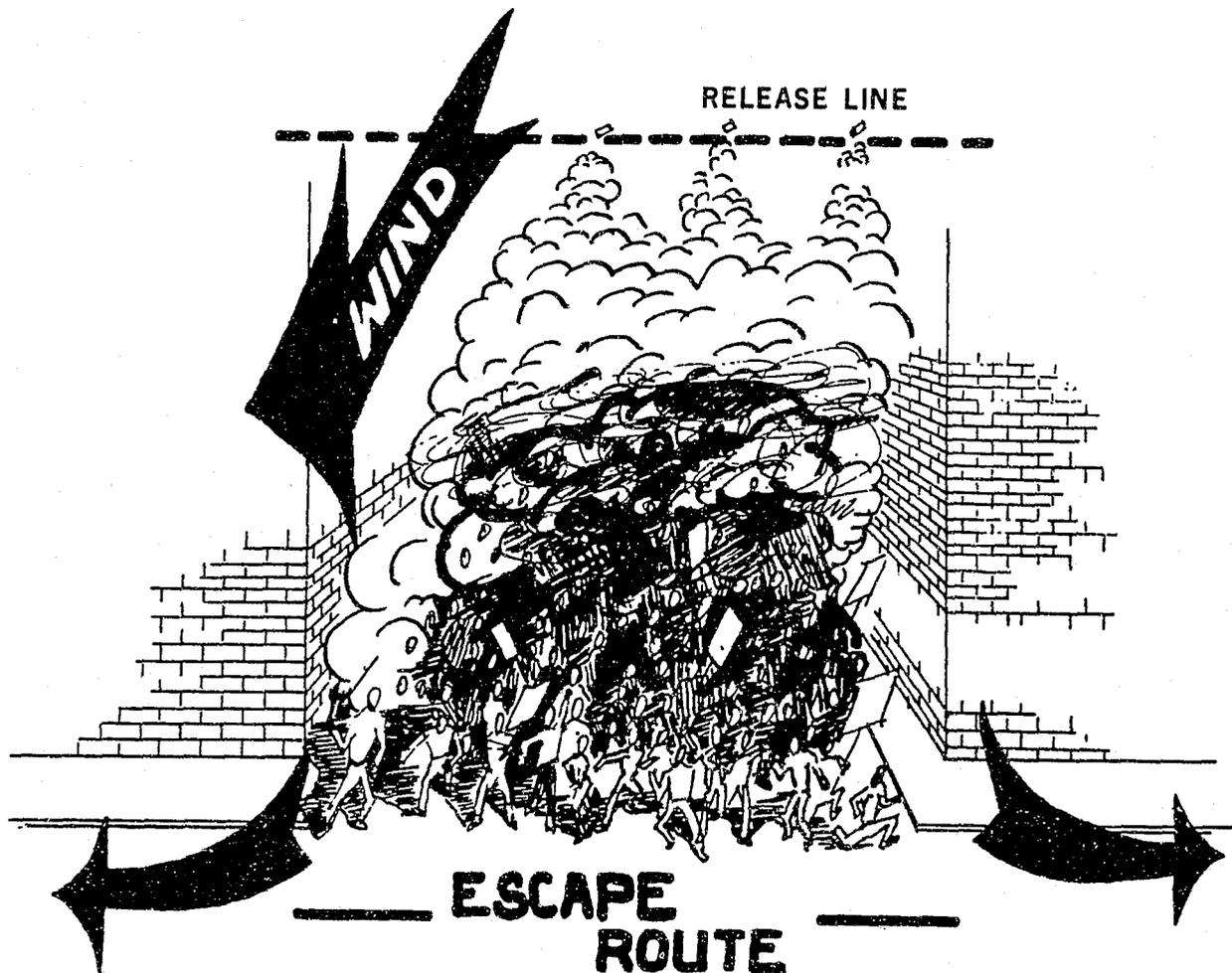
-WIND SPEED EFFECT ON MUNITIONS PLACEMENT  
INADEQUATE COVERAGE CORRECTED BY USING ADDITIONAL MUNITIONS



-USE OF AGENT TO SPLIT A CROWD UNDER FAVORABLE CONDITIONS



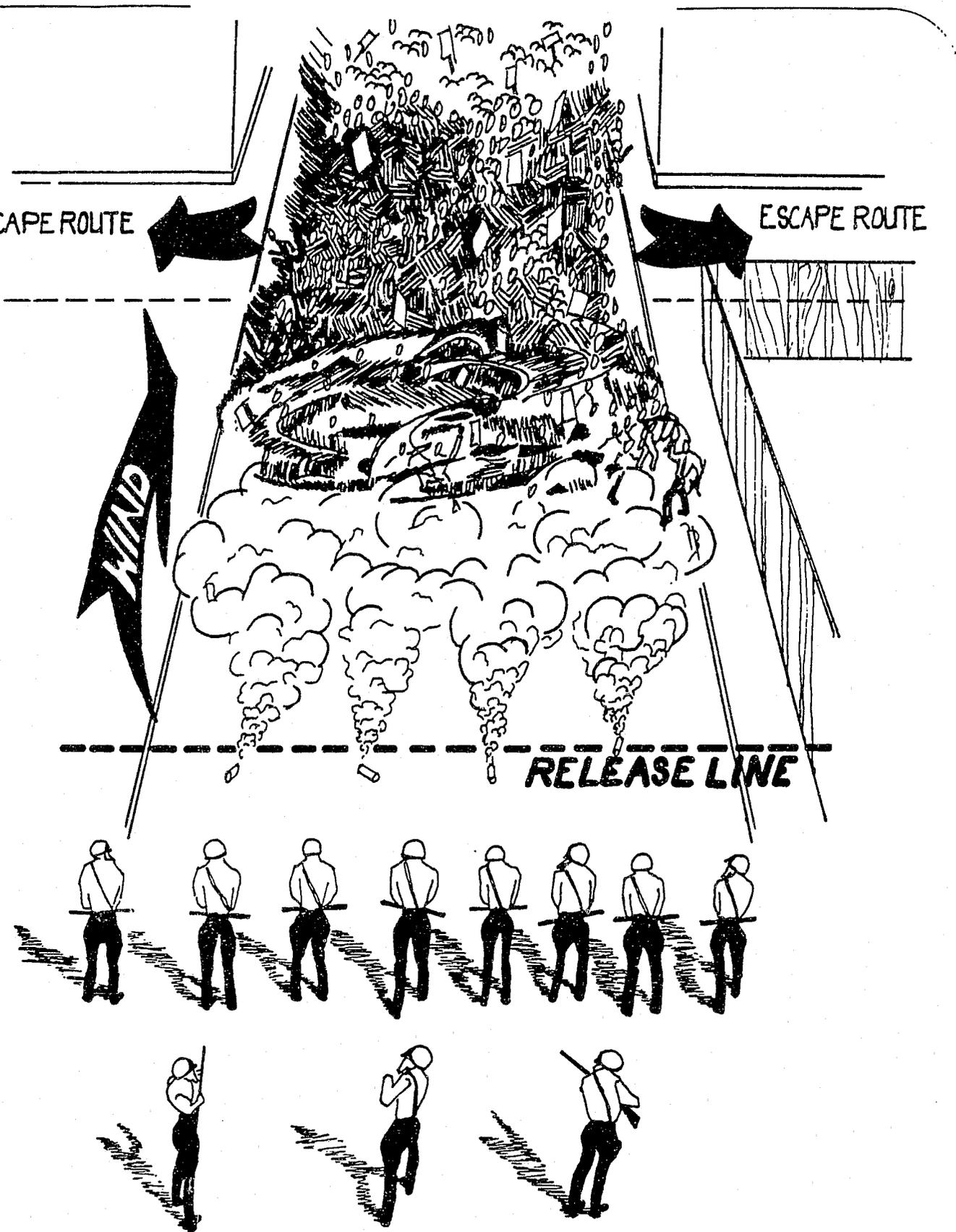
-RAPID AREA SATURATION WITH VEHICLE MOUNTED FOG DEVICES



IDEAL RELEASE PATTERN - HEADWIND (Launched Grenades or Unstabilized Projectiles)

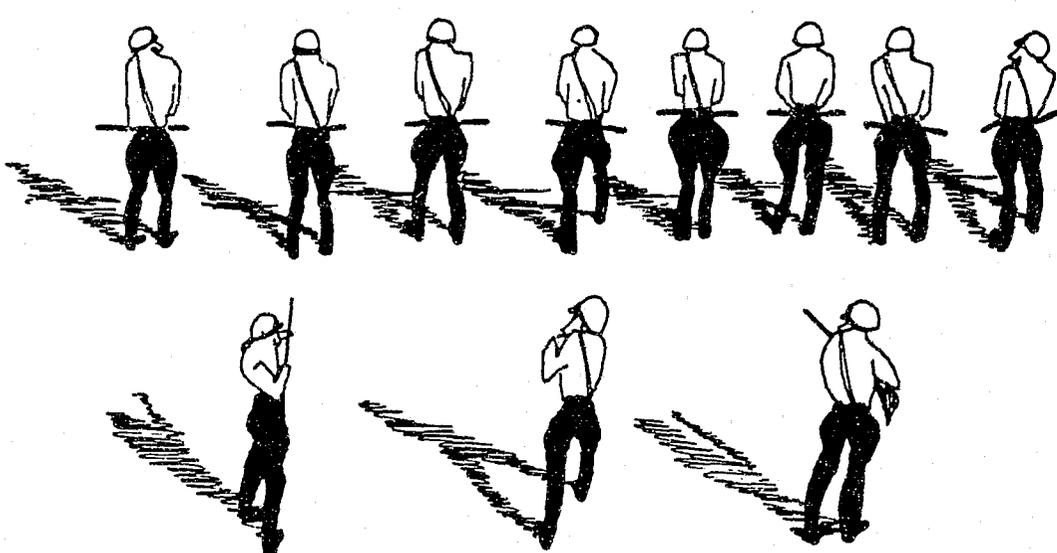
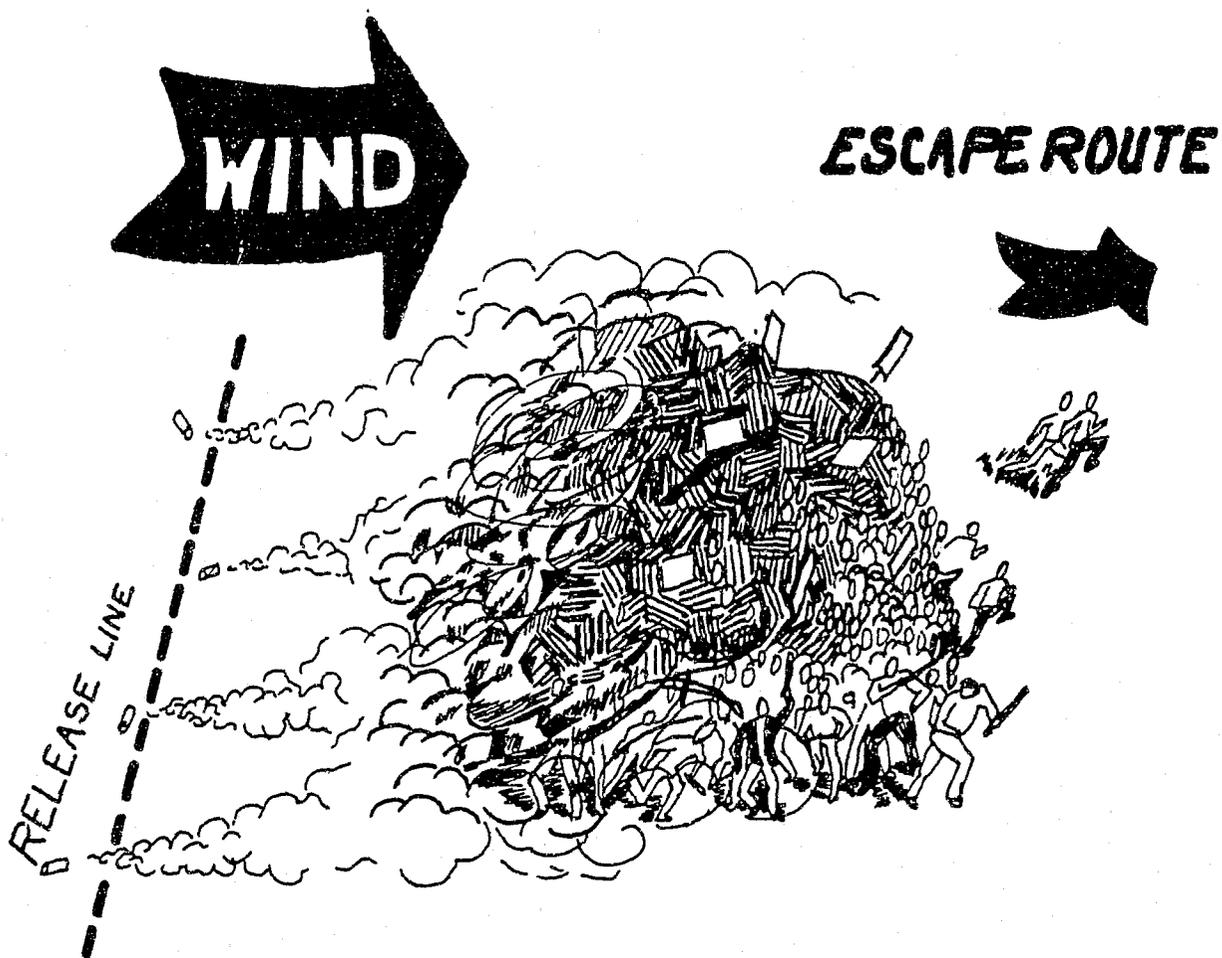
ESCAPE ROUTE

ESCAPE ROUTE

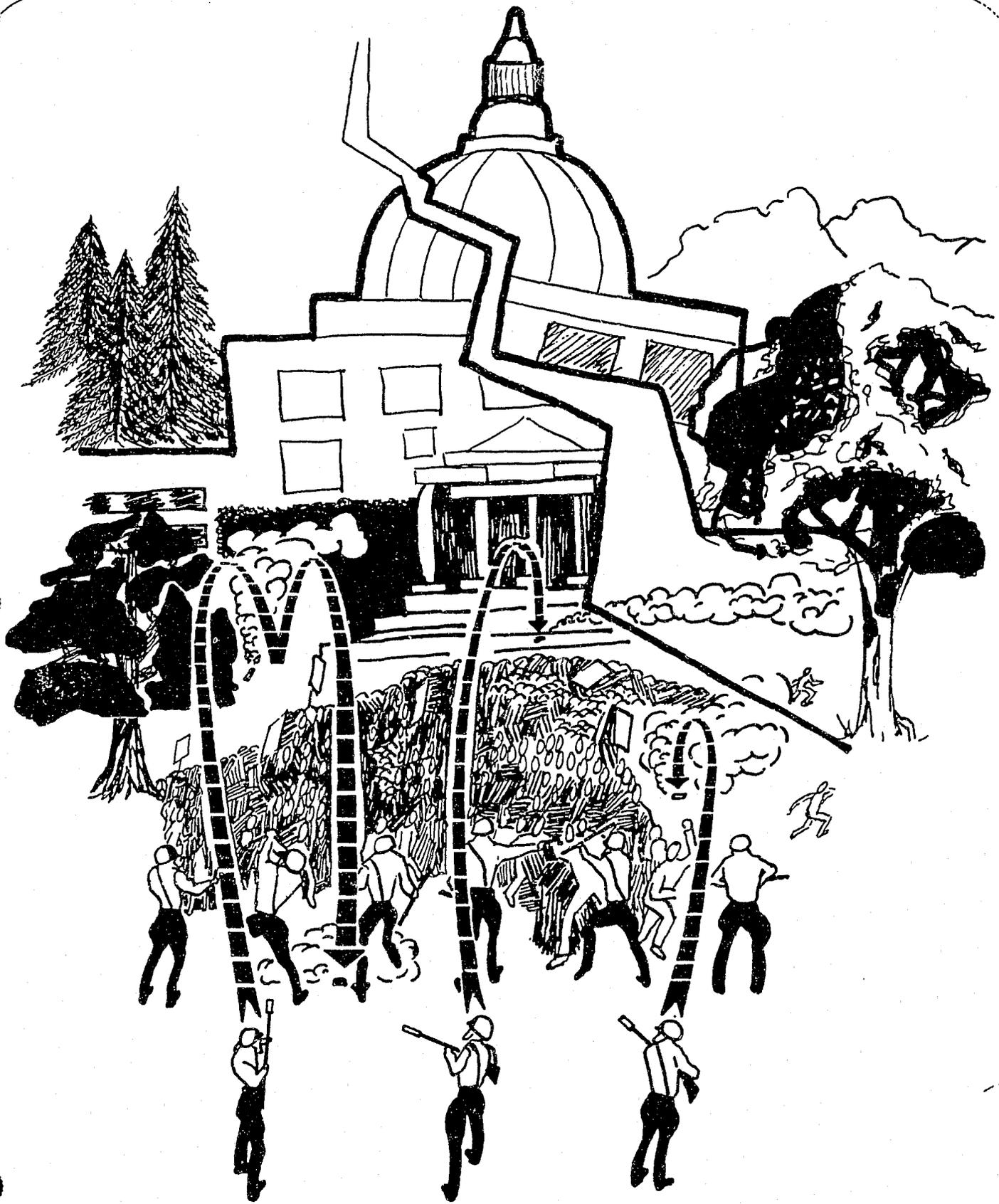


**RELEASE LINE**

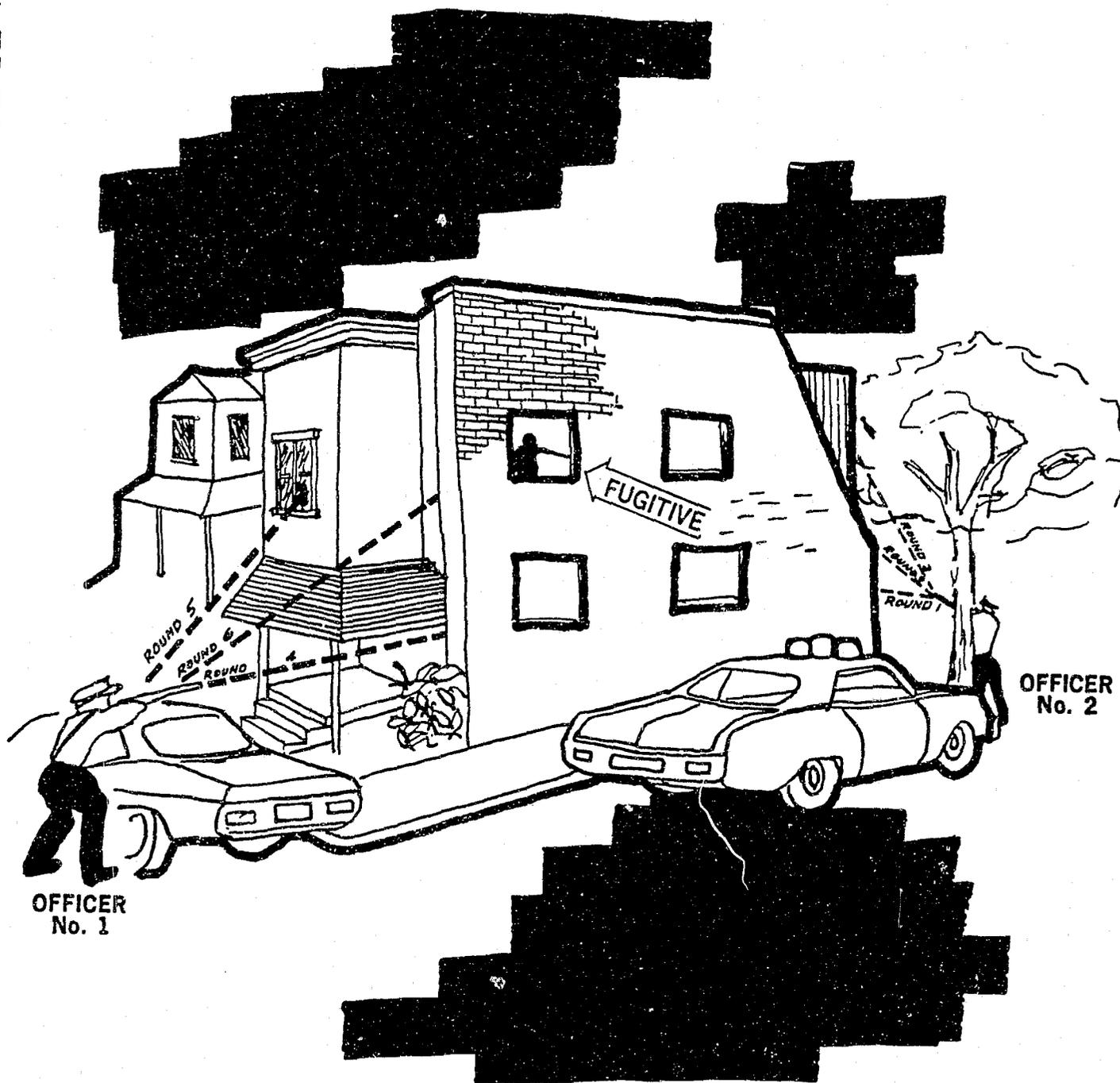
**IDEAL RELEASE PATTERN - FOLLOWING WIND  
(Grenades or Bulk Dispenser)**



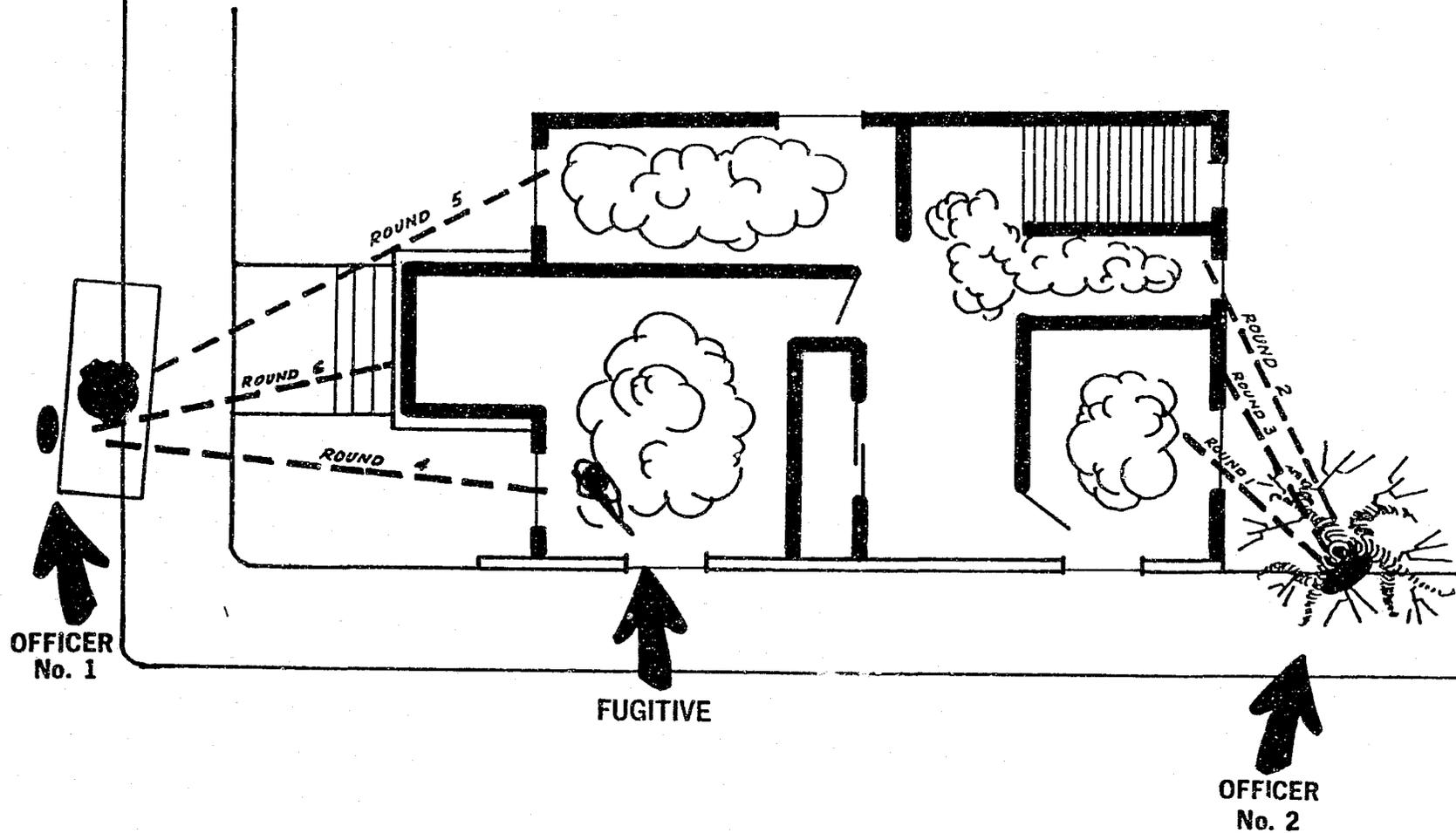
**IDEAL RELEASE PATTERN - FLANKING WIND**  
**(Launched Grenades or Unstabilized Projectiles)**



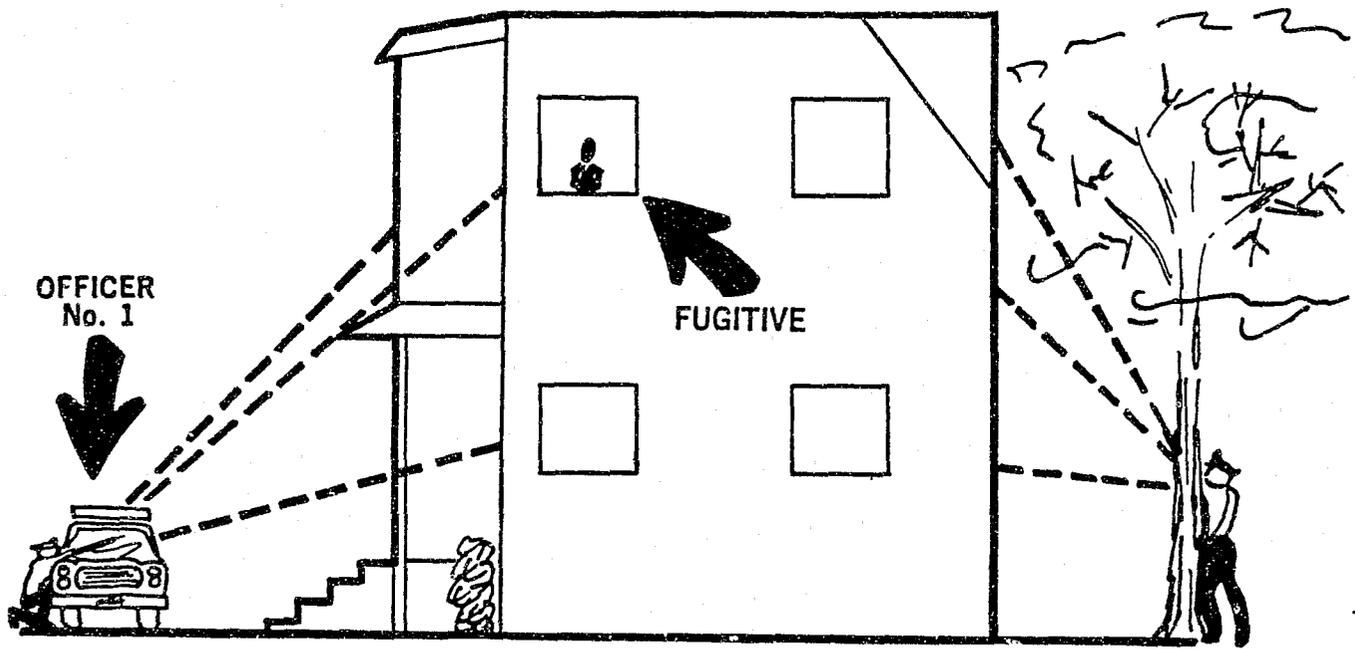
**-IMPROPER USE OF PYROTECHNIC GRENADES IN A CONTACT CONFRONTATION**



USE OF PROJECTILES OR GRENADES AGAINST BARRICADED CRIMINAL.  
(Adapted from Federal Laboratories. Tear Gas Blue Book)



USE OF PROJECTILES OR GRENADES AGAINST BARRICADED CRIMINAL  
(Adapted from Federal Laboratories. Tear Gas Blue Book)



OFFICER  
No. 1

FUGITIVE

OFFICER  
No. 2

**USE OF PROJECTILES OR GRENADES AGAINST BARRICADED CRIMINAL**  
(Adapted from Federal Laboratories. Tear Gas Blue Book)

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