

## Striving for Great Standing Scores

# Striving for Great Standing Scores

By Gary Anderson, DCM Emeritus

### THE STANDING POSITION IS THE MAKER OF CHAMPIONS IN ALL POSITION RIFLE EVENTS



**BB Gun**



**Sporter  
Air Rifle**



**Precision  
Air Rifle**



**Rimfire  
Sporter**



**Smallbore  
3-Position**



**Highpower  
Rifle**

## DEFINITIONS OF TERMS USED IN THIS ARTICLE

- Hold.** *The magnitude of front sight movements over the aiming bull while attempting to fire a shot.*
- Canting.** *Rotating the rifle to the right or left to facilitate aiming or an improved head position and balance.*
- Body-Rifle System.** *Understanding the athlete's body and rifle as a single unit.*
- Visual Focus.** *The application of intense visual concentration on reducing sight picture movements while aiming.*
- Inner Position.** *The outer position is what is seen by others; the inner position is what athletes feel inside their bodies while attempting to fire shots.*
- Position Descriptions.** *All position descriptions in this article are given for right-handed athletes; for left-handed athletes, simply reverse right and left.*

A well-known rifle manufacturer advertises itself as the “Meistermacher,” the maker of champions. Having a well-designed, high performance rifle is indeed important for marksmanship success, but in position rifle shooting, the real maker of champions is the standing position. Standing is part of all of the position rifle events in which junior shooters regularly participate. No competitive rifle position shooter will become a real champion without shooting great standing position scores. By most measures, standing is the most important part of position rifle success because it is where the most points are lost and conversely where athletes stand to gain the most points by working to improve their scores.

The objective of this article is to examine the primary aspects of standing position performance to help coaches, junior athletes and their parents understand what must be done to become a great standing shooter. To achieve that objective, the athlete's position, shot technique and training methods must fulfill the following objectives:

1. **Position Stability.** The most important factor in shooting great standing scores is stability, how steady the athlete can hold the rifle while aiming and attempting to fire the shot. With today's standing position scores now rising nearly as high as prone and kneeling scores, athletes who want to become champions must strive to develop prone-like “holds” with their standing positions.

2. **Position Preparation.** A key to achieving a great standing position hold is disciplining oneself to take special steps and extra time to prepare the position and ensure its consistency before proceeding with the actual firing of the shot.

3. **Shot Technique.** Achieving a prone-like standing position hold is achievable, but great standing position holds are fragile, shorter and easily disturbed. Excellent shot technique that ensures consistently firing shots during times of best hold is necessary to achieve high standing scores.

4. **Training Methods.** Position stability and consistent shot technique can only be achieved by doing thousands of correct repetitions. How much an athlete trains and how well they train are major factors in determining how high an athlete's standing scores can climb.

This article is not about learning how to build an initial standing position. This article is about how to improve and perfect an established standing position. If you are new to position rifle shooting and need information about how to build a standing position, you can download and study an excellent CMP instructional video titled "Building the Standing Position" at <https://vimeo.com/392210961>. A brochure titled "Teaching Rifle Positions to New Shooters" can be downloaded from the CMP website at <https://thecmp.org/news-media/publications/>. A book published by the **CMP, Coaching Young Rifle Shooters\***, includes detailed instructions for beginning standing shooters.

## RECHECKING THE POSITION

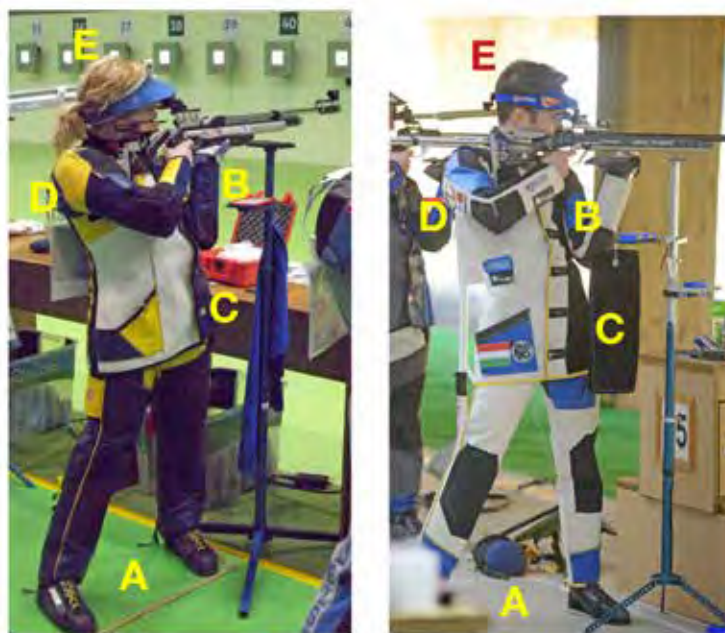
Stability in any position begins with having a structurally sound position. Thus, the first step in achieving great standing scores is to recheck the fundamental features of the position being used now to make sure it has no significant shortcomings. Standing position features to recheck are:

**A. Position Orientation.** In structurally sound standing positions, the feet and body must be turned 90 degrees away from the line of fire. The body must face 90 degrees away from the target while the left hip points at the target. Turning a little more than 90 degrees is OK (*95 degrees maximum*), but anything less than that should be corrected.

**B. Rifle Support.** There are three keys to achieving proper rifle support with the left hand and arm. a) The left arm must be down, resting on the side of the body with the muscles of the left arm and shoulder totally relaxed.

*\*Coaching Young Rifle Shooters was written by the author of this article, Gary Anderson, and published by the CMP. Copies can be ordered through the CMP E-Store "Bookstore" (From the CMP home page, click on "Sales," "E-Store" and "Bookstore.")*

## THE STANDING POSITION – FUNDAMENTAL FEATURES



**A. POSITION ORIENTATION.** The feet and body are turned 90 degrees from the line of fire.

**B. RIFLE SUPPORT.** The left arm rests on the left side with the elbow directly under the rifle. The left hand and wrist must be configured to raise the rifle to target level.

**C. LEG AND HIP CONFIGURATION.** Feet are shoulder width apart or slightly wider. The hips are aligned with the feet. Hips are level or the forward hip is slightly elevated.

**D. TORSO CONFIGURATION.** The upper body bends slightly to the right and rear.

**E. HEAD POSITION.** The head must be nearly erect. This is achieved by locating the butt-plate up in the shoulder or by lowering an adjustable butt-plate.

*The athletes in this illustration are Virginia Thrasher, USA, 2016 Olympic gold medalist, and Istvan Peni, Hungary, a World Cup gold medalist whose highest 50m standing international competition score is 395x400.*

If the left arm is not relaxed down on the left side, get it down. Getting the arm fully relaxed and down on the side may require using a higher hand-wrist position to raise the sights to eye level. b) The left elbow must rest on the side directly under the rifle. If the left elbow is not directly under the rifle after shouldering the rifle, lift the left arm and rifle up, push the left elbow further forward and lower it back down onto the side. Practice doing this until fixing the left elbow directly under the rifle becomes natural.

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c) The left hand and wrist must be configured so it raises the rifle to target level with the rear sight aperture aligned with the aiming eye. With precision rifles, a riser block or palm rest can be used to aid in raising the rifle to the proper height. With other rifles where such devices are not permitted (*i.e.*, *BB Gun, Sporter Air Rifle, Rimfire Sporter Rifle*), a hand and wrist configuration (*i.e.*, *resting the rifle on the hand with the wrist bent, on the fork of the hand, on the fist or on the thumb and split fingers*) must be selected to raise the rifle to aiming eye height. The hand-wrist position must also support the rifle at a height that allows the upper body to bend comfortably to the right and rear and which also keeps the upper body balanced over the feet.

**C. Leg and Hip Configuration.** Basic marksmanship instruction simply tells beginners to step to the line and take up their standing position with the body turned 90 degrees away from the target. At that point, nothing is said about how wide the stance should be or whether the hips should be level or shifted forward to elevate the forward hip. What is important in the beginning is to avoid a position with extremes. Most new shooters will start with the feet about shoulder width apart. That's OK, but if the feet are less than a foot apart or spread extremely wide, that should be corrected. Some shooters will naturally shift the hips forward to elevate the left hip. This usually results in placing a little more weight on the left (forward) leg.

### STANDING – LEG AND HIP CONFIGURATIONS



Beginning marksmen may start with either of these two basic leg and hip configurations. In the position on the left, the left hip is elevated. In the position on the right, the hips are level.

Those variations are also OK as long as extremes are avoided. At a later stage of development, how to precisely configure the legs and hips should be the focus of serious evaluation to determine which configuration is best for each individual athlete.

**D. Torso Configuration.** A key to standing position stability is having a balanced position where minimal muscle tension is applied to keep the body in that position. In standing, muscle tension in the lower back can be relieved by bending the upper body (torso) to the right to counterbalance the weight of the rifle, which is extended to the front (left) of the position. Especially with a heavier rifle, it is also necessary to bend back slightly to the rear to counterbalance the weight of the rifle, which is being held on the front of the body (see illustration below).

**E. Head Position.** The shooter's head position facilitates aiming and plays key roles in balancing the position and keeping it balanced. Establishing a good head position starts with fixing how the head is held so that it is reasonably erect. It does not have to be perfectly erect,

but it must be sufficiently erect to allow the aiming eye to comfortably look forward through the rear sight. The rifle must then be raised up so that the aiming eye is aligned with the rear sight aperture. This is achieved by adjusting the butt-plate location and configuration of the left (support) arm. Getting the rifle sights up to aiming eye level is easier with precision air and smallbore rifles that



*Note how this athlete's standing position bends to the rear to balance the body-rifle system over the feet. The athlete is 50m 3-position Junior World Record holder, Filip Nepejchal, Czech Rep.*

have adjustable butt-plates, adjustable cheek-pieces, higher sights and fore-end risers of varying sizes. The guiding principle here is to establish a reasonably erect head position first and then adjust the rifle to the head. If necessary, “canting” the rifle to bring the sights back to the aiming eye is better than tipping the head over to see through the sights (*note how the rifle is canted in the photo on the previous page*).

### Advanced Standing Position Details

After an athlete has established a structurally sound standing position and has been able to practice and shoot competitions with it, an important stage of development will be to consider critical standing position details and determine whether structural improvements are possible. Possible position improvements include:

1. **Vertical Support Column.** Standing position stability and balance is enhanced by having a position where the rifle, left elbow and left hip are aligned in a vertical line that runs from the rifle down to the balance points in the feet. This vertical column of support makes it possible to balance the “body-rifle system” over the balance point in the feet with minimum muscular effort. This vertical support column can only be achieved when the left elbow and left hip are directly under the rifle. This is a time to make sure the hips are squarely aligned over the feet. Any twisting in the upper body must be in the upper body, not in the legs.

2. **Leg and Hip Configuration.** Some experimenting may be necessary to find the best solutions for how wide the foot stance should be, and whether the hips should be kept level or shifted forward to elevate the forward hip. A good way to start considering alternatives is to study the photos of the positions used by champion junior and senior athletes included in this article.

3. **Relaxed Left Arm and Shoulder.** Muscle tension in the left arm and shoulder as they support the rifle can cause hold movements. Minimizing those movements is achieved by developing the ability to relax the left arm and shoulder muscles. An effective way to do this is to focus attention on those muscles while breathing and bringing the rifle down onto the target. Each time the lungs exhale, tell those muscles to “let-go-relax.”

4. **Position Balance.** Muscle tensions required to keep the body-rifle system in position can also cause hold movements. Reducing those movements can be achieved by balancing the position so that only the minimum muscle



*This front view of a structurally sound standing position illustrates the vertical support column that aligns the rifle, left elbow, left hip and balance point on the feet.*

tension necessary to keep the body-rifle system balanced over the position balance points is applied (*see diagram on next page*). Depending upon the leg and hip configuration used by an athlete, the balance point for the entire position will be centered between the feet or shifted somewhat forward towards the target. The weight that falls on each foot is normally shifted just slightly forward of being perfectly balanced.

5. **Right Arm and Hand Position.** The purpose of the right arm and hand is to place the right hand and index finger in the proper position to press the trigger directly to the rear. Great standing athletes have adopted a variety of right arm positions with some dropping the arm down almost to the side while others lift it up so the upper arm is nearly horizontal. The one common feature that all right arm positions have is that they keep the forearm and wrist straight. Hand tension on the pistol grip varies according to the discipline. Precision air rifle and smallbore rifle shooters who usually use triggers in the three- or four-ounce range can have very light hand grips. Highpower rifle shooters who must fire with 4.5-pound triggers and Rimfire Sporter shooters who have 3.0-pound triggers should use firm grasps on the pistol grip. They may also use the hand to pull the rifle back into the shoulder as a technique for controlling the rifle better when wind is blowing on the shooters' positions.

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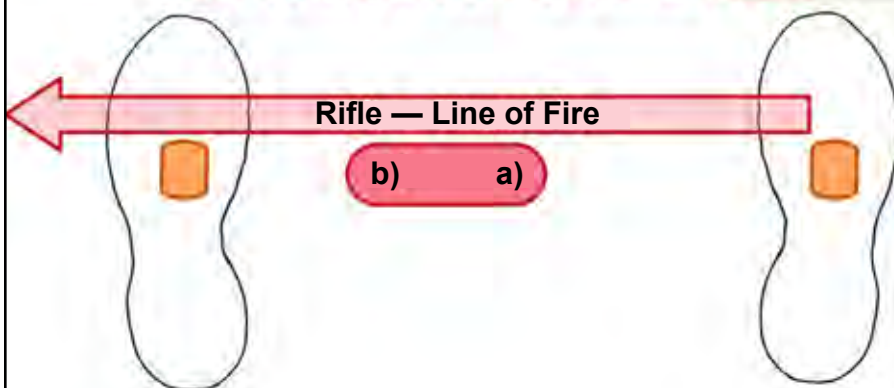
## JUNIOR CHAMPIONS' STANDING POSITIONS



These international junior champions display a variety of standing positions that have all been used to produce winning or world record scores. All positions incorporate 90-degree body turns, left elbow locations under their rifles and reasonably erect head positions, but other position features vary.

The athletes (l. to r.) are Aishwary TOMAR, India, 50m Junior World Record; Anna JANSSEN, Germany, 50m Junior World Record; Elavenil VALARIVAN, India, 10m World Cup Final gold medalist; Changhong ZHANG, China, Junior World Cup gold medalist.

## STANDING POSITION BALANCE



**[Red Oval]** = The balance point for the complete position and rifle should fall within this area. Position weight can be distributed 50%-50% (balance point at a) or as much as 70%-30% (balance point at b).

**[Orange Rectangle]** = The balance point for each foot. Position weight should be shifted slightly forward.

**6. Clothing Selection and Fit.** In rifle disciplines where athletes are permitted to wear special shooting jackets (highpower rifle) or shooting jackets and trousers (precision air rifle and smallbore rifle), athletes must devote attention to taking full advantage of this performance enhancing equipment. Indeed, in these disciplines, it is not possible to be competitive at the highest levels without having special shooting clothing. Strict regulations apply, particularly for precision air and smallbore rifle clothing, so no purchase should be made without first determining that it is legal. Shooting clothing manufacturers offer special fitting services and it is worthwhile to take advantage of this when obtaining jackets and trousers.

**7. Position Consistency.** After an athlete has carefully evaluated their standing position and has made any

necessary corrections or changes, there is one more aspect of firing in that position to consider. This is that once a standing position complies with the fundamental features of a structurally sound position, that same position must be used every time the athlete trains or competes. Athletes must avoid temptations to try different position variations just because they are having a bad day or because another athlete is firing great scores while using a different position variation. The surest path to improvement in any shooting position is performing consistent, correct repetitions of dry and live fire shots, in the same position and with the same shot technique.

## POSITION PREPARATION

A key to making consistently good shots in the standing position is taking extra time to prepare the position before starting to aim. This must be done for every shot. What is to be avoided here is simply throwing the rifle up into position and immediately starting to aim and fire the shot. Instead, the athlete should go through a step-by-step preparation routine that concludes with lowering the head to the cheek-piece and starting to aim. Careful position preparation takes an extra five or ten seconds to shoulder the rifle and prepare the position before starting to aim but doing this will make a big difference.

1. **Mental Preparation.** Position preparation begins with loading the rifle for the next shot. Most athletes do this

while resting the rifle on a rifle stand. It is a time for clearing the mind of any extraneous thoughts so that full attention is focused on preparing to fire another good shot.

2. **Consistent Butt-Plate Location.** When shouldering the rifle, the butt-plate must be placed in the same, precise location in the shoulder for each shot. Many advanced shooters visually check the butt-plate location while shouldering the rifle to be sure (*note how the athlete in Step 2 below is doing this*).

3. **Consistent Left Elbow Position.** Each time the rifle is shouldered, it is also critical to fix the left elbow in the same location. If the left elbow position changes, this changes how the position is balanced and typically results in bad shots to the left or right.

4. **Pre-Shot Checks.** An important pre-shot check is to be sure the position feels right. Many relaxation checks consider the left arm and shoulder—are they really relaxed? Other checks consider the muscles in the legs where consistent light tension is usually applied to maintain balance. A critical pre-shot check considers how the position is balanced. Advanced athletes know how correct balance must feel for their position and they discipline themselves to check their balance before they lower their eye to begin aiming, before each shot.

## POSITION PREPARATION — IN STEPS



**STEP 1 – loading and focusing attention on position preparation steps;**

**STEP 2 – fixing the butt-plate location in the shoulder;**

**STEP 3 – lifting the rifle into position and checking the left elbow location;**

**STEP 4 – checking and balancing the position before starting to fire.**

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*Yutian FU, China, is the 50m 3-position Junior Women World Record holder. She makes her pre-shot checks while pausing in this position.*

**5. Consistent Head Position.** If the location of the head on the cheek-piece changes, this changes the balance of the position. This, in turn, can have an adverse impact on hold stability. Athletes must control their technique for placing the head down on the cheek-piece so that the head is always in the same location with respect to the rear sight. Advanced technique must also pay attention to how much pressure is placed on the cheek-piece. Some will have light cheek pressure; some will have more cheek pressure. The key once again is doing this the same way, for each shot.

**6. Approach to Target.** When aiming at the target begins, the last inhale-exhale cycle is made as the aligned sights are brought onto the target. For standing, the approach to the target is usually from above, although the important thing is to always approach the target from the same direction and in the same way, for each shot.

### SHOT TECHNIQUE

Shot technique is a vital part of shooting great standing scores, but this is a detailed topic that merits full, separate consideration. Two previous *On the Mark* technical articles analyzed shot technique and should be studied by anyone seeking to learn more about shooting great standing scores. “*Developing Great Shot Technique, Part I*” and “*Developing Great Shot Technique, Part II*” can be downloaded at [https://thecmp.org/news-media/gary\\_otm/](https://thecmp.org/news-media/gary_otm/).

### TRAINING METHODS

Developing a structurally sound position combined with disciplined position preparation and correct shot technique is essential to shooting great standing scores. However, the most significant difference maker in developing superior hold stability and great shot technique in standing is training. The athlete’s work ethic—how hard he/she is willing to work—is what really makes someone into a great standing position shooter.

The effectiveness of an athlete’s training methods is measured by their scores, especially scores fired in competitions. There are two keys to how much progress will be gained from any training method. They are a) training volume and b) training integrity. Within limits that are seldom exceeded by any young athlete, the more training repetitions that are performed the more an athlete will improve. Training integrity looks at whether training repetitions are performed correctly and with full focus and attention to details. When training repetitions are performed hastily and with lackadaisical effort, scores will not improve and may even regress.

A key to standing position progress requires establishing priorities. Since more points can be gained by improving standing scores than by improving kneeling or prone scores, standing practice should have the highest priority. More training time should normally be dedicated to standing. As a general rule, training plans should allocate about 10 percent of available training time to prone, 30 percent to kneeling and 60 percent to standing.

Four different training methods are employed by athletes to steadily improve their standing position scores. In addition to a) live fire training on the range and b) dry fire training that can be done on the range or at home, two other training methods are especially effective in contributing to standing position improvement:

c) **Dry Holding.** Holding drills can be done on the range with an actual target but are more frequently done during home training by placing an aiming bull at an appropriate height on a wall. In this training method,



**Athlete warm-up areas at ISSF World Cup venues are popular places where both rifle and pistol shooters practice aiming exercises to prepare their positions for peak performance.**

*Doing aiming exercises without a target is an excellent training method for developing standing's inner position.*

athletes go through the initial steps of position preparation and shot technique and then attempt to hold the front sight as steady as possible over the bullseye or aiming point while focusing full attention on the sight picture. Holding repetitions should last about 10 to 12 seconds each. Holding drills offer effective ways to learn how to apply intense "visual focus" on reducing hold movements and to sense whether there are tensions or balance problems with the position that are preventing the hold from becoming steadier.

d) **Aiming Exercises.** Doing aiming exercises, with or without dry firing, on blank targets or with no target at all can often be an even better way to develop a feel for how the body is working to hold the rifle still. The work of the athlete's body in trying to hold the body-rifle system as still as possible is sometimes referred to as the "inner position." Without an aiming bull, attention can be shifted to this inner position and how the muscles and system balance are working to make the body feel like it is in calm, quiet control. Many rifle and pistol shooters now use aiming exercises as a training method as well as a way to warm up and prepare their bodies for optimal performance before they move to the range to begin shooting.

Developing the ability to shoot great standing scores in competitions begins with having a structurally sound physical position, but the real difference makers

are position preparation, shot technique and, most of all, training, how hard an athlete works.

### **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.

