



# **Safe Handling Course**

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## 4 Golden Safety Rules

- Always 'Prove' a firearm is unloaded – Do this whenever you handle the gun, picking it up, handing it to someone, receive it from someone.
- Always point the firearm at your target.
- Never put your finger on the trigger until you are sighted on your target and ready to shoot.
- NEVER point a firearm at anyone.

## Stop! Procedure

- If anything happens that you feel could be or is unsafe – You or Anyone else can shout in a loud and clear voice:

**STOP! STOP! STOP!**

- All shooters must remove fingers from triggers, put the firearm down, stand back and await instruction.
- The Senior Range Officer will assess the situation and say how to proceed.
- Remember: when you are allowed to proceed – Clear the rifle first and then go through the normal process in the same way as you would to start the detail. (Detail shown later in this document).

## Zones within the Club

- The club have specific zones where specific rules relating to firearms.
- Muzzles must be pointed up when moving around the club and Breach flags should be used if you have them



## Car Park

- Any firearms must be completely covered if they are being moved between a vehicle and club
- Again, any firearms must be completely covered if they are being moved between the club and outside ranges.

## Club Room

- Firearms should be moved to the Gun Room as quickly as possible
- You should not handle Firearms in the Club Room unless you are liaising with the Duty Officer.

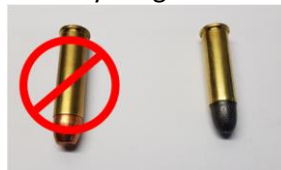
### Gun Room

- Any firearms in this area should have their working parts in an 'Open' state (Bolt open so you can see there are no bullets in the firearm).
- Firearms to be placed here while waiting to go on range.
- Firearms can be worked on in this area.



### Inside Range

- This is where you are able to shoot under the direction of the Senior Ranger Officer.
- Only shoot at your target and do not shoot targets in adjacent bays (always be sure which is your target).
- All firearms to have 'Open' actions until the Senior Range Officer authorises the start of shooting.
- No Jacketed Rounds to be used at Weybridge Rifle & Pistol Club (Copper coloured head)



### Outside Range

- As per Inside Range but additionally:
- To shoot on the outside range you must first qualify by shooting three consecutive 10-bull targets and achieve a minimum score of 80 per card.
- There must be at least 2 people on the outside range at the same time to allow shooting to take place. (This allows one person to stay with the firearms while the other changes the targets between details).

### Leaving the Range

- When you have completed your shooting let the Range Officer know you have finished.
- The Range Office will make sure everyone is at the shooting points and not down range.
- The RO will 'Prove' your rifle (make sure it is clear and in an open state).
- They will allow you to collect your belongings and take the Rifle off the range.
- You can then take the rifle to the Gun Room if you are going to shoot later or hand it over to the Duty Officer in the club room.
- Remember to keep the muzzle pointing up when moving around the club.

## Club Officers

Duty Officer:	Opens the club and has overall responsibility on that session.
Senior Range Officer:	A competent individual who is in overall charge of the range details.
Range Officer:	A competent individual who helps run the range details under the direction of the Senior Range officer.
Ranger Officers:	Obey the Range officers, they are there for your safety. Their word is LAW!

## Range Details/Orders:

- Upon entering the range, the Senior Ranger Officer will inspect the firearm is in an open state and clear of ammunition.
- Place the Firearm/Airgun on the shooting point, with the muzzle pointing toward your target.



- The Senior Range Officer will check all Firearms/Airguns have their Working parts open, Magazines are not inserted into the gun and no ammunition is in the gun
- Everyone must then stand behind the Yellow line, away from the shooting point.
- No one is allowed to touch Firearms/Airguns when people are down range.
- The order will be given to put up, change or retrieve targets.
- When all shooters return and the range is clear, the Senior Range Officer gives the command to put Eye Protection and Hearing protection on, Face Forward, Charge Magazines, Load and Fire when ready.
- At the end of each detail, RO checks all shooters are behind the yellow line, and then checks and audibly states the firearm(s) are clear.

## General commands from the RO:

- Is everybody ready? > Eye's On > Ears On > You may Load and Fire when ready.
- These range commands may change depending on the shooting detail taking place (turning Targets).

## General:

- The Safe behind the Duty Office is out of bounds to anyone but the Duty Officer (unless they allow access).
- Only open the front door if you know the person who wants to come in.
- Wash your hands after shooting to remove any lead/propellant contamination.
- Hear protection is mandatory when there is live fire on the inside range.
- Eye protection is mandatory when on the inside range.
- Club rules allow juniors to join the club from the age of 11, they can shoot Airguns under supervision and will learn safe practice and technique.
- When a junior reaches the age of 14, they can move on to shooting firearms once they have attended safe practice sessions.
- Adults can shoot Airguns and firearms once they complete the safe practice sessions.



- Occasionally, if someone is shooting an Airgun or Black Powder Pistol there is a possibility of a ricochet. If anything rebounds from the Butts all shooting should stop and the Senior Range Officer will assess the situation before shooting re-commences.
- If shooting on the inside range on your own, do not lock the door to the range.
- The Range door should be locked if 2 or more people are shooting.
- Only Targets provided by WRPC can be used. Exceptions are allowed if the Duty Officer approves in advance.

### Misfire Procedure:

- Occasionally you will experience something called a misfire. This is an event where you have pulled the trigger, but the gun has not fired.
- There are several reasons for this but the most common are, faulty ammunition, feed problems from the magazine, you have already fired all your ammunition and occasionally it can be a fault with the firearm you are using.

### What to do:

- Keep pointing the rifle in a safe direction – sometimes the primer (or fuse) can be delayed in going off.
- Count to 30 seconds.
- Remove the magazine from the rifle.
- Angle the rifle so the chamber is away from your face.



- Open the working parts.
  - Ensure the rifles chamber is clear before resuming.
  - If in doubt, leave your rifle pointing in a safe direction down range and raise your hand to alert the Range Officer. Never remove the rifle from the shooting point unless the RO has cleared it.
  - If all else fails, ask the Range Officer to alert the Duty Officer of a problem. The Duty Office will assume control and assess the situation.
  - Firearms cannot leave the firing point until safe.
- 
- Work out the cause of a misfire – inspect round – Has it got good strike on the primer – If yes, it is an ammo issue, if there is no sign of a strike then the rifle could have a problem – stop shooting and inspect the rifle for potential issues.

## Specific Rifle Operation – Ruger 10/22: Semi Auto Rifle

- This rifle is a Semi-automatic reloading rifle, meaning, it will automatically reload the next round after a shot is fired.
- Ensure the rifle is unloaded and the working parts are always open when not shooting on the firing point.



- Charging the magazine: A 0.22 Rimfire round can only be inserted into the magazine one way. The Magazine has an enlarged opening at the top. This allows the larger part of the 0.22 cartridge to be inserted, pushed down & pushed back at the same time.



There are two types of magazines available at WRPC - 10 shot rotatory magazine and 25 shot Banana Magazine:

- Loading is the same for both magazines.
- When the order to 'Charge the Magazine' is given
- Insert the rounds into the magazine.
- Allow the working part to close and apply the safety.
- Load the Magazine into the Rifle. (The Magazine has a dimple at the back of it. Push the Magazine into the magazine well of the rifle, you may hear and feel a 'Click' when it is in place).



- Releasing the Magazine: Either magazine can be released by pushing the magazine release forward, this allows the magazine to drop away.



- Ruger working parts: upon firing the last shot the working parts will remain forward.





To open the working parts:

1, Remove the magazine (as previously described)



2, pull the working part back and hold it there.



3, push the Working parts retainer back and up, hold this in place while you release the working parts



4, Ensure the working parts remains in the open position, if it goes all the way forward, restart the process from picture 2.



### Best Practice when shooting:

- When the RO says it is safe to start the detail,
- Apply the safety.



- If you can see red, the rifle is ready to fire – (safety is not applied)



- Charge your magazine.
- Release the working parts.
- Load the magazine into the rifle.
- Put the rifle into your shoulder and take aim. Keep your finger away from the Trigger.



- Aim the rifle at the target.
- Do not raise the rifle above your target.
- If you happy with the sight picture, you can push the safety in, pull the working parts back & release (Do not slide the working parts forward as this could cause a misfire).
- If you need to rest a loaded rifle during the detail, this is okay as long as you keep holding the rifle with the muzzle pointed in a safe direction (Down range) and you remove your finger from the trigger.



## Specific Rifle Operation – CZ 455: Bolt Action

- This rifle is a Bolt Action rifle, meaning, a round will load when the open working parts are closed. During the operation a round will be taken from the magazine and pushed into the chamber.
- Ensure the rifle is unloaded and the working parts are always open when not on the firing point (this is known as Proving the rifle).



- Loading: A 0.22 Rimfire case can only be inserted into the magazine one way. The Magazine has a notch opening at the top. This allows the larger part of the 0.22 cartridge to be inserted, pushed down & pushed back.





There are two types of CZ455 magazine available at WRPC:

- A 5 shot and a 10-shot magazine: When the order to load is given, the magazine can be loaded, then inserted while the rifle is on the shooting bench or in the shoulder, you may hear and feel a 'Click' when it is in place.
- Please note, the bolt should not be actioned until you are aiming the rifle at the target.



- Releasing the magazine: either magazine can be released by pulling the magazine release toward the back of the rifle, this allows the magazine to drop away.



- CZ Bolt: The bolt is actioned by sliding it forward and down to load a round, then the bolt should be lifted and pulled back to eject a spent case before sliding forward to pick up the next round.
- Remove bolt – depress trigger.





### Best Practice when shooting:

- When the RO says it is safe to do so, you may load your magazine and insert the magazine to the rifle.
- Do not push the bolt forward yet.
- Put the rifle into your shoulder and take aim. Keep your finger away from the Trigger.
- Aim the rifle at the target.
- Do not raise the rifle above your target.
- If you happy with the sight picture, you can push the bolt forward to load the rifle.



- If you need to rest a loaded rifle during the detail, this is okay as long as you keep holding the rifle with the muzzle pointed in a safe direction (Down range) and you remove your finger from the trigger.



## Specific Rifle Operation – Marlin 1897 0.38/0.357 Lever Action

- This rifle is a Lever Action rifle, meaning, a round will load when the Lever is pulled down & then pulled up to load a round.
- Ensure the rifle is unloaded and the working parts are always open when not on the firing point (this is known as Proving the rifle).



- WRPC uses .38 but the Marlin can use 0.357 magnum round too.
- Loading: A 0.38 Centre Fire Round can only be inserted into the Tube magazine one way.
- With the rifle on the shooting bench, close the working parts, push the round into the slot.
- Push the round from the front into the slot and push forward at the same time.
- Load subsequent rounds in the same way. The tube magazine is fixed and will take a maximum of 9 rounds.



- Apply the safety – release hammer then part cock back to half cock.

### Best Practice when shooting:

- When the RO says it is safe to do so, you may load the rifle.
- Do not open the working parts via the lever yet.
- Put the rifle into your shoulder and take aim. Keep your finger away from the Trigger.
- Aim the rifle at the target.
- Do not raise the rifle above your target.
- If you happy with the sight picture, you can load the rifle but pulling down on the lever and pulling up on the lever.



If you need to rest a loaded rifle during the detail, this is okay as long as you keep holding the rifle with the muzzle pointed in a safe direction (Down range) and you remove your finger from the trigger.



#### Checking the Marlin is clear of ammunition:

- Action the Lever – 3 times.
- Leave the lever in an open position.
- This will allow you to see the chamber is clear of ammunition.
- Ensure the rifles chamber is clear before resuming.

## Glossary of Shooting Terms

### A

- **Action:** The physical mechanism that manipulates cartridges and/or seals the breech. The term refers to the method in which cartridges are loaded, locked, and extracted from the mechanism. Actions are generally categorized by the type of mechanism used. A firearm action is technically not present on muzzleloaders as all loading is done by hand. The mechanism that fires a muzzle-loader is called the lock.
- **Ammunition or Ammo:** the projectile shot from a gun.

### B

- **Barrel:** A tube, usually metal, through which a projectile will travel before exiting toward the target.
- **Bipod:** A support device that is like a tripod or monopod, but with two legs.
- **Black Powder** also called gunpowder: a mixture of sulphur, charcoal, and potassium nitrate. It burns rapidly, producing a large volume of hot gas to power the projectile down a barrel.
- **Black-Powder Substitute:** A firearm propellant that is designed to reproduce the burning rate and propellant properties of black powder (making it safe for use in black-powder firearms), while providing advantages in one or more areas such as reduced smoke, reduced corrosion, reduced cost, or decreased sensitivity to unintentional ignition.
- **Blank:** A type of cartridge for a firearm that contains gunpowder but no bullet or shot. When fired, the blank makes a flash and an explosive sound (report). Blanks are often used for simulation (such as in historical re-enactments, theatre, and movie special effects), training, and for signalling (starting pistols for a race). Blank cartridges differ from dummy cartridges, which are used for training or function testing firearms; these contain no primer or gunpowder and are inert.
- **Blowback:** A system of operation for self-loading firearms that obtains power from the motion of the cartridge case as it is pushed to the rear by expanding gases created by the ignition of the powder charge. The Ruger 10/22 is an example of a blow back action.
- **Bolt action:** A type of firearm action in which the firearm's bolt is operated manually by the opening and closing of the breech (barrel) with a small handle. As the handle is operated, the bolt is unlocked, the breech is opened, the spent shell casing is withdrawn and ejected, the firing pin is cocked, and finally a new round/shell (if available) is placed into the breech and the bolt closed.
- **Bolt:** working part that moves back and forth to extract and load a cartridge
- **Boresight:** a very basic adjustments made to an optical firearm sight, or iron sights, to align the firearm barrel and sights. This method is usually used to pre-align the sights, which makes zeroing (zero drop at XX distance) much faster.
- **Brass:** The empty cartridge case.
- **Breach:** the area exposed by the working parts opening allowing the gun to load.
- **Breach Flag** – a plastic 'Flag' showing the breach is open and no-ammunition can be loaded.
- **Break-action or break barrel:** A gun whose barrel are hinged and rotate perpendicular to the bore axis to expose the breech and allow loading and unloading of ammunition.
- **Buffer:** component that reduces the velocity of recoiling parts (such as the bolt on a Ruger 10/22).
- **Button rifling:** Rifling that is formed by pulling a die made with reverse image of the rifling (the 'button') down the pre-drilled bore of a firearm barrel.

### C

- **Calibre:** the internal diameter of a firearm's barrel or a cartridge's bullet,
- **Carbine:** a shortened version of a rifle.



- Cartridge: the assembly consisting of a bullet, propellant, shell casing, and primer. When counting, it is referred to as a "round".
- Centrefire: a cartridge in which the primer is in the centre of the cartridge case head.
- Chamber: the portion of the barrel or firing cylinder in which the cartridge is inserted prior to being fired. Rifles and pistols generally have a single chamber in their barrels, while revolvers have multiple chambers in their cylinders and no chamber in their barrel.
- Chambering: inserting a round into the chamber, either manually or through the action of the weapon.
- Coriolis effect: Any object moving horizontally on or near the earth's surface is deflected slightly off course due to the spinning of the planet – only necessary to know on long range shooting of 1000yards plus.

## D

- Dry Fire: the practice of "firing" a firearm without ammunition. That is, to pull the trigger and allow the hammer or striker to drop on an empty chamber. This is good practice for trigger control.
- Dummy or practice round: A round of ammunition that is completely inert, i.e., contains no primer, propellant, or explosive charge. It is used to check weapon function and practice of trigger control.

## E

- Eye relief: For optics such as a rifle scope, eye relief is the distance from the eyepiece to the viewer's eye. For a shooter, eye relief is an important safety consideration. An optic with too short an eye relief can cut skin at the contact point between the optic and the shooter's eyebrow due to recoil.
- Extractor: A part in a firearm, normally part of the bolt, that helps to remove brass cases of fired ammunition after the ammunition has been shot or spent.

## F

- Falling block action (also known as a sliding-block action) is a single-shot firearm action in which a solid metal breechblock slides vertically in grooves cut into the breach of the rifle and actuated by a lever. In the top position, it locks and resists recoil while sealing the chamber. In the lower position, it leaves the chamber open so the shooter can load a cartridge from the rear (example: BSA Martini Action rifle).
- Fouling: The accumulation of unwanted material on solid surfaces. The fouling material can consist of either powder, lubrication residue, or bullet material such as lead or copper.

## G

- Grain: A grain is a very small unit of measurement, there are 437.5 grains in an ounce. This is used in shooting to measure the weight of a projectile head or powder charge.
- Gunpowder: see Black Powder.

## H

- Hang Fire: An unexpected delay between the triggering of a firearm and the ignition of the propellant. This failure was common in firearm actions that relied on open primer pans, due to the poor or inconsistent quality of the powder. Modern weapons are susceptible, particularly if the ammunition has been stored in an environment outside of the design specifications.
- Half-cock: This is where the hammer is partially but not completely cocked. Many firearms, particularly older firearms, had a notch cut into the hammer allowing half-cock, as this position would neither allow the gun to fire nor permit the hammer-mounted firing pin to



rest on a live percussion cap or cartridge. The purpose of the half-cock position used both for loading a firearm, and as a safety-mechanism.

- Hammer: The function of the hammer is to strike the firing pin in a firearm, which in turn detonates the impact-sensitive cartridge primer. The hammer of a firearm was given its name for both resemblance and functional similarity to the common tool.

## I

- Iron sights are a system of aligned markers used to assist in the aiming of a firearm. Iron sights are typically composed of two component sights, formed by metal blades: a rear sight mounted perpendicular to the line of sight and consisting of some form of notch (open sight) or aperture (closed sight); and a front sight that is a post, bead, or ring.

## J

- Jacket or jacketed bullets: A metal, usually copper, wrapped around a lead core to form a bullet head.

## K

- Keyhole or keyholing: Refers to the end-over-end tumbling of the bullet which will often leave an elongated or keyhole shaped hole in a paper target. This occurs when the bullet is insufficiently stabilised by the firearm's rifling.
- Kick: see recoil.

## L

- Lever-action is a type of firearm action with a lever that encircles the trigger guard area, (often including the trigger guard itself) to load fresh cartridges into the chamber of the barrel when the lever is worked.

## M

- Magazine: A magazine is an ammunition storage and feeding device within or attached to a repeating firearm. Magazines may be integral to the firearm (fixed) or removable (detachable). The magazine functions by moving the cartridges stored in the magazine into a position where they may be loaded into the chamber by the action of the firearm.
- Muzzle: The far end of the barrel from which the projectile exits.
- Muzzle brakes and recoil compensators: devices that are fitted to the muzzle of a firearm to redirect propellant gases with the effect of countering both recoil of the gun and unwanted rising of the barrel during rapid fire.
- Muzzle energy is the kinetic energy of a bullet as it is expelled from the muzzle of a firearm.
- Muzzle velocity is the speed at which a projectile leaves the muzzle of the gun.

## N

- NRA or National Rifle Association is one of the national sports bodies looking after shooting sports.
- NSRA or National Small-bore Rifle Association is one of the national sports bodies looking after shooting sports specifically for small-bore competition shooters.

## O

- Optical Sight or Scope: typically, a tube filled with lenses and a reticule fitted to a gun to enhance the accuracy.

## P

- Picatinny rail: a bracket used on some firearms to provide a standardized mounting platform.

- Plinking: Informal target shooting done at non-traditional targets such as tin cans, glass bottles, and balloons filled with water.
- POA: point of aim.
- POI: point of impact.
- Pump-action: A rifle or shotgun in which the handgrip can be pumped back and forth to eject a spent round of ammunition and to chamber a fresh one.

## Q

## R

- Receiver: the part of a firearm that houses the working parts.
- Recoil: The backward momentum of a gun when it is discharged.
- Red dot sight: device installed that allows quick acquisition of a target by tricking the eye to see a red dot on the target.
- Ricochet: is a rebound, bounce or skip off a surface, particularly in the case of a projectile.
- Rifling: Helical grooves in the barrel of a gun or firearm, which imparts a spin to a projectile around its long axis. This spin serves to gyroscopically stabilize the projectile, improving its aerodynamic stability and accuracy.
- Rimfire: A type of firearm cartridge that has the primer in a rim around the base of the cartridge.
- Round: a single cartridge.

## S

- Safety: A device used to help prevent the accidental discharge of a firearm, generally, when activated they disable the firing mechanism.
- Semi-Wadcutter or SWC: A type of all-purpose bullet commonly used in revolvers and lever action rifles; they are shaped like a cone with a flat point. The SWC design offers better external ballistics than the wadcutter, as its conical nose produces less drag than the flat cylinder.
- Shooting range: a specialized facility designed for firearms practice.
- Shooting sticks are portable Rifle mounts.
- Single-shot rifle: A firearm that holds only a single round of ammunition and must be reloaded after each shot.
- Slam-fire: a premature, unintended discharge of a firearm that occurs as a round is being loaded into the chamber.
- Sling: a type of strap or harness designed to allow an operator to carry a firearm on his/her person and/or aid in greater hit probability with that firearm by using the sling to steady the rifle.
- Squib load, also known as squib round, pop and no kick, or just squib: A firearms malfunction in which a fired projectile does not have enough force behind it to exit the barrel, and thus becomes stuck. Squib loads make the firearm unsafe to shoot unless the projectile can be removed.
- Stock: The part of a rifle or other firearm, to which the barrel and firing mechanism are attached, that is held against one's shoulder when firing the gun. The stock provides a means for the shooter to firmly support the device and easily aim it.
- Silencer, Suppressor, Sound Suppressor, Sound Moderator: A device attached to or part of the barrel of a firearm to reduce the amount of noise and flash generated by firing the gun.
- Smokeless Powder: Modern propellant for bullets. This powder has better consistency when fired and is more stable than Black Powder.

## T

- Telescopic stock or Collapsing stock: A stock on a firearm that can be pushed in to or fold in on itself to become more compact.

- Trigger: A mechanism that actuates the firing sequence of a firearm. Triggers almost universally consist of levers or buttons actuated by the index finger.

## U

## V

- Varmint rifle: A small-calibre firearm or high-powered air gun primarily used for varmint hunting.

## W

- Wad-cutter: A special-purpose bullet specially designed for shooting paper targets. A wad-cutter has a flat or nearly flat front that cuts a very clean hole through the paper target,
- Windage: The side-to-side adjustment of a sight, used to change the horizontal component of the aiming point.
- Working Parts: See 'Action'

## X

- X-Ring: a circle in the middle of a shooting target bullseye used to determine winners in event of a tie.

## Y

## Z

- Zero-in or Zeroing: The act of setting up a telescopic or other sighting system so that the point of impact of a bullet matches the sights at a specified distance.