

Basic Firearms Instructor Course

SHOTGUN INSTRUCTOR

(Instructor's Manual)

2012 Edition

MPTC Firearms Training Committee

Course: Basic Firearms Instructor Lesson: Shotgun Instructor

Authors: Bert DuVernay, Joseph Picariello & Todd Bailey

Date Written: January 2009 Date Revised: April 13, 2012

Time Allocation: 8 hours

Target Population: Law Enforcement Officers

Recommended Class Size: Up to 20 students

Course Goal

To teach shotgun instructional skills, nomenclature and operation to prospective police firearms instructors.

<u>Instructor Provided Training Aids & Supplies</u>

Classroom & Range with adequate backstop and room to conduct planned activities

Q targets with optional Good/Bad Guy targets

First Aid Kit

Water

Sanitary Facilities

Communications (radio or cell phone)

Student Equipment Requirements

Operable shotgun with a sling (pump or semi automatic)

250 rounds shotgun ammo (50 slugs, 50 buck shot, 150 birdshot (#8 or #9)

50 rounds pistol ammunition (FMJ OK)

Service Pistol w/minimum of two (2) pistol magazines

Complete Duty Belt

Body Armor

Personal Protective Equipment (eye & hearing)

Student Performance Objectives

- Demonstrate the safe and proper operation of the shotgun
- Identify the basic components of the shotgun and their function
- Demonstrate the basic shooting positions used with the shotgun
- Demonstrate the procedure for administratively down loading the shotgun
- Demonstrate immediate action clearance procedures
- Demonstrate a basic proficiency to qualify to MPTC instructor minimum standards

Testing Procedures

- Minimum score of 90% for all live fire scored drills & qualification
- Minimum score of 80% on all written exams and guizzes
- Demonstrate the ability to teach in front of a class

References

MLEFIAA Firearms Instructor Development Program – Shotgun Instructor. 2007.

MPTC 8 Day Firearms Instructor Program, 2008

MCJTC Firearms Instructor Manual, 2005

 $Mass.\ Sheriff's\ Assn.\ Education\ \&\ Training\ Committee-Firearms\ Instructor\ Course$

MLEFIAA Specialty Impact Weapon & Munition System Instructor Manual, 2008.

Def-Tec Specialty Impact Munition Instructor Manual, 2004.

CTS Less Lethal Instructor Handbook, 2008.

PoliceOne.com

Force Science Research Center

NRA Tactical Shotgun Course

Action Target 3 Gun Course (Shotgun Section)

Manual Text w/Highlighted Teaching Points

Instructor Notes

INTRODUCTION

The shotgun in the hands of the law enforcement officer is not a new tool however it has been eclipsed by the patrol rifle in recent years. As the police officer recruit demographics has changed from rural applicants with hunting experience to a more urban officer, trainers have seen a decline in the familiarity with this tool. This has led to complaints about the recoil, accuracy and ease of operation. Some critics have called for its retirement stating it has become obsolete.

In fact, the shotgun is the most versatile weapon in our inventory. No other weapon is capable of delivering such a wide variety of munitions in so many different situations. The shotgun can be employed to deal with unruly crowds, prison riots and deadly force situations just to name a few. What other weapon is able to deliver distraction devices, OC, tear gas, impact munitions (both single and multiple projectiles), bird shot, buck shot and slug rounds?

Problems associated with the shotgun can be traced back to poor or no training. This is where your abilities as a firearms instructor will help your officers make the best use of this tool. Whether you choose to retain the shotgun with its full capabilities or just limit it to a less than lethal capacity, it belongs in your armory and deserves its fair share of training time.

SAFETY CONSIDERATIONS The instructor will read aloud and review this material. Emphasis on compliance by everyone.

Firearms safety is the responsibility of everyone on the range – not just the instructor. Not only is it permissible for anyone to call a "Cease Fire" if they see a safety hazard or issue developing, it is their responsibility to do so.

All safety rules and subject matter are testable material.

Emphasize anyone can call a "cease fire"

Cardinal Rules of Firearms Safety

- 1. All firearms are ALWAYS considered loaded until they have been physically and visually checked. Even then, they will ALWAYS be treated as if they were loaded.
- 2. Your finger will ALWAYS stay off the trigger until the weapon is on target and the decision to fire has been made. Off target Off trigger.
- 3. ALWAYS be sure of your target AND what is beyond it.
- 4. ALWAYS keep the muzzle of your weapon pointed in a "safe direction". The muzzle of your weapon NEVER points at anything you are not willing to destroy. A "safe direction" is defined as a direction in which should an unintentional discharge occur, the result would NOT be death or personal injury. The Laser Rule treat your firearm as if it was a laser and it could destroy everything it points at.

All personnel on a MPTC range or participating in MPTC training are required to have eye and hearing protection.

It is strongly recommended that when shooting patrol rifles, shooters use foam ear plugs PLUS over the ear hearing protection.

This is a good time to insure all students have the proper safety equipment.

Eye protection shall have side shields.

Purpose

The purpose of the police shotgun is to provide the officer with a versatile, multi-purpose, large bore weapon capable of safely engaging targets beyond the typical range of the police service pistol. Up to the reintroduction of the patrol rifle as a common tool with patrol officers, the 12 gauge shotgun was the primary long gun for American law enforcement. While viewed by some as archaic, the shotgun was capable of delivering devastating damage during close in encounters. In recent years, the shotgun has been eclipsed by the patrol rifle mainly due to the rifle being perceived as less punishing (with recoil) by the average officer.

Many have called for the retirement of the police shotgun. Claims that it is obsolete and unnecessary are incorrect and misleading. Even with departments who have issued patrol rifles to all their officers, the shotgun still has a place on the front lines. The police shotgun is arguably the most versatile weapon in our inventory.

Capable of handling:

- Single projectiles (slugs),
- Multiple projectiles (buckshot),
- Specialty impact munitions (bean bag rounds),
- Distraction devices and
- OC/chemical rounds.

We do not have another weapon which can be used in so many different situations.

When equipped with rifle or ghost ring sights, the shotgun in the hands of an experienced marksman is capable of delivering accurate fire with slugs out to 80 yards. The large diameter projectile hits with authority and buck shot can deliver multiple hits with one press of the trigger. In communities where the military look of most Test material

Emphasize the relevance of the shotgun even if the agency has patrol rifles

Ask students how many other weapons are this versatile?

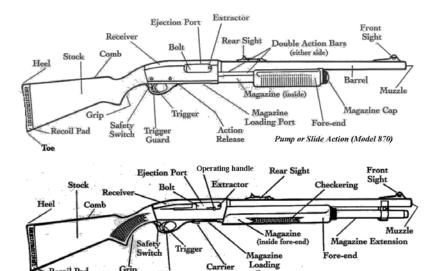
Test material

Many experienced shooters are capable of reaching 100 yards

patrol rifles is viewed as a negative trait, the shotgun portrays a more conventional and socially acceptable image.

The police shotgun is commonly found in semi automatic and pump action versions. There is a great deal of training commonality with the semi auto models and the pump action is virtually indestructible. It is not unusual to find Remington 870 shotguns in service which are older than the officer holding them.

Nomenclature



Students are responsible for all material in the Nomenclature graphic

Test material

Police officers should be familiar with the basic operating components of the police shotgun.

Instructors should know all the parts

The pump shotgun requires the operator to manually cycle the action which makes it very different from the semiautomatic pistols and rifles we are accustomed to using. The majority of problems the shooter will encounter on the range will be the result of the shooter failing to properly cycle the action.

Stress this as they will see this as instructors

Student Manual contains graphic of Mossberg and Benelli models

Primary differences between the Remington and Mossberg are the

Semi Auto (Model 11/87)

location of the safety and action release. Mossberg's placement of the safety on the upper receiver area makes their shotgun more user friendly for left hand shooters and locating the action release behind the trigger guard means you do not have to shift your grip to operate it. Mossberg's carrier (shell lifter) design makes a double feed less likely. Despite this, the Remington remains the most popular police pump shotgun.

Operation

As with all other firearms, the operation of the shotgun can be generally categorized as:

Feed - Fire - Extract - Eject

Operation – Pump Action

The operation of the pump shotgun can be broken down to four steps: **PRESS** – press the trigger which fires the weapon and unlocks the action.

If not firing, PRESS the action release to unlock the action without firing.

BACK – Pull the fore end all the way to the rear. You want to hear metal on metal.

RELEASE – Release the trigger

FORWARD – Push the fore end all the way forward to close the action

Operation – Semi Auto

The operation of the semi auto shotgun is similar to other semi auto weapons and can be generally categorized as –

- The firing cycle begins with the shooter removing the safety and placing their finger on the trigger.
- Press the trigger;

Test material

Test material Instructor will demonstrate operation of with EMPTY weapon in class.

- The round will fire and the action will open, extracting and ejecting the spent round;
- A fresh round is released from the magazine to rest on the shell lifter (carrier);
- As the action closes under the compressed tension of the recoil spring, the shell lifter raises the new round in line with the chamber and the bolt moves forward pushing the round ahead of it into the chamber.
- The locking lug(s) engage as the bolt moves completely into battery;
- Releasing the trigger will prepare the weapon for a follow on shot.

There are some differences between the various manufacturers of semi-auto shotguns with respect to operation, terminology, loading and unloading. Semi-auto shotguns have one thing in common – it is possible to "limp wrist" the shotgun causing it to malfunction similar to a semi-auto pistol. Semi-auto shotguns must be held firmly to the shoulder to prevent malfunctions.

Test material

The operation of the semi auto shotgun is similar to other semi auto weapons. With the safety OFF and a round in the chamber - Press the trigger to begin the firing cycle;

The round will fire and the action will open, extracting and ejecting the spent round followed by reloading a fresh round.

Releasing the trigger will prepare the weapon for a follow on shot.

Remington 1100 & 11-87

The Remington 1100 and 11-87 are gas operated semi automatic shotguns which have been in production since the early 1960's. These operate similar to other gas operated weapons in that the gas pressure resulting from the burning propellant is scavenged off near

the muzzle during the firing cycle. The high pressure gas is directed back via the gas cylinder and piston to the bolt assembly causing it to unlock and move to the rear. This initiates the extraction and ejection of the empty cartridge case. As the bolt returns forward under the compression tension of the action spring, a new round is fed from the magazine into the chamber. The action closes and the lug on the locking block assembly engages the corresponding notch in the receiver.

Benelli M1 (Super 90)

The Benelli is a recoil operated shotgun. When the weapon is fired, the force of the projectile(s) being propelled down the barrel causes an equal and opposite reaction against the bolt face. This causes the bolt to unlock and move to the rear extracting and ejecting the spent cartridge case. The recoil spring tension then causes the bolt to return forward which chambers a fresh round. The advantage of a recoil operated weapon over a gas operated one is they stay cleaner and there is no gas system to adjust.

Loading (Each student to have 5 dummy rounds & shotgun)

Almost all police shotguns have a tubular magazine located below the barrel. To load the shotgun, the shooter will insert rounds through the magazine loading port located in the bottom of the receiver.

It is very important to push the round completely into the magazine tube so that the rim goes past the shell latch. The shell latch is the device which holds the ammunition in position and allows it to feed properly on to the carrier. If you fail to push the round past the shell latch, it may result in a double feed. This is a condition where a round is trapped between the carrier (shell lifter) and the closed bolt.

Have empty shotgun and dummy ammo available for demonstration

Demo with dummy ammo

If a double feed occurs, it is easily cleared by depressing the action release while forcibly opening the action. This is usually best accomplished by slamming the butt on the ground. The instructor will demonstrate this procedure.

Certain manufacturers have slight differences. H&K and Benelli are the most commonly found shotguns with a different operating method. Loading the Benelli is simple, but it can only be loaded if the hammer is cocked so that the carrier latch can retain the shells as they're loaded into the magazine. The Benelli has a device identified as the "cartridge drop lever" that protrudes from the lower right side of the receiver just above the trigger guard - see photo in Student Manual. When the lever and its red dot are exposed, the hammer is cocked. (NOTE: The lever doesn't tell you that there's a shell in the chamber, only that the hammer is cocked.)

After the magazine tube is topped off, to get a round into the chamber, you have two choices. You can (1) manually load a round into the chamber or (2) Press up on the Cartridge Drop Lever to release a round from the magazine on to the carrier. Pull the bolt to the rear and release to chamber the round. Top off the magazine.

Tactical Reload

In past years the shotgun course has stressed shooting until the weapon is dry then "combat loading" individual rounds. This has now been replaced with the more practical protocol of the 'tactical reload". You will replenish the rounds that you shoot as the tactical situation permits. Think of this as "shoot 2, reload 2" or "put back what you shoot". This all begins when we remove the shotgun from the storage mount and rack a round into the chamber. There is now room for one round in the magazine so it should be stressed to top off.

Whenever possible, you should reload behind good cover. If

Instructors should be familiar with weapons other than what their agency issues.

Cartridge Drop Lever graphic in Student Manual and on Slide Show

Students to demonstrate loading skills.

The old program stressed Combat Loading with no Tactical Reloading. This created a training scar which must be corrected.

Replace what you shoot.

Mention replacing the round that is initially chambered.

Stress "top off" "put back what you shoot"

no cover is available, drop to a knee to make yourself a smaller target or continue to move making yourself a more difficult target to hit. Concealment and making yourself a small target is never an acceptable alternative to cover.

With DUMMY ROUNDS - have students practice topping off

Combat Load / Reload

Combat loading refers to the process of loading single rounds in through the ejection port into an empty weapon to bring it back into service in a hurry. You can load across the top or from underneath the bottom of the receiver.

Remember - Combat loading is a technique that should only be used when the shotgun has run dry. In past years, the combat load technique was over used. It created a training scar by developing the habit of shooting the shotgun until it was empty then reloading only one round at a time to deal with an eminent theat. This set the operator up for failure since it essentially turned a repeating shotgun into a single shot weapon. The combat load technique is perfectly acceptable IF your weapon is empty and you need to get it running immediately. The preferable method is not to let the weapon run dry in the first place which is why we stress tactical reloading.

NOTE: For semi automatic shotguns (Benelli & Remington 1187) – The bolt will lock open on the last shot. Drop the round into the ejection port and release the bolt as indicated by the manufacturer's instructions. Top off magazine or fire as required.

With DUMMY ROUNDS – have students practice combat loading

Spare Ammunition

Reloading brings up the topic of extra ammunition. It is safe to presume that your agency issues or stipulates wearing a magazine pouch on your duty belt to hold extra service pistol magazines. This Emphasize -

- Don't take your eyes off the threat
- Keep the muzzle pointed towards the threat axis in case you need to engage suddenly

Combat Loading is NOT obsolete – we just need to understand the limitations of this technique.

You can load from above or below – either is correct as long as it works for you.

Emphasize the importance of spare ammo on the weapon.

is because it is understood that police officers may encounter deadly force situations which do not end after the capacity of your magazine. With this theory in mind, we have to ask, "Why would any agency arm an officer with a long gun and not provide the means to carry extra ammunition?"

Shotguns have a limited ammunition capacity compared to the patrol rifle. Even with an extended magazine, the capacity will rarely exceed 9 rounds. The photos included here depict several solutions to keeping spare rounds with the shotgun. These rounds can be located on the receiver, butt stock or the sling.

Transport Mode (a.k.a. Cruiser Ready, Cruiser Carry Condition or Administrative Load)

Most agencies which carry the shotgun in a vehicle store it in a condition where it can be readily put into action. This is normally with a loaded magazine, action closed on an empty chamber and the safety on. Once accessed from the storage location in a tactical situation, the action is cycled to load a round into the chamber. This is called **Tactical Mode** (i.e. the shotgun is ready to be used in a tactical situation. This differs from when the shotgun is removed for an administrative purpose such as shift change or inspection. It is suggested your department policy differentiate between the two situations.

REMEMBER - The safety remains ON until the weapon is up on target and the decision to fire has been made.

The Benelli can be carried in "cruiser ready" condition, with the magazine tube loaded, chamber empty and a round resting on the carrier. To do this, pull the bolt open and release to cock the hammer. Load the magazine. Next, press the Cartridge Drop Lever to release the last round in the magazine backward to lie on the shell carrier beneath the closed bolt. To put the weapon into the Tactical Mode, Review the various options available to the agency to have spare ammo on the weapon.

Know how to access your spare ammo especially if you have to carry it in your pocket.

Test material

Test material

pull back and release the bolt handle to chamber the round.

"TRANSPORT MODE" means

Action CLOSED - Magazine LOADED - Chamber EMPTY - Safety ON

"TACTICAL MODE" means

Round in the chamber and safety on or off as tactical situation dictates

Unloading

As with the patrol rifle, it is necessary for the police officer to know how to unload their shotgun in addition to how to load it. The procedure outlined here will allow you to remove all the ammunition from the weapon without having to cycle all the rounds up into the chamber and ejecting them on to the ground. You will be able to safely unload or download the weapon while maintaining control over your ammunition.

- 1. With the muzzle pointed in a safe direction, insure the safety is ON;
- 2. Depress the action lock;
- 3. Using one hand, block the ejection port
- 4. Slowly open the action withdrawing the round from the chamber if present. A round will be released from the magazine on to the carrier (shell lifter).
- 5. When the action is fully to the rear, roll the shotgun on its side so the rounds roll out the ejection port into your hand. *If there was a round in the chamber, you will end up with two rounds in your hand. If the chamber was empty, you will have only one.*
- 6. From the bottom, push the carrier up.
- 7a. On Remington shotguns, manipulate the right shell latch to allow the next round in the magazine tube to move to the rear. Repeat until magazine is empty.

Test material

Unloading the shotgun has never been stressed. If you load a weapon – you need to know how to unload it.

This is a testable skill.

Emphasize this point

7b. On Mossberg shotguns, close the action, manipulate the left shell latch to allow the next round in the magazine tube to move to the rear. Repeat until magazine is empty.

8. Visually and physically confirm the chamber and magazine tube are empty.

Semi-Auto Shotguns

Detailed information unloading the Benelli and Remington 11-87 can be found in the Student Manual.

The instructor is advised to consult the Student Manual for detailed info on semi auto shotguns.

Downloading – Pump Shotguns

Not every confrontation with the shotgun requires a round to be fired. As a matter of fact, the overwhelming majority of the time, you will not fire the shotgun and will be left with a shotgun with a chambered round and wish to return it to the cruiser ready condition. There are two methods to download the pump shotgun. Both work equally well and are presented here for you to choose from.

Explain difference between unloading and downloading.

1. With the muzzle pointed in a safe direction, insure the safety is ON;

Instructor should know both methods and be able to demonstrate them on the range.

- 2. Depress the action lock and open the action slightly;
- 3. Block the ejection port with your shooting hand and smartly open the action;
- 4. The chambered round will be pulled out and will come to a rest in the ejection port. The first round in the magazine will be released on to the shell lifter.
- 5. Roll the shotgun on its side and TWO rounds will roll out the ejection port into your hand.
- 6. Confirm the chamber is empty and no rounds are on the shell lifter.
 - 7. Slowly close the action insuring no round is chambered.
 - 8. Replace the two rounds into the magazine.

9. Return the weapon to its storage location.

The alternate method which also works well with Winchester pump shotguns –

- 1. With the muzzle pointed in a safe direction, insure the safety is ON;
- 2. Place the middle finger of the left hand behind the fore end.
- 3. Depress the action lock and open the action. The middle finger will limit the travel of the fore end so the chambered round is extracted but the first round in the magazine is NOT released on to the shell lifter.
 - 4. Pick the round off the extractor.
 - 5. Close the action slowly insuring no round is chambered.
 - 6. Replace the round into the magazine.
 - 7. Return the weapon to its storage location.

Using DUMMY AMMO, students will demonstrate their ability to DOWNLOAD then UNLOAD their shotgun

Downloading – Semi Automatics (Benelli)

- 1. Point the muzzle is a safe direction and ensure the safety is ON.
- 2. Slowly open the bolt and when the round begins to tilt out of the ejection port, pluck it off the extractor with your other hand.
 - 3. Allow the bolt to close on an empty chamber.

Note: Unless the trigger or cartridge drop lever is pressed, a round will not feed from the magazine when you cycle the bolt. See Student Manual for additional information.

(Remington 11-87)

1. Point the muzzle in a safe direction and ensure the safety is ON.

- 2. Brace the butt on your hip or leg and retract the bolt slowly until the chambered round is extracted and begins to angle out the ejection port.
- 3. Pluck the round off the extractor and allow the bolt to close on an empty chamber. Double check the chamber remains empty.
- 4. If you retract the bolt too far and a round is released from the magazine on to the carrier, hold the bolt open and roll the weapon ejection port down and let the round drop into your hand.
 - 5. Replace the round(s) back into the magazine.

Fitting the Shotgun to the Shooter

Historically, one of the most influential factors in an officer's poor performance with the police shotgun is due to an improper fit. This is especially true with smaller statured officers regardless of gender. The traditional police shotgun had a standard wood stock fitted with a recoil pad to compensate for the heavy recoil of magnum loads. Officers wearing body armor or a heavy jacket found the length of pull (the distance between the trigger face and the rear of the butt) to be too long to shoot comfortably or well. In the picture in the Student Manual, note how the longer stock dimension puts the shotgun further forward which in turn pushes the shooter's torso back resulting in a poor cheek weld to the stock and causing the shooter to be off balance. With the arm in this position, it is difficult for it to support the weight of the shotgun causing discomfort to the shooter even before the first round is fired.

There are several remedies for this situation which will make shooting the shotgun a more pleasant experience for the officer – especially if they are a novice shooter or have had poor experiences with the shotgun in the past. Shortening the standard stock by one inch or changing it out with a "Youth" stock is the easiest for an agency wishing to retain the standard stock configuration. Youth

Proper fit of the shotgun to the shooter applies to both male and female officers.

Stress the advantage the shorter stock (length of pull) will have.

stocks are shorter in length which compensates for the padding of a heavy jacket or body armor. Officers of larger stature can shoot a shotgun fitted with a youth stock much easier and better than the smaller officer trying to work around a standard stock. The photo to the right compares a Remington synthetic stock with the typical 14 inch length of pull and the Hogue overmolded "tactical" stock with the same 12 inch length of pull found on youth stocks. Experience has shown that average to large statured shooters are not adversely affected when using a shotgun with a short stock. On the other hand, a smaller statured shooter will always shoot better with the shorter length of pull. If you think you may encounter resistance to equipping department shotguns with "youth" stocks, label them it a "tactical" stock for law enforcement use only.

Several companies now market adjustable stocks for shotguns. These are a little more expensive however they offer greater flexability between different users. They also permit the overall length of the shotgun to be reduced making stowage easier in the cramped quarters of today's police cruiser. One of the most popular is based on the M4 collapsable stock. It can be had with 4 or 6 adjustment positions and is easily bolted on to your shotgun.

Another design is similar in appearance but offers a degree of recoil dampening by means of springs and a design which allows the stock to compress under the recoil. This can be a very effective design for a shotgun assigned to a shooter who historically has had recoil related issues. It should be noted that this style will not work well with semi-automatic shotguns as it tends to induce failures to feed similar to 'limp wristing'.

In the end, any of these solutions will improve the fit of the shotgun to the majority of your officers making shotgun training less painful and more productive.

Effective but more expensive.

Important point

Fundamentals of Shooting the Shotgun

The shotgun has more recoil than the patrol rifle, especially rifles in 5.56mm. While not abusive or uncontrollable, shooters using a proper technique will experience less felt recoil and faster follow up shots than those who do not. In most cases, the reputation of the shotgun being punishing to shoot is a byproduct of poor technique. By applying sound fundamentals, the shooter will manage the recoil more effectively and achieve better accuracy. There are four basic fundamentals you need to master to shoot the shotgun well – Stance, Grip, Sight Picture and Trigger control.

STANCE – Unless a shooter is extremely muscular and can literally manhandle the shotgun, there is a critical need for a well balanced and supported stance. Feet spread at shoulder width with your weight slightly forward will compensate for the recoil. Right handed shooters will lead with their left foot. Keep the torso square to the threat so your soft body armor provides maximum protection. Tuck your elbows in to lock the weapon in place. This technique will allow you to move smoothly and be able to engage threats while moving. Use of a shorter stock can allow the shooter to assume a more squared up stance to the target. The M4 style collapsible stock allows the length of pull to be changed which will make handling the shotgun easier for smaller officers.

The "H&K" stance (see photo in Student Manual) keeps the torso square to the threat so your soft body armor provides maximum protection. Tuck your elbows in to lock the weapon in place. This technique will allow you to move smoothly and be able to engage threats while moving. Use of a shorter stock can allow the shooter to assume a more squared up stance to the target. The M4 style collapsible stock allows the length of pull to be changed which will make handling the shotgun easier for smaller officers.

Better protection from your ballistic vest.

Locks weapon in

Better mobility

Over compensating the traditional stance will limit your mobility. The photo at the right shows shooters taking an overly wide stance which is <u>strongly discouraged</u>. While this may provide acceptable recoil control, it is a disadvantage for a combat shooting stance as it severely limits the shooter's ability to move quickly or to respond to a threat behind and to the left (for right hand shooters).

Instructor will demonstrate the proper stance and grip

Student Manual has a photo of shooters taking an excessively wide stance. Demo how this limits mobility.

GRIP – The forward hand supports the front of the weapon and cycles the action on pump shotguns. The rear hand pulls the stock firmly into the shoulder and operates the trigger and safety. The toe of the stock is placed in to the pocket of the shoulder with no gap between the recoil pad and the body. Bring the shotgun up to eye level. This keeps the head erect.

Stress this. Many shooters will bring head down to shotgun.

SIGHT PICTURE – Three types of sights are commonly found on shotguns.

Bead sights feature a single ball centered on the top of the barrel.

When sighting, you should see only the bead with none of the supporting base visible. There is no rear sight reference which makes this system fast but less accurate at longer distances.

proper sight picture for the various types of sights.

Using diagrams, show

Conventional Rifle sights use the familiar post and notch system which you are familiar with from your handgun.

Ghost ring sights are similar to the peep or aperture sights you use on the patrol rifle. The difference is the aperture on ghost ring sights is much larger allowing more light to pass through which allows them to be used more effectively in dim light. The larger aperture also allows for a faster sight picture. High visibility front sights or tritium inserts make the front sight post easier to see. Center the post in the aperture as shown in the photo. As you focus on the front post, the rear aperture will disappear. With a little practice, this will become the fastest and easiest sight system to use.

TRIGGER CONTROL – The recoil on the shotgun may tend to cause the shooter to jerk the trigger or to flinch. Proper training will demonstrate to the shooter that the recoil is more than manageable and they can concentrate on smoothly pressing the trigger when the sights are properly aligned and the decision to fire has been made.

This is best taught as "trigger press"

Shooting the Shotgun

High Ready – In the high ready position, the shooter is holding the shotgun at chest height with the muzzle up and the trigger finger is straight alongside the receiver with the safety on. The eyes are concentrating on the threat or in the direction of a possible threat and not on the weapon. To engage, the shooter elevates the butt up into the pocket of the shoulder as the muzzle comes down on target. The feet, legs and hips should not have to move. The shotgun should come up to eye level. Do not bring the head down to the shotgun.

Instructor will demo with Blue Gun

A disadvantage to this carry technique is if an assailant grabs the muzzle, it is difficult to prevent them from controlling the weapon. This can be countered by the "J" maneuver however this becomes problematic if you are in a confined area such as a narrow hallway. For this reason alone, the high ready position is not recommended for most law enforcement situations.

Teaching point

Low Ready – The low ready position is the preferred ready position because it keeps the muzzle pointed in a safe direction. The butt of the shotgun remains in the shoulder pocket and the muzzle is depressed so that it is pointing approximately 3 feet in front of the shooter's feet. The trigger finger is straight along the receiver of the shotgun and the safety is on. This position presents an unobstructed view of the threat axis. To engage, the shooter merely elevates the muzzle to the threat. The weapon should naturally come up to the

Instructor will demo with Blue Gun

eye. It also allows the shooter to safely move amongst a group of people without the muzzle "lasering" innocent bystanders. To engage, the shooter merely elevates the muzzle to the threat. If the toe of the stock is in the correct position, the weapon should naturally come up to the eye. If you find the shooter needs to bring their eyes down to the shotgun sights, the toe of the stock is not properly positioned in the pocket of the shoulder.

In the event of a gun grab, the officer can lower the butt or drop to the ground which will bring the muzzle up in line with the threat. At that point, it can be fired if necessary.

Proper use of cover is critical to proper deployment of any long gun. These photos show how properly using cover will reduce the amount of your body which can be seen thus making you less of a target. First we want to be sure that the cover we have selected is sufficient to stop incoming rounds. If it will not, it is merely concealment. The shooter should move back from cover to cut down on the angle needed to see around the cover. This can be demonstrated by the "slicing the pie" demo you may have had in the academy. Keeping back from cover not only reduces the amount of our body that can be seen by the threat and it makes us less susceptible to spall and debris that may be projected back from rounds hitting our cover. Examine these pictures and determine how you could make yourself even less of a target. Hint: look at the shooter's arm in the Student Manual photo.

Malfunctions

As with other firearms, malfunctions with the shotgun can be classified in one of four categories - Failure to: feed, fire, extract or eject. Being familiar with the weapon's controls will expedite getting the shotgun up and running again after a malfunction.

Demo "SAFETY CIRCLE" concept and reasons why we use it for movement and pivots.

Teaching point for instructors.

Instructor can demo this to the class using any moveable barrier with a vertical edge.

Emphasize difference between "cover" and "concealment".

Show how "slicing the pie" can keep operator behind cover while allowing them to see further past a corner.

If unable to demo in the classroom, do it at the range.

Review each malfunction and how to remedy the situation.

Failure to Feed – The shotgun shell cartridges sit in the tubular magazine under spring tension. When the operator cycles the action, the two shell latches operate in succession to release only round on to the shell lifter (carrier). The shell lifter then raises the cartridge in line with the chamber and the bolt pushes it forward. The most common malfunction in the feeding cycle is a double feed. This occurs when one or more rounds are released on to the carrier with the bolt closed. The tension from the magazine spring jams the rounds against the bottom of the bolt can jam the action. This will not be seen on Mossberg shotguns due to the shell lifter design. Remington has modified the carrier (shell lifter) with the Flexi-tab carrier so that this malfunction can be cleared easily. After putting the safety ON, the operator presses in on the action release button and racks the action open in a normal fashion. If you have a Model 870 that has the old solid carrier, you will need to depress the action release, apply rearward pressure on the fore end while slamming the butt briskly on the ground. The inertia will open the action and allow you to clear any cartridges out of the loading area.

Do not succumb to the temptation to stick a knife blade or screwdriver up beside the carrier and try to lever the cartridge back into the magazine. You will be prying against the primer and if the round were to go off, it will set off the other rounds in the magazine with horrific results to the shotgun and your hand on the fore end.

Failure to Fire – This can be traced to faulty ammunition or a mechanical failure such as a broken firing pin. Should the operator have a failure to fire they will cycle the action to eject a possibly faulty round and bring a fresh one up into the chamber. A second failure to fire will probably be indicative of a mechanical problem which will not be easily remedied. The operator will immediately sling the shotgun (or discard it as necessary) and transition to their service pistol.

Instructor will induce a Double Feed with dummy rounds and demo how to clear it.

Show difference between old style carrier and Flexi-tab as illustrated in the Student Manual.

Stress how this can ruin your whole day if you ignite one primer!

Instructor will emphasize that if the second round does not fire, the operator must presume the problem is mechanical and won't be easily fixed. They should transition to service pistol.

Failure to Extract — When the operator experiences difficulties in extracting a fired cartridge case from the chamber, it is normally associated with ammunition (rim on the cartridge case), a heavily fouled chamber or a broken extractor. The symptom will be a cartridge case lodged in the chamber and difficult to remove. The operator should immediately transition to their service pistol. When the situation has been resolved and time permits, the extractor can be examined to see if the hook is in good condition. The stuck case can be tapped out with a cleaning rod from the muzzle end.

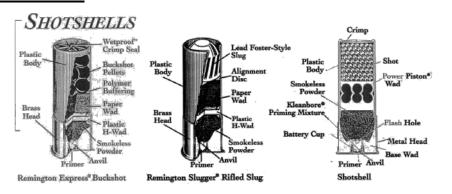
Failure to Eject – The ejector is normally a fixed stop which causes the cartridge case to pivot out on the extractor as the bolt is drawn to the rear. A damaged or missing ejector will result in the case being withdrawn by the extractor but not being kicked clear of the ejection port. This is not a problem which will get better so the standard practice is to transition to the service pistol and carry on the fight. The operator may be able to reach a finger into the ejection port and flip out the spent case. This should not be attempted in a tactical situation unless there is no other weapon available.

Any of these 3 can cause a failure to extract.

Don't waste time trying to clear this – transition to service pistol!

Don't waste time trying to clear this – transition to service pistol!

Ammunition



The usefulness and versatility of the shotgun stems from the wide variety of ammunition which is available. Slugs are a single projectile with a maximum effective range of about 80 yards. The purpose of the slug is to extend the range of the shotgun beyond the

Students are responsible for this material.

Test material

This is all test material

effective range of buckshot. Range with slugs is limited by the shooters ability to accurately sight the shotgun and the trajectory of the slug which tends drop off rapidly beyond 75 yards.

Buckshot is a multi projectile load containing eight or nine .33 caliber balls. Extremely effective for close combat to about 10 yards and a maximum effective range is 18 yards. Beyond this distance, the buckshot spreads out wider than the average human torso. The rule of thumb for buckshot fired from an 18 inch cylinder choked barrel is the shot will spread one inch for each yard of distance down range. Officers equipped with shotguns loaded with buckshot need to keep this in mind at all times. Both buckshot and slugs are available in low recoil loads. If you have buckshot available and are up against a threat hiding behind an automobile, it is possible to "skip" the buckshot under the vehicle with the intent of striking the threats feet and ankles. Aiming for a point on the ground just in front of the gap between the vehicle and pavement, the shot will ricochet along the pavement at about ankle height.

Bird shot is much smaller in size than buck shot. While it is particularly effective for training due to lower recoil and lower cost, it has little tactical value and is generally not used as a duty round.

There is a general misconception regarding the terminal ballistic performance of shotgun ammo. Many uninformed sources promote the shotgun as the 'ultimate stopper' for a gunfight. While this may have a degree of truth given the right ammo and distance to the target, it is not a "magic bullet" or a guaranteed man stopper. There is also a danger of over penetration with some shotgun rounds.

Students should reference the ballistic

gelatin photos in the

manual.

Short Barreled and Specialty Shotguns

A law enforcement agency may legally purchase a short barreled shotgun from a manufacturer for official use. As with any

Test material

Test material

other NFA weapon, the proper paperwork should be completed and submitted to the BATFE to keep everything legal.

Legal Note: Federal law regulates the minimum legal length of a shotgun barrel to 18 inches and an overall length of 26 inches or greater. Anything shorter is considered a "short barreled shotgun" (SBS) and must be registered on the National Firearm Registration and Transfer Record (NFRTR) which was established by the National Firearms Act.

Massachusetts law prohibits anyone from manufacturing or possessing a "sawed off shotgun". This means no one can legally take a current shotgun and cut the barrel down shorter than 18 inches or otherwise shorten the shotgun to less than 26 inches in overall length. There is no exception for law enforcement agencies even if you register it with the BATFE on a Form 10. The subtlety of the law here is while it is legal to manufacture a short barreled shotgun on a new receiver, you cannot alter or modify a current shotgun to short barreled configuration – at least here in Massachusetts. It is suggested that you keep this in mind when someone comes up with the bright idea of taking an abandoned shotgun from the property room and turning it into a 12 inch barreled breaching shotgun.

M.G.L. References:

Chap 140, §121 - "Sawed-off shotgun", any weapon made from a shotgun, whether by alteration, modification or otherwise, if such weapon as modified has one or more barrels less than 18 inches in length or as modified has an overall length of less than 26 inches.

Chap 269§10(c) Whoever, except as provided by law, ...or whoever owns, possesses or carries on his person, or carries on his person or under his control in a vehicle, a sawed-off shotgun, as defined in said section one hundred and twenty-one of said chapter one hundred and forty, shall be punished by imprisonment in the state prison for life, or for any term of years provided that any sentence imposed under the provisions of this paragraph shall be subject to the minimum requirements of paragraph (a).

In the past decade, the patrol rifle has eclipsed the shotgun as the long gun of choice for most police agencies. The superior range, magazine capacity and potential accuracy of the patrol rifle are good These are important legal aspects of converting a 'hunting' shotgun to a short barreled shotgun yourself.

This is an often overlooked clause which prohibits altering an existing shotgun to a SBS.

reasons why this has happened. For departments which have not embraced the patrol rifle concept, the shotgun remains the key long gun and the short barreled shotgun gives them the flexibility to operate in tight quarters. The shotgun is certainly not obsolete. No other weapon is capable of delivering such a wide variety of munitions in such a small package. One way of decreasing the package size is to shorten the shotgun barrel. A strong argument can be made that a short barreled shotgun can be an extremely effective weapon for close in situations such as warrant services, maritime boarding operations and any other operation in confined quarters where the service pistol is considered inadequate.

Not all short barreled shotguns are suitable for law enforcement use. Back in the 1930's it was popular and easy to shorten hinge action double barreled shotguns to make them more concealable and easier to use in certain circumstances. Several companies manufactured these weapons such as Ithaca which made the "Auto Burglar". These actually remained very popular with some agencies well into the 1970's. Due to the limited capacity (2 rounds), there are better shotguns available for this task. There are several manufacturers in existence today who will build you a similar sized pump shotgun with a larger magazine capacity.

Less Lethal

The pump shotgun's ability to fire specialty rounds such as bean bag, stingball, flashbang, OC and CN/CS makes it a truly versatile weapon. The MPTC offers an excellent Less Lethal Impact Munitions program. That specific material will not be covered in depth in this module. The majority of these specialty rounds do not produce the recoil or gas pressure to operate a semi-automatic shotgun so their use is restricted to pump shotguns. There is an inherent safety concern when issuing any rounds such as bean bag or other impact munitions with the combat shotgun and conventional ammo. The MPTC highly recommends that if your agency has adopted the use of less than lethal munitions such as bean bag rounds, a dedicated "Less Lethal" shot gun which has been distinctively marked be assigned specifically with these munitions.

The topic of Less Lethal munitions will be covered in depth in the Less Lethal portion of the 10 Day program.

Accessing the Shotgun

There are a number of different ways to secure the shotgun in a vehicle. Whether a gun vault or gun lock, how to access the weapon is an often overlooked aspect of training. Manipulation of the unlocking system as well as removing the weapon from the storage location should be part of every long gun training session. This used to be fairly straight forward in the days predating airbags and MDT's. Back then, it was common to mount the shotgun rack on the dash which made it quite easy to access. Federal regulations now prohibit mounting anything which will interfere with the airbag deployment and the MDT mount generally occupies the old mounting location. Shotguns and patrol rifles are now most commonly mounted between the front seats, horizontally on the cage or in the trunk. Any may find the shotgun shoehorned into a space barely large enough to hold the weapon. This has been found to cause the

A significant amount of time is spent teaching officers to access their duty pistol from the holster. It can be argued we need to spend an equal amount of time teaching officers to access their long guns from the vehicle storage system.

user to tilt or maneuver the weapon in a certain fashion to get it in	
and out of the rack easily. Knowing these idiosyncrasies in addition	
to the location of the unlock button or combination to the weapons	
drawer BEFORE you actually need the weapon in a deadly force	
situation will greatly increase your chances of getting it out smoothly.	
In the end, you will need to work around what location and storage	
method your agency has selected and make the best of it. Every	
officer should know the location of the electronic lock activation	
button or how to open the storage location. Remember - repetition	
builds familiarity and familiarity builds speed.	

SHOTGUN RANGE DRILLS

- I. Fundamentals drills
 - A. Stance coaching
 - 1. balls of feet
 - 2. movement
 - B. Mount coaching
 - 1. Low Ready
 - 2. Pocket of the Shoulder
 - 3. Up-Down drill
 - C. Dry fire by the numbers (slide action)
 - 1. Press (trigger)
 - 2. Back (slide back)
 - 3. Release (trigger)
 - 4. Rack (slide forward to chamber a round)
 - D. Dry fire
 - 1. Singles
 - 2. Multiples
 - 3. Topping off
- II. Loading (with dummy rounds if available)
 - A. Loading
 - B. Downloading (return to ADMIN LOAD condition)
 - C. Unloading (by manipulating shell stops)
- III. Live Fire Exercises Center Mass (50 rounds)
 - A. 5 yds., 1 round 10x
 - B. 7 yds., 1 round 10x
 - C. 10 yds., 1 round 10x
 - D. 15 yds., 1 round 10x
 - E. 25 yds., 1 round 10x (slug only)
- IV. Shotgun Stoppages
 - A. Double Feed
 - 1. Instruction on how to set up double feed for training
 - 2. Corrective Techniques

- B. Transition to handgun is the recommended option
- V. Transition From Shotgun to Handgun (12 rounds)
 - A. Philosophy
 - B. Technique for Securing the Shotgun
 - C. Technique for Engagement with Handgun
 - 1. One Hand Method
 - a. Weapon (shotgun) Perpendicular to Ground
 - b. Weapon (shotgun) Canted to Inside 30 Degrees
 - 2. Arm/Body Position
 - 3. Shotgun Muzzle Awareness
 - D. Dry Drills
 - E. Live Fire Exercises
 - 1. 2 rds. from shotgun followed by 2 rds. from handgun 6x
- VI. Multiple Shots (20 rounds)
 - A. Rationale
 - B. Technique
 - C. Live Fire Exercises Tactical Reload ("Top Off") after each
 - 1. 7 yds., 2 rds., 4x
 - 2. 7 yds., 3 rds., 4x
 - D. Live Fire Exercises Combat Reload (emergency reload of empty weapon)
 - 1. 7 yds., Load with 2 rds., Shoot 2 rds and combat reload 1. Repeat 3x
- VII. Pivots & Turns (30 rounds)
 - A. Rationale
 - B. Technique
 - 1. Demo Left / Right pivot
 - 2. Demo 180 degree turn (left / right)
 - 3. Insure adequate distance between shooters
 - a. Muzzle discipline
 - C. Dry Drills
 - D. Live Fire Exercises @ 7 Yard Line
 - 1. Pivot Right, fire 2 rounds repeat 5x
 - 2. Pivot Left, fire 2 rounds repeat 5x
 - 3. Turn 180 (right), fire 2 rounds repeat 2x

4. Turn 180 (left), fire 2 rounds – repeat 3x

VIII. Shooting While Moving (30 rounds)

- A. Rationale
- B. Technique
 - 1. Demo Forward / Back
 - 2. Demo Lateral
- C. Dry Drills
- D. Live Fire Exercises
 - 1. Command to move forward is "ADVANCE"
 - 2. Command to move to the rear is "WITHDRAW"
 - 3. Engage while moving forward from 12 to 3 yard line 5 rounds
 - 4. Engage while withdrawing from 3 to 12 yard line 5 rounds
 - 5. Repeat one more time
 - 6. Engage while moving laterally on 7 yard line
 - a. One shooter at a time -5 rounds
 - b. Repeat in opposite direction 5 rounds

IX. Use of Cover (12 rounds)

- A. Rationale
- B. Technique
 - 1. Demo right side of cover
 - 2. Demo left side of cover
- C. Dry Drills
- D. Live Fire Exercises 10 Yard Line
 - 1. Right side of cover 1 round
 - a. Repeat 6x
 - 2. Left side of cover 1 round
 - a. Repeat 6x
- E. Demo skipping 00 Buckshot on pavement (optional if range permits)
- X. QUALIFICATION (25 rounds)
 - A. MPTC Shotgun Qualification Course of Fire
 - 1. 94% minimum passing score

QUALIFICATION COURSE

Title: 25 Round Shotgun Qualification Course w/time limits

Course Type: Qualification

Date Written: March 2, 2009 Revised: March 31, 2011

Rounds: 28 (only 25 will be fired) Distance: 25, 15, 10, 7 and 5 Yards

Passing Score: 94% for firearms instructors, 80% for all others

Scoring: Slug – 4 points for each valid hit

00 Buck (8 or 9 pellet)* $-\frac{1}{2}$ point per valid hit

*If the agency only authorizes buckshot, the 18 rounds fired at the 10, 7 and 5 yard line stages will be buckshot. Slugs will always be fired from the 25 and 15 yard lines.

Fundamentals: This course of fire incorporates the fundamentals of shotgun operation and marksmanship including loading, putting the shotgun into operation, firing from different positions, tactical reloading (topping off/put back what you shoot), downloading and unloading. Additionally, officers will use good tactical fundamentals such as verbal commands, scanning, use of cover and movement.

Objectives: This course of fire was designed to better evaluate an officer's ability to –

- Load the shotgun in a safe manner;
- Access the weapon from the vehicle storage rack (if applicable);
- Place the shotgun into operation;
- Effectively put rounds on target;
- Fire the shotgun from realistic shooting positions including on the move;
- Keep the shotgun in a "ready to fight" condition by continuously topping off the magazine;
- Engage threats from various angles while pivoting and on the move;
- Scan effectively for additional threats;
- Download and unload the shotgun in a safe manner.

Notes: For ease in scoring, it is recommended the course be fired with slug ammunition. In this course of fire, the term "up" is used as the cue to fire. It should be noted that any cue such as "six" or "deadly threat" can be used as well. The command to fire should be decided by the instructor based on their agency's policy.

STAGE ONE – KNEELING FROM COVER 25 Yards 3 Rounds (slug only)

Preparation: Begin with the shotgun in the condition it is normally transported in on the 30 yard line. This can be either unloaded or "transport condition" as the department's policy dictates. If spare ammo is not positioned on the weapon, it will be positioned on the body where it can be easily accessed. Instructors are encouraged to have their

officers demonstrate their ability to remove the weapon from the storage location in the vehicle if applicable. On the command "gun" or "threat", the shooters will access their weapon, chamber a round and advance to the 25 yard line where they will cover the threat from the kneeling position using good cover and verbal commands.

On the command "UP", the shooters will engage the target with 3 rounds, scan while covering the target then top off their magazines. On the command to "advance", shooters will move to the 15 yard line covering their target. **Finger off the trigger – Safety ON**

STAGE TWO – OFF HAND (slug only)

15 Yards 4 Rounds

At the 15 yard line, shooters will engage their targets with 4 rounds in 7 seconds from the standing position on the command "UP". Shooters will scan for additional threats, cover the target, top off magazine and move to the 10 yard line when the command "advance" is given. **Finger off the trigger – Safety ON.**

STAGE THREE – PIVOT & SHOOT

10 Yards 6 Rounds

At the 10 yard line, shooters will demonstrate their ability to engage a target to the side or rear. Instructor will demonstrate the SAFETY CIRCLE and how to keep the muzzle depressed inside it when pivoting. Have shooters face in the desired direction with muzzles fully depressed. On the command "UP", shooters will (in order of sequence) – **LOOK** to identify the threat,

PIVOT to face the threat,

Bring the MUZZLE UP to the threat and

ENGAGE with ONE round in 3 seconds.

Cover – Scan – Top Off

Pivot to the LEFT – fire one round in 3 seconds. Repeat 1X (2 rounds).

Pivot to the RIGHT – fire one round in 3 seconds. Repeat 1X (2 rounds).

Pivot 180 degrees – fire one round 3 seconds. Repeat 1X (2 rounds).

Instructors should have shooters look and pivot BEFORE bringing the muzzle up on target. If you are running a crowded line or working with novice shooters, you can reduce the angle to 45 degrees so all muzzles remain in a safe direction.

STAGE FOUR – SHOOTING ON THE MOVE 10 to 7 Yds. 4 Rounds

Shooters should still be scanning from "low ready" on the 10 yard line. On the command "Advance and Engage" or "UP", shooters will advance to the 7 yard line while firing two rounds. Once at the 7 yard line, shooters halt, scan and top off magazines. Repeat again for a total of 4 rounds. Instructors should encourage shooters NOT to stop when they shoot - keep the line moving.

Safety ON – Scan – Top off magazine if necessary

STAGE FIVE – CONTROLLED PAIRS w/ Movement 7 Yards 6 Rounds

Shooters face threat with shotgun at the low ready position. On the command "UP", shooters will engage with two rounds then move one step laterally (left or right) as directed in 5 seconds. Scan – cover threat.

Repeat twice more for total of six rounds.

Top Off if necessary

Safety ON – Low Ready

On the command "Advance to the Five", shooters move forward to the 5 yard line.

STAGE SIX – HAMMER DRILL

5 Yards 2

Rounds

Position shooters facing the threat with weapon at "low ready". On the command "UP", shooters will fire two rounds in 3 seconds in rapid succession to center mass.

DEMONSTRATE ABILITY TO UNLOAD & DOWNLOAD THE SHOTGUN

The shotgun will have 3 rounds remaining (including one in the chamber). Shooter(s) will demonstrate ability to download to Transport Mode and then unload their shotgun. If necessary, this evaluation may be conducted off the range with dummy rounds. In that case, only 25 rounds are required for the qualification course.

This skill set is part of the shotgun qualification and must be demonstrated.

APPENDIX I

12 Gauge OO Buckshot Pattern Tests S&W 3000 w/ 18 inch cylinder choke barrel Federal 2-3/4 inch 9 Pellet OO Buckshot

APPENDIX II

12 Gauge OO Buckshot Pattern Tests Remington 870 w/ 18 inch Vang Comp barrel Winchester "Ranger" 2-3/4 inch 9 Pellet OO Buckshot

APPENDIX III

Shotgun Ammunition Performance in Ballistic Gelatin

APPENDIX IV

Buckshot Comparision Chart

APPENDIX V

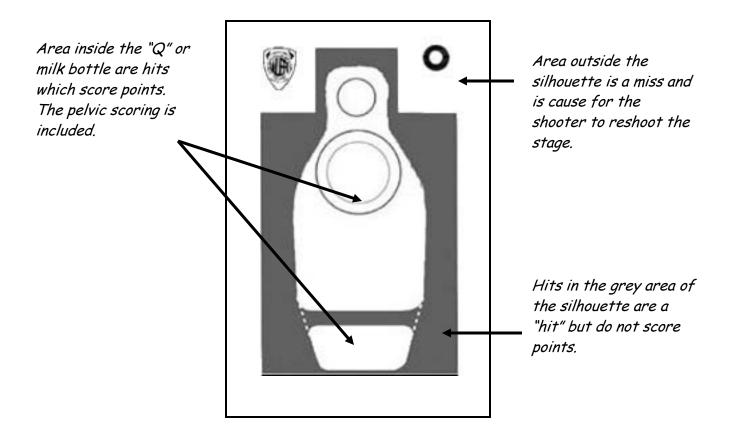
Maintenance & Care

APPENDIX VI

Semiautomatic Shotguns Benelli

Remington 11-87

MPTC FIREARMS INSTRUCTOR TRAINING IALEFI Q-P Target Scoring Instructions



MPTC Instructor Qualification and Certification requires 100% round accountability. This means each shot must strike within the body (scoring area) of the target. Peripheral hits on the body are a hit but not scored.

Shots in the margin of the target outside the silhouette are considered a "miss" which requires the shooter to reshoot only that stage. If they miss on two stages, they would have to reshoot all the stages where a miss was recorded.

The purpose of this is to emphasize the importance of making every round count and that a round that misses the target can go anywhere and strike anyone.