California State University
NORTHRIDGE
Department of Public Safety
University Police Division

LESSON PLAN

SUBJECT: Introduction to the Remington 870 Shotgun

LENGTH: 4 hours

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DATE PREPARED: January 31, 2008

APPROVED BY: Irene P. Johnson, Chief

DATE APPROVED: 2/5/2008

Description: Officers will be instructed in the safe and proper use of the patrol shotgun and the less-lethal flexible baton shotgun. The course will be divided into three parts. Part one will be in a classroom setting and will consist of a general introduction to the shotgun. Part two will be an introduction and instruction on the flexible baton shotgun and ammunition. Part three will be a hands-on range exercise with both the patrol shotgun and the flexible baton shotgun.

Goals:

1. Each officer will demonstrate that they can operate a patrol shotgun safely and accurately showing loading and unloading, safety operation, function test.
2. Each officer will demonstrate basic marksmanship skill with a shotgun on a target.
3. Each officer will demonstrate an understanding of the basic capabilities and limitations of department authorized shotguns.

Procedures:

1. Officers will report to the range with required duty equipment

a. Sam Brown belt
b. Vest
c. Patrol equipment and firearm

2. The department armorer, if available, will inspect firearms used on the range prior to instruction.
3. Officers will receive instruction on range safety, the legal and moral aspects of the use of force, and departmental policy concerning the use of force.
   Training/demonstration: The shotgun as a patrol tool. Officers will receive instruction on:
   a. Shotgun safety
   b. Making the shotgun patrol ready
   c. Shotgun shooting positions (importance of firm grip, right/left shoulder, under arm, one handed)
   d. Administrative and combat loading the shotgun
   e. Moving targets
   f. "Skipping rounds
   g. Phone book test (shoot a phone book with bird shot from 10 yards then repeat at 3 yards) This shows the penetration of shotgun rounds at close distances and dissipation of power at further distances)
   h. Shotgun shot spread
   i. Flexible baton shotgun

Safety Discussion:
4 basic safety rules

a. Treat every firearm as if it is loaded; Never point a firearm at anything you are not willing to destroy.
b. Don't load the firearm until ready to shoot.
c. Do not touch the trigger until ready to fire.
d. Be sure of your target and what's behind it.

Needed equipment:

1 shotgun per student
3 dummy rounds of shotgun per student
10 rounds of 00 buck per student
2 rounds of Flexible Baton rounds per student
3 paper targets per student
Hand Wipes
Water

FIREARMS PROGRAM

Safety Guidelines

A. Application

The intent of these guidelines is to promote student and staff safety awareness in areas involving psychomotor skills training and to reduce the potential risk for injuries. Each training presenter will be furnished with a copy of these guidelines.

B. Safety Guidelines and Guidelines for Student-to-Instructor/Staff Ratio

There shall be at least one instructor for every six students during static line courses of fire, one instructor for each student during stress courses, and one instructor for five students during moving courses of fire.

General safety rules unique to each firearms training facility will be provided to trainees.

At each range facility, areas will be designated to accommodate persons who are not directly engaged in shooting.

Each firearms training session shall have a communications process capable of clearly transmitting instructions to all person on the range.

Range facilities and bullet impact areas shall be inspected for apparent hazards prior to live fire exercises.

Adequate emergency lighting shall be provided at the site of any night-time firearms training.

Weather conditions shall be considered with regard to the need to provide shaded areas, shelter or protective clothing.

Indoor ranges shall be adequately ventilated.

A first aid kit shall be readily accessible at each range site.

Ranges equipped with reactive targets shall be configured in such a manner as to minimize the danger of ricochets.

Every student shall be required to wear eye and ear protection while engaged in shooting or while in the immediate vicinity of the firing line.

The use of soft body armor shall be required while on the range.

All students shall use only Department-approved equipment while on the range.

Each weapon shall be subject to a basic safety inspection and approved for use by the instructional staff prior to use on the range.

Clothing and footwear appropriate to the course of fire and terrain of the range shall be required.

The instructional staff shall be easily identifiable and shall wear approved gray Firearms Instructor Staff polo shirt or other authorized uniforms.

All firearms instructors shall have successfully completed a POST-certified Firearms Instructor Course.

All firearms instructors shall participate in periodic Firearms Instructor Update Courses.

Instructors shall have received previous training in the particular weapon or weapons used in training.

General range safety rules shall be reemphasized to students prior to range training.

Students will be briefed on the rules of the range. This includes safety rules, specific prohibitions, and handling of unusual occurrences.

Procedures for handling weapons malfunctions, ammunition failure and other unusual occurrences shall be reviewed immediately before live fire training.

Students shall be instructed to keep their fingers outside the firearm's trigger guard until a target is available for shooting and they decide to fire.

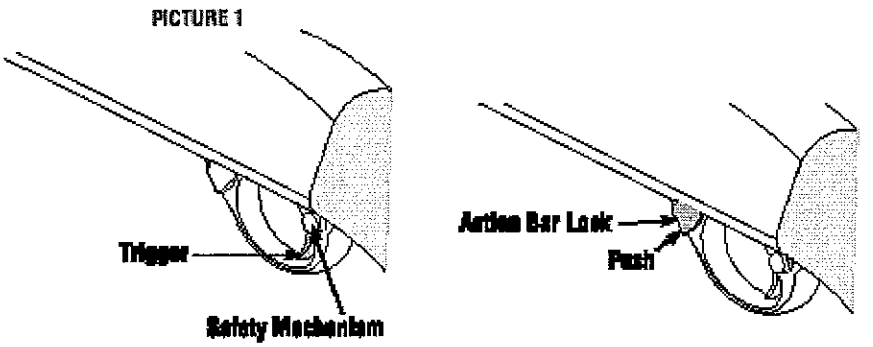
Students shall be given a general orientation to any tactical shooting course where live fire will be used prior to application phase of training.

Students shall be instructed to wash their hands and face thoroughly after shooting to remove any lead particles or other debris deposited as a result of the weapon's discharge.

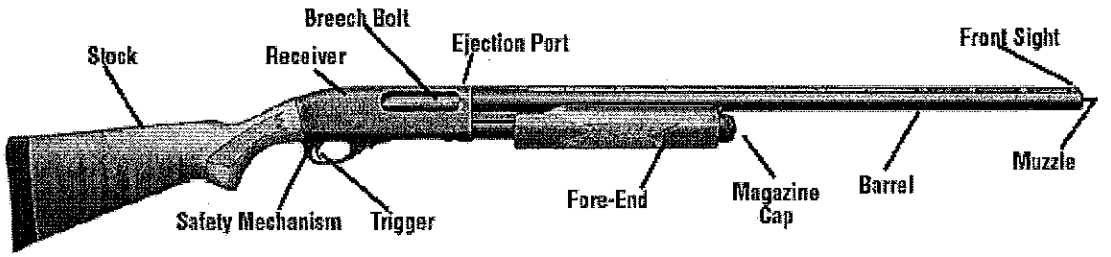
II. Type of Instruction:
Lecture format followed by a qualification and shotgun firing exercise.

III. Course Outline:

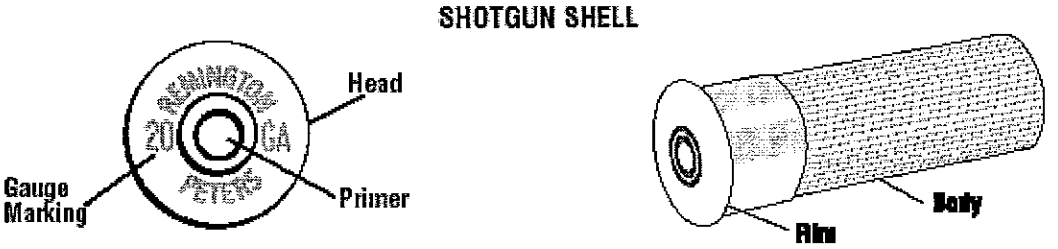
1. Why a shotgun
    a. Historical reasons: Our police roots derive from the English police system as opposed to the Roman police system. In our system the police are part of the civil population as opposed to the military population. Our tradition is to use civilian weapons. Note that the use of explosives and submachine guns is a relatively new development in our police system. Historically we have used revolvers, and shotguns rather than pistols and submachine guns.
    b. Unlike any other police firearms, shotguns are designed to fire at moving targets
    c. Massive firepower (nine 32 caliber pellets striking the target simultaneously)
    d. Versatility: the shotgun is the only weapon in the police arsenal that can fire bird shot, buck shot, slugs, flares, tear gas, bean bags, etc.
2. Drawbacks to the shotgun
    a. The shotgun is a short-range weapon. The pellets are not aerodynamic and do not retain their effectiveness over long distances. Additionally the spread of the shot after it leaves the barrel reduces the number of hits on the target and thus their effectiveness. Furthermore, the pellets that miss the intended target may be a hazard down range to non-participants.
    b. The shotgun has a limited number of rounds of ammunition. Our handguns carry 15+1 while our shotguns only carry 4. Even if we carry additional rounds we will likely only have 10 at the most.
    c. The shotgun can be awkward if the operator ends up in a foot pursuit or arrest situation. Remember, you can't just set the shotgun down because it's inconvenient to carry it further.



PICTURE A *This picture shows the main parts of a REMINGTON MODEL 870™ PUMP ACTION SHOTGUN. The picture will aid in understanding the instructions in this book.*



PICTURE B *This picture shows the parts of the ammunition.*



Nomenclature of the Remington 870 Shotgun (Remington 870 owners manual form RD 7058)

The Vang Comp System

The Vang Comp System (VCS), designed by gunsmith Hans J. Vang, is a set of modifications to shotgun barrels. The alterations to the barrel consist of lengthening the forcing cone, back-boring the barrel, and adding compensating ports. With the VCS, accuracy significantly improves, felt recoil is dramatically reduced, and muzzle rise diminishes. By lengthening the forcing cone, the pellets have a smooth flow from the chamber to the bore. This prevents the pellets from bunching up in the barrel and reduces the felt recoil. In addition, the pellets do not become as deformed and keep a more consistent shape.

With less deformation and a less turbulent flow, the pellets achieve a higher rate of accuracy. Back-boring the barrel is accomplished by boring the barrel from the chamber towards the muzzle creating a choke where there was none. Back-boring is a key portion of the VCS modification and aids in both increasing accuracy and reducing felt recoil.

Probably one of the most important and most obvious parts of the VCS are the compensating ports. Some of the gases, created by the burnt powder exiting the muzzle, vent upward through the ports. This redirected gas flow helps prevent the muzzle from rising and allows for both increased accuracy and a more rapid recovery time between shots. Also, the ports reduce muzzle flash, which in turn helps to retain night vision and keep the shooters location less conspicuous in low light conditions.

In combination, the lengthened forcing cone, the back-boring, and the compensating ports make up the Vang Comp System. The VCS has been estimated to reduce felt recoil by about 15%. The increase in accuracy is dramatic. For example, patterns using 9 pellet 00 buck are as tight as 2 3/4" at 15 yards and 10 to 12" at 25 yards. Also of note, all modifications, except the compensating ports, are internal.

No extra parts are added to the barrel. Thus, the VCS barrel requires no maintenance other than normal cleaning. Also, other types of specialty ammunition, such as slugs, can be used in the Vang Comp System. The VCS, developed to maximize performance of the tactical shotgun for Law Enforcement and Military applications, is covered by three U.S. Patents. Currently only Mr. Vang's Arizona facility produces the VCS.

Cardinal Rules of Firearms Safety

Firearms are mechanical devices, and will not fire by themselves. People make firearms dangerous. Human intervention adds in the factors of common sense, reason, judgment, restraint, and good safety habits. If you do not follow the four cardinal rules of firearms safety, you are a tragedy waiting to happen.

1. **TREAT ALL FIREARMS AS IF THEY ARE LOADED AT ALL TIMES.**
   There are no exceptions to this rule. Be extremely serious about it. You must always believe that a firearm is loaded when handling it. **Check it twice!**

2. **KEEP THE MUZZLE POINTED IN THE SAFEST POSSIBLE DIRECTION.**
   Keep the muzzle pointed in the safest direction and never intentionally cross anything you are not prepared to shoot.
   A safe direction is one where NO injury and only minor property damage could occur if an unintentional round is fired. Any time you are holding a firearm in your hand, you are responsible for determining the safest possible direction. Think of the firearm as having a laser beam extending from the muzzle and whatever it touches could be shot. Wherever you point the muzzle is where the laser beam goes.[1]

3. **NEVER PLACE YOU FINGER INSIDE THE TRIGGER GUARD UNTIL YOU ARE ON TARGET, AND HAVE MADE THE DECISION TO FIRE.**
   Keep your trigger finger straight on the frame of the firearm unless the muzzle is pointed at something you are prepared to shoot.
   The trigger finger is only placed into the trigger guard and on the trigger when coming on target just before firing. When you stop firing, take the trigger finger out of the trigger guard and lay it straight on the frame, as a convulsive hand grip could cause a trigger finger held just outside the trigger guard, to enter and possible fire the gun.[2]
   It is normal for the human animal to make a fist when frightened or to grab when he/she stumbles. If you grab with one hand (as if grabbing for a stairway rail etc.) you will likely grab (sympathetically) with the other hand. If your finger is on the trigger you will likely pull the trigger if you are startled or stumble. When you consider that many times the firearm is in your hand when you are in potentially life threatening situations and often in the dark, it is especially important to keep your finger off the trigger until you are ready to fire.

4. **BE SURE OF YOUR TARGET AND BACKGROUND**
   You must identify the target first, and then you must be cognizant of the area around and behind the intended target.

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[1] NRA Law Enforcement Rifle Instructor Manual (edition 2.1, F-4)
[2] NRA Law Enforcement Rifle Instructor Manual (edition 2.1, F-5)

These four safety rules must form a "Safety Reflex" that is in place and working all the time. Follow all these rules always and the unintentional discharge of a firearm under your control won't happen or at least (if an unintentional discharge occurs) won't injure anyone.

Safety specific to the Remington 870 shotgun:
The Remington 870 shotgun is cocked and ready to fire whenever a round is placed in the chamber. The safety only stops the trigger movement. If the shotgun is sufficiently jarred, the hammer might fall off of the sear and the shotgun could then discharge. Care must be taken when setting the shotgun down or leaning it against something that it does not fall.

Shotgun handling skills:

1. Basic safety check (used when checking out the shotgun for duty). The acronym for the basic safety check is BEEFS or Barrel, Extractor, Ejector, Firing pin, and Safety.
    a. Open the action and make sure the shotgun is empty (visually and by feel)
    b. Remove barrel and look for obstructions and damage to the barrel and sights.
    c. Check the extractor. Make sure it is under spring tension and not broken.
    d. Check the ejector. Make sure it is in place and not damaged
    e. Check the firing pin. Place a penny on the bolt face and while holding the penny down with your finger, pull the trigger. The firing pin should make a visible dent on the penny.
    f. Safety. Put the barrel back on the shotgun and work the action. Make sure the shotgun is empty (visually and by feel). Work the action and then with the safety on, pull the trigger. The firing pin should not move and no click should be heard. Take the safety off (you may check to make sure it is not loaded again) and again pull the trigger. This time the trigger should release the firing pin. (If you think ahead, you can check the safety at the same time as you check the firing pin. Just remember to put the safety on while the barrel is off and you are checking the firing pin with the penny test).
2. Loading and Unloading
    a. Loading the magazine. With your thumb, push a shotgun round with the rim toward the rear into the magazine until you hear a click and the round remains in the magazine.
    b. Combat loading. Hold the shotgun, pointed down range, in your strong hand. Open the action. With your weak hand drop a round into the ejection port with the rim of the round to the rear.
    c. Special round substitution. With a loaded shotgun, rack a round into the chamber. Place the substation round in the magazine. Rack the shotgun again. Top off the magazine.
    d. Unloading. If a round is in the chamber, make sure the safety is on. Then depress the slide release lever and slowly move the slide to the rear. You can place your hand near the ejection port to catch the round as it is ejected or if done slowly enough you can just pluck the round from the ejector. Reach under the shotgun and push the loading ramp upward. As you move the slide further to the rear, the next round will be released from the magazine. Place your hand near the loading port and catch the round as it is released from the magazine. Next reach into the loading port and press the shell latch on the inside (left side) of the ejection port and release the next round. Repeat until all rounds are removed from the shotgun.
    e. Do not rack the rounds out of the shotgun as this increased the chances of an accidental discharge and the rounds may become damaged if they are ejected onto the ground or other hard objects.
3. Cleaning the Shotgun

a. First, open the action and make sure the shotgun is unloaded
b. Remove the barrel from the shotgun
c. Depress the shell stops and remove the slide and bolt from the shotgun. Use care as the bolt comes out in two parts and is not attached to the shotgun; it simply rides on the action bars.
d. It is not recommended or advised to take the shotgun apart further than this point. Further disassembly is only authorized by the department armorer.
e. Use a shotgun brush attached to the shotgun cleaning rod to brush the inside of the shotgun barrel. It is recommended that the brush be used dry and not be dipped in cleaning solution.
f. Next attach a cleaning tip to the cleaning rod and use a cleaning patch dipped in cleaning solvent to clean the inside of the barrel. This same cleaning patch can then be used to wipe the bolt parts and action bars.
g. Wipe the entire shotgun dry of solvents and then wipe the shotgun with a lubricant.
h. Wipe the shotgun of all excess lubricant.
i. Inspect the firing pin for damage before reassembling the shotgun.
j. Reassemble the shotgun.
k. Complete a BEEFS safety and function check prior to putting the shotgun in storage or use.