

GUN SAFETY ON SHOOTING RANGES

GUN SAFETY ON TARGET SHOOTING RANGES

How the Sport of Shooting is Striving to Achieve a Perfect Gun Safety Record

By Gary Anderson, DCM Emeritus



CMP Competition Centers, like this one at Camp Perry, Ohio, host dozens of major events attended by thousands of junior and adult competitors every year. CMP Competition Centers have never had an injury-causing incident involving unsafe gun handling.

The CMP's responsibility to promote gun safety is prominently featured in its enabling legislation and in CMP Mission and Vision statements. The 1996 federal law that created the new CMP said, "*the functions of the CMP are to instruct citizens of the USA in marksmanship; and to promote practice and safety in the use of firearms.*"¹ The CMP Mission, as originally adopted by the CMP Board of Directors, is to "*Promote marksmanship through firearms training, safety, competitions, and youth programs.*" Likewise, the CMP Vision is "*To lead the nation in marksmanship excellence by providing safe, innovative programs with a focus on youth.*" Safety instruction and safety rules feature prominently in virtually every CMP program and publication.

In pursuit of that mission, the CMP has sought to develop and teach gun safety rules and range procedures that ensure the absolute safety of every youth and adult who participates in CMP marksmanship training and

competition programs. This ***On the Mark*** article presents a comprehensive review of these CMP procedures. Use this article as a safety review for program leaders, coaches, instructors, and parents. It can also be used as an instructional guide for new participants.

CMP Safety Goal

The CMP gun safety goal is: **ZERO GUN SAFETY INCIDENTS!** We established this goal for two reasons. First, it is achievable. The CMP believes that if established gun safety rules are followed, all safety incidents involving the use of guns can be prevented. Second, there are many people in this country who think guns are dangerous and believe (mistakenly) that even supervised target shooting is dangerous. Any gun safety incident has the potential to magnify that false image. The CMP wants all of its

¹36 USC, §40722.

program participants to be safe and the best way to ensure participant safety is to steadfastly follow and enforce all established safety rules in all CMP programs.

Shooting's Safety Record

We must start by recognizing that there was a time when rare injury-causing incidents did occur in training and competition programs affiliated with the CMP. In 2004, for example, there were four injury-causing incidents, including one fatality, in high school JROTC marksmanship programs. Gun safety has long been a priority in the CMP and the programs of its predecessor agency, the NBPRP,² but these incidents made it clear that gun safety rules and training had to get better. No gun safety incident that injures or that could injure another person is acceptable. The CMP partnered with the JROTC Commands to identify the most effective gun safety rules and teach them to JROTC cadets. We sought gun and range safety procedures that would eliminate the possibility of any safety incidents if they were implemented by all JROTC marksmanship programs. Since that fateful year, no further injury-causing incidents involving safe gun handling have occurred in those programs.

As a result of advances like these, organized target shooting has become one of the safest of all youth sports. Youth three-position air rifle practice and competition activities, with more than 250,000 annual youth participants, have now gone for nearly two decades without a single injury-causing incident involving the use of air rifles.

The National Matches take place over a six-week period every summer at Camp Perry, Ohio. A total of 4,000 competitors participate in competitions for eight different pistol and rifle disciplines where competitors fire nearly one million shots at distances from 10 meters to 1000 yards. There have been a few instances where competitors or armorers have been injured in gun explosions or while pulling targets in highpower rifle pits, but there has not been a single injury-causing incident involving the handling of guns in CMP championships or sanctioned competitions since the new CMP was created in 1996. Safety rules work; they protect program participants.

Fundamental Rules of Safe Gun Handling

Achieving zero safety incidents in CMP programs requires safe gun handling rules that ensure safety in all marksmanship training and competition conditions.

²National Board for the Promotion of Rifle Practice and its administrative agency, the Office of the Director of Civilian Marksmanship.



Strict range safety procedures followed in Bulls-eye Pistol target shooting have successfully overcome the safety challenges involved in handling pistols.

We also wanted rules that could be applied in other gun handling situations. Over past decades, the CMP has hosted or participated in several review sessions with gun safety experts. These sessions identified three “**Fundamental Rules of Safe Gun Handling**” that fulfill this requirement. These rules are keyed to three readily identifiable gun parts, **Muzzle-Action-Trigger**, that are easy to remember and serve as a mental safety check list.

Rule One: Always point gun muzzles in safe directions. Gun safety training must prepare a person to instinctively decide what is a safe direction. While carrying a gun or handling a gun in an instructional setting, that

FUNDAMENTAL RULES OF SAFE GUN HANDLING

1. MUZZLE. Always point gun muzzles in safe directions.

2. ACTION. Keep gun actions open and unloaded, with safety flags inserted, until preparation and firing is authorized by a Range Officer.

3. TRIGGER. Keep fingers off of triggers, until aiming and firing authorized by a Range Officer has begun.

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A lesson young Three-Position Air Rifle athletes have learned well is that the index finger must not be placed on the trigger until the gun is in position and being aimed at the target.

usually means pointing the gun up or down.

A cardinal rule is to never allow a gun muzzle to point at another person. On shooting ranges, gun muzzles must be pointed up or downrange towards the targets.

Rule Two: Keep gun actions open and unloaded, with safety flags inserted, until preparation and firing is authorized by a Range Officer. This rule requires visually checking the gun's chamber and magazine, if any, to see that it is unloaded. When guns are brought to a

target range, gun actions must be open, and if they are not already open, such as when they are removed from a gun case or pistol box, immediately opening them. The use of safety flags to demonstrate that guns are unloaded is now standard practice in all CMP shooting disciplines. On shooting ranges, a Range Officer is responsible for authorizing preparation periods, loading and firing.

Rule Three: Keep fingers off of triggers, until aiming and firing authorized by a Range Officer has begun. This rule applies in two separate situations, first, when taking a gun from its case or from someone else and second, when on the firing line while aiming and firing. When taking a gun, all fingers must remain outside of the trigger guard. There is no reason to place a finger on the trigger at this point. When handling guns, all fingers must remain outside of the trigger guard until a gun is on a firing line where a Range Officer has authorized preparation and firing. Even after safety flags are removed, the index finger should not come off of the trigger guard and move onto the trigger until the pistol or rifle is being held in a firing position and aiming at a target has begun.

Gun Handling Responsibility. Anyone who decides to take a gun for any reason, whether it is to shoot it, practice with it or simply look at it, is responsible for applying these three Rules of Safe Gun Handling before doing anything else with the gun. That means taking a gun with fingers outside of its trigger guard, pointing its muzzle in a safe direction and checking its action. If the gun action is not open, the person who takes that gun is responsible for opening the action and checking to make sure it's unloaded. And if you don't know how to do that, don't take the gun—get instruction first. If a succession of people had applied this safety procedure on the Alex Baldwin "Rust" movie set, that tragedy would not have happened.

Redundant Gun Safety Rules. It is important to understand how these fundamental safe gun handling rules work. If someone takes a gun and keeps their fingers off of the trigger, it's pretty difficult to have an unintended discharge even if the gun was loaded. But as soon as they take the gun, they must point it in a direction where an unintended discharge would cause no harm. With the muzzle pointed in a safe direction, attention must shift to the action. If the action is not open, open it. If the gun is loaded, unload it. Each of these safety steps adds another layer of protection. Safe gun handling rules are designed to be redundant so that if one step is overlooked the other steps will still ensure safety.

Mastering Gun Safety. One of the lessons learned in teaching gun safety is that safe gun handling must be

Safety Flags



practiced by handling real guns on real shooting ranges. There are gun safety rules to be learned and safety exams are used in many youth programs to determine whether participants know these rules well enough to move on to range firing. But to develop the muzzle awareness to instinctively know where a gun is pointed, to acquire the habit of keeping the index finger out of the trigger guard and to automatically check to see if gun actions are open and unloaded requires live practice. Mastering gun safety requires learning fundamental gun handling rules as well as actually practicing those rules.

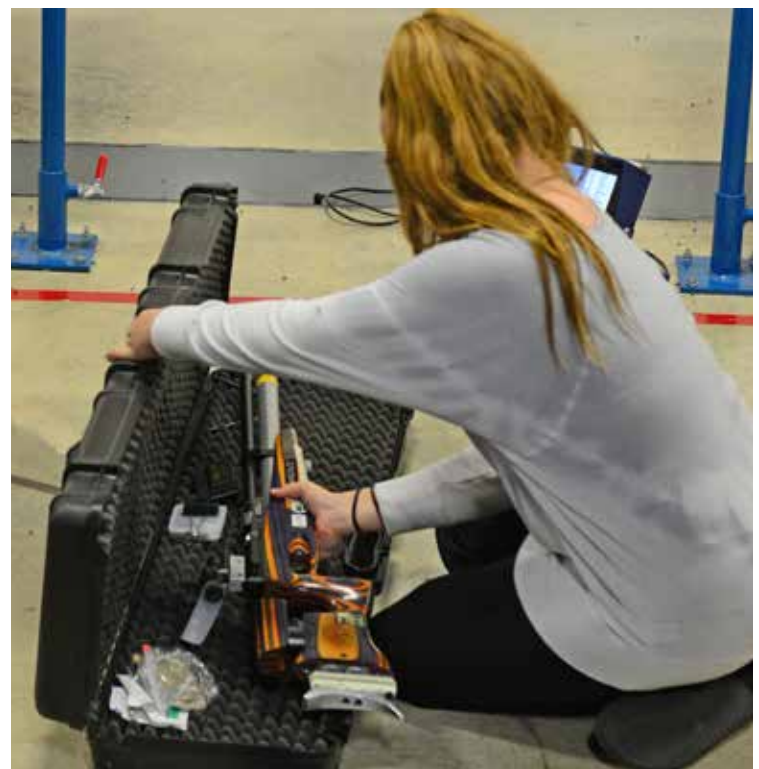
Safety Flags

Safety flags first came into play about 20 years ago. Until then, a gun was considered cleared when its action was open, its magazine, if any, was out or empty, and the chamber or bore was unloaded. These steps are usually sufficient to ensure safety, but there were a few problems with them. First, with air guns, it is impossible to visually confirm that there is no pellet in the barrel without looking into the barrel. Second, it's difficult for a Range Officer to confirm that a gun is unloaded without getting close enough to see the gun's chamber. Properly checking guns on a firing line took a long time. Third, Shooting needed a highly visual way to demonstrate to others on the range, including spectators, that the guns being handled there really were unloaded.

The first **safety flags** were called **open bolt indicators** (OBI). They inserted into rifle and pistol actions and demonstrated that actions were open, but OBIs didn't prove guns were unloaded. Then a probe to go in the chamber was added to OBIs to show that gun chambers were empty. Those were **empty chamber indicators** (ECI). The use of

ECIs in firearms quickly became mandatory in competition and training programs administered by the CMP, NRA, and most other shooting sport organizations. ECIs, however, did not solve the air gun problem. If there was a pellet in the bore, an ECI probe would just push it further down the barrel. A group of Three-Position Air Rifle coaches came up with the ingenious solution of using a length of bright-colored weed-trimmer cord that extended out of both ends of the barrel to prove that there was no pellet in the barrel. These were called **clear barrel indicators** (CBI). The alphabet soup of OBI/ECI/CBI is instantly recognized by competitors, but these letters mean nothing to a skeptical public. Hence the current effort to call all of these devices **safety flags**.

Today anyone who takes a pistol or rifle to a shooting range is expected to keep its action open and unloaded with a **safety flag** inserted until that gun is on a firing point and preparation and firing times are authorized. **Safety flags** make it easier for participants to follow safety rules, they make the work of Range Officers easier, and they clearly demonstrate to spectators how safe target shooting ranges are. An interesting corollary to this discussion about **safety flags** is that they have been so effective, they are now required on ranges all over the world. The International Shooting Sport Federation (ISSF) began requiring safety flags for all international competitions in 2013.



In Three-Position Air Rifle, rifles are removed from their cases and replaced into their cases on the firing line.

RULES FOR SAFETY FLAG USE

- All rifles and pistols on ranges must have **safety flags** inserted.
- **Safety flags** may only be removed on designated firing points during preparation and firing times, or when guns are cased or stored.
- **Safety flags** must be reinserted as soon as a firing series is completed.
- No rifle or pistol may be removed from a firing line unless it has a **safety flag** inserted and is checked by a Range Officer.

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Most pistols are transported and stored in pistol boxes. To ensure safety, pistol boxes must be closed whenever anyone goes down range to score or place targets.

Transporting Guns

Common practice today is to transport guns to and from ranges in gun cases or pistol boxes. These cases are usually used to store their guns when they are not at the range.

Bringing guns to ranges in cases or boxes is not universally required but some ranges do require all guns to be cased. There are rules governing the use of gun cases, but these rules vary according to the discipline so check the appropriate rulebook for details.

- There are soft gun cases, hard rifle cases and pistol boxes. Guns should be placed in cases so that when they are opened on a range, muzzles are pointed downrange.

- Since guns are stored in gun cases, safe practice at the end of a firing session is to remove **safety flags** (after guns are checked by a Range Officer), close gun actions, and release the firing mechanism before closing gun cases. Air guns also require expelling gas downrange (must be done on the firing line) when releasing the trigger before closing the gun case. Guns must remain unloaded when stored.

- When cased guns arrive at the range, the rules vary as to when they may be uncased. In some disciplines, guns are uncased in the ready or assembly area. As soon as a gun comes out of its case, its action must be opened, and a **safety flag** must be inserted.

- When pistols arrive at a range, they must remain in closed pistol boxes or cases until competitors are called to the line. Pistol boxes remain closed while competitors hang their targets or go downrange to score and then can be opened only after Range Officer authorization.

- In Three-Position Air Rifle shooting, rifles are removed from their cases on the firing line after Range Officer authorization.

- Before any guns may be removed from a firing line or placed in a gun case, they must be cleared and checked by a Range Officer.

Range Safety Procedures

At the CMP, great emphasis is placed on adopting range safety procedures that will prevent any injury-causing incidents from occurring during competition events. Range

procedures for the shooting disciplines dictate how each competition event is to be conducted. Specific safety rules are found in the different competition rulebooks. For example, in the **National Standard Three-Position Air Rifle Rules**, Rule 2.0 defines safety terms. In the **CMP Highpower Rifle Competition Rules**, Rule 3.6 defines “Range Safety Procedures.” Match Officials, coaches and competitors need to obtain the appropriate rulebook to study its specific safety rules.

Standard Range Commands. An important component of range safety procedures is the use of standard **range commands**. Commands like **LOAD**, **START** (or **COMMENCE FIRING**), **STOP** (or **CEASE FIRING**), **UNLOAD**, **IS THE LINE READY?** and **IS THE LINE CLEAR?** have very specific meanings. Only those commands may be used for their specific situations. If a Range Officer were to invent a different command to instruct competitors to stop firing, for example, this would cause confusion and create a possible safety hazard. Standard **range commands** facilitate teaching competitors how to respond during different competition stages.

Range Officer Scripts. Not only are **range commands** standardized, but the entire sequences of “**Range Officer Commands and Instructions**” for conducting the different courses of fire in each rulebook are standardized and printed in the back of every CMP rulebook. These standardized **Range Officer Scripts** ensure that all competitors know what to expect. Surprises can become safety hazards. Every Range Officer in a CMP-sanctioned competition is expected to use the proper **Range Officer Script** to conduct competition firing.

A Cleared Gun. Range safety procedures require firing series to start and end with **cleared** guns. A **cleared gun** is a gun with a 1) open action, 2) empty chamber, 3) magazine empty or removed, 4) safety flag inserted and 5) that has been checked by a Range Officer.

A Cleared Firing Line. Range safety procedures require firing lines to be **cleared** after each stage of fire, before competitors may go downrange to score or replace targets or remove equipment from the firing line. A **cleared firing line** is a firing line where all competitors have finished the firing series, and all guns have been cleared and checked by a Range Officer. On ranges where the next step is going downrange to score or replace targets, all **cleared** guns must be benched or grounded.

Going Downrange. In some disciplines like Bullseye Pistol, Rimfire Sporter Rifle and Three-Position



Something as simple as carrying guns on a range has its own safety procedure. Guns must be carried with muzzles up or down, with safety flags inserted.



Range Officers play a critical role in resolving problems that could become safety risks.

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COMMANDS FOR CONDUCTING A 60-SHOT AIR RIFLE/AIR PISTOL EVENT ON RANGES WITH ELECTRONIC TARGETS OR TARGET CARRIERS	
COMMANDS	INSTRUCTIONS
<i>Before the competition:</i>	<i>Before a competition, the Range Officer must prepare the range for firing. Competitors may not move their equipment to the firing line until the Range Officer calls them to the firing line.</i>
5:00 minutes before Start Time (when Preparation and Sighting time starts)	
WELCOME TO THE (Competition Name) RELAY NUMBER (Relay Number) YOU MAY MOVE YOUR (RIFLES/PISTOLS) AND EQUIPMENT TO THE FIRING LINE...YOUR PREPARATION AND SIGHTING TIME WILL BEGIN IN FIFTEEN MINUTES	<i>The Range Officer begins each relay by calling competitors to the firing line and welcoming them to the competition.</i> <i>After arriving at their firing points, competitors may set up their equipment, take their firing positions and do holding and aiming exercises but they may not remove safety flags or dry fire.</i>
<i>After 15:00 minutes:</i>	
PREPARATION AND SIGHTING TIME...START DURING THIS TIME, YOU WILL HAVE FIFTEEN MINUTES TO FIRE UNLIMITED SIGHTING SHOTS	<i>During the Preparation and Sighting time, competitors may continue preparing their positions, remove safety flags, close rifle actions and dry fire, load, and fire unlimited sighting shots.</i>
<i>After 15:00 minutes</i>	
PREPARATION AND SIGHTING TIME...STOP	

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This is the start of the Range Officer script for conducting a 60-shot Air Rifle or Air Pistol event. Shooting event scripts, which are published in all CMP Rulebooks, tell Range Officers everything they need to do or say to conduct that event safely and correctly.

Air Rifle, competitors need to go downrange to score or replace targets. No one is permitted to handle or touch any gun on the firing line while anyone is downrange.

Mechanical safeties. Many guns have mechanical safeties and some gun safety experts have insisted that for a gun to be considered **cleared**, its safety must also

be engaged. We rejected this idea for a couple of reasons. First, not all guns have mechanical safeties. Second, the most important safety on a shooting range is an open gun action with a **safety flag** inserted. We want competitors focusing on clearing their guns, not fiddling with mechanical safeties. Engaging a mechanical safety is not required to clear a gun.

Cleared vs. Safe. Terminology is important in range safety procedures. We use specific words to define precise functions and know why we use those terms. An example concerns how a gun that has been unloaded and placed down is described. An older concept described such a gun as “safe” and a firing line with “safe” guns as “the firing line is safe.” Competitors knew what this meant, but to outsiders saying a gun or shooting range is sometimes “safe” implies there are other times when they are “not safe.” Ranges are safe when rules are followed so range commands use the terms **cleared** and **not cleared** to indicate when guns on a firing line are unloaded with **safety flags** inserted.

Carry vs. Handle. Competition rules distinguish between **carrying** and **handling** guns. **Carrying** guns is moving them from one place to another. Guns can be carried anywhere behind the firing line as long as they are **cleared**. **Handling** a gun involves any act that would prepare it for firing: removing a safety flag, closing an action, shouldering a rifle, aiming a pistol, putting on a sling that is attached to a rifle, etc. **Handling** guns behind the firing line is not permitted. **Handling** guns is permitted on the firing line after competitors are called to the line, however, a second authorization to uncase guns is required in certain disciplines.

Preparation Periods. Even after competitors are called to a firing line, they are not permitted to remove **safety flags** and close gun actions for dry firing. Those acts are authorized only after the Range Officer announces the start of a **preparation period** when competitors can remove **safety flags** and dry fire in preparation for firing.



CMP Rules now require all competitors in highpower rifle and bulls-eye pistol events to wear eye and hearing protection while on firing lines.

Problems and Malfunctions. The risk of a gun safety incident occurring increases significantly when a competitor experiences a malfunction or problem. The specter of a competitor getting out of position with a loaded gun to seek assistance with a malfunction is scary. All new shooters are taught that if they have a problem or malfunction, that they must remain in position with the gun muzzle pointed downrange and raise their hand to call for a Range Officer. Range Officers are trained to manage these situations.

Eye and Hearing Protection. In rare and not always controllable circumstances, center-fire cartridges can blow up a gun and potentially injure the competitor. The cumulative effects of gun fire sounds can cause permanent hearing loss. To protect competitors against the possibility of these injuries, CMP rules require all competitors in highpower rifle and bulls-eye pistol events to wear eye and hearing protection while on a firing line. Participants in other disciplines are “urged” to take adequate precautions.

Trained Range Officers. The frequent mention of Range Officers in this article highlights the important roles they play in keeping range firing safe. Range Officers have specific responsibilities for checking competitors at critical points during competitions to verify that competitors are

complying with safety procedures. To enhance Range Officer competence for performing these tasks, the CMP implemented a **Range Officer Training Program**. Full information is posted on the CMP website at <https://thecmp.org/training-tech/range-officer-training-course/>. Anyone who serves or hopes to serve as a Range Officer is encouraged to take this training.

Shooting Safety—A Matter of Focus. We hope this article demonstrates how the CMP and the Shooting Sports are endeavoring to keep participants safe, with a realistic goal of preventing all gun safety incidents. To achieve this goal, all shooting sports participants must focus on safety. Shooting safety requires constant vigilance by everyone on the range. Shooting truly is one of the safest of all sports. Let’s strive to keep it perfectly safe!

About the Author

Gary Anderson, Director of Civilian Marksmanship Emeritus, retired as the full-time CMP Director at the end of 2009. He continues to work with the CMP as the senior marksmanship instructor. During his remarkable career, he won two Olympic gold medals, seven World Championships and 16 National Championships. He served as a Vice President of the International Shooting Sports Federation (ISSF) from 1990 through 2018. He is a former Nebraska State Senator and Past President of USA Shooting. He served as a Technical Delegate for Shooting during the 2012 and 2016 Olympic Games as well as for the 2014 and 2018 World Shooting Championships.

In 2012, the International Olympic Committee awarded Gary Anderson with the Olympic Order, its highest honor “for outstanding services to the Olympic Movement.”

In 2014, the CMP expanded its world-class air gun center at Camp Perry and renamed the facility the Gary Anderson CMP Competition Center, in honor of Anderson’s contributions to the organization and the marksmanship community.

