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CMP Guide to Junior Pistol Shooting

Cover Photo: The athlete on the cover of the ***CMP Guide to Junior Pistol Shooting*** is Shuman Sanghera, from Great Falls, Virginia. Ms. Sanghera is one of the leading USA pistol juniors who have arisen in the last few years. In 2022, she won the junior Air Pistol event in the Camp Perry Open and placed third in the open Air Pistol event. She won the junior title and placed second in the open competition in the 2022 CMP National Air Pistol Championship. She also won USA Shooting's 2022 Junior Olympic Air Pistol Women event.

INTRODUCTION

A primary purpose of this **CMP Guide to Junior Pistol Shooting** is to promote greater participation by junior athletes in the discipline of target pistol shooting. The Guide seeks to do this by providing information and instruction to inspire and motivate youth, parents, and club leaders to become active in junior pistol programs. This Guide provides foundational knowledge for getting started in pistol shooting and gives detailed instructions for pistol marksmanship skills that young pistol athletes must master to become successful competitive pistol competitors.

Instructions in this Guide are based on pistol techniques practiced by the best pistol competitors in the world. Most of the photos in this Guide depict leading junior athletes who have already achieved notable successes in junior and open competitions. They provide proof that the best junior pistol athletes can compete at the highest national and international levels.

Credit for sources that were used to prepare this Guide must be given to former USA Shooting staff members, National Pistol Coach Sergey Luzov and Youth Programs Manager Mike Theimer, to an unpublished manuscript on pistol shooting by the Russian marksmanship professor Lev Vainsteyhn, to a book by former USSR coach A. A. Yur'yev titled **Competitive Marksmanship** that was published by the NRA in 1973 and to a series of recent works published in Germany. These German works included **Olympisches Pistolen Schiessen** by Heinz Reinkemeier and Gaby Buhlmann, **Ich Lerne Sportschiessen** by Katrin Barth and Beate Dreilich and **Ich Trainiere Sportschiessen**, also by Barth and Dreilich.

The Civilian Marksmanship Program (CMP) is a federally chartered non-profit corporation. The CMP mission is “*to promote firearm safety and marksmanship with an emphasis on youth.*” CMP marksmanship programs include national, regional, and local rifle and pistol competitions. The CMP is a leading national organization in providing rifle and pistol marksmanship instruction programs to train and certify instructors and publish training resources. This **CMP Guide to Junior Pistol Shooting** is published as part of the CMP’s effort to promote safety and marksmanship instruction for youth in the sport of shooting.

The CMP Guide to Junior Pistol Shooting

By Gary Anderson

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PART I – TARGET PISTOL SHOOTING

The first part of the Guide provides basic information about target pistol shooting and about programs and competitions that are available to youth who participate in pistol shooting.



More competition opportunities are now available to junior pistol athletes in the USA. Here, the eight top athletes are starting the Junior Air Pistol final during the May 2022 CMP Camp Perry Open.

Introduction to Target Pistol Shooting

Target pistol shooting offers many rewarding opportunities for youth who want to compete in the shooting sports. Several hundred local junior shooting organizations are now conducting pistol programs for youths. 4-H Shooting Sports Clubs offer target pistol instruction in most states in the USA. Every year about 40 states conduct State Junior Olympic Pistol Championships. Pistol is a collegiate club sport with programs in 90 colleges and universities. Five of the 15 Olympic shooting events are pistol events. The Civilian Marksmanship Program (CMP) and USA Shooting (USAS) both have junior pistol events in their National Championships. USAS also selects the best junior pistol athletes in the USA as National Junior Team members who participate in international junior competitions including World



The Leverett brothers, Henry (l.) and Jack (r.), are two of the USA's leading young pistol athletes. They are shown here during the 2018 Junior World Championship. Henry earned the prestigious U. S. International Distinguished Badge in 2022. Both Henry and Jack represented the USA in the 2021 Olympic Games in rapid-fire pistol and both are now members of the Ohio State University Pistol Team.



Katelyn Abeln is another outstanding young pistol athlete. She won a silver medal in the 2018 World Championship 25m Pistol Women Junior event at the age of 17. She now competes for the Ohio State University Pistol Team.

Junior Championships and International Shooting Sport Federation (ISSF) Junior World Cups.

Junior target pistol shooting also faces daunting challenges. Developing high performance pistol skills requires more training time and hard work than it takes to reach similar levels in rifle or shotgun shooting. Pistol athletes don't have performance aids to boost their scores like the supportive clothing rifle competitors wear. There are legal constraints in some states that prevent youth from shooting pistols even in target events. Rifle is a popular school sport, but pistol shooting is not. Many shooting clubs sponsor junior rifle programs, but only a few support junior pistol. While there are a growing number of pistol opportunities for juniors, there are still too few junior pistol programs and too few junior pistol athletes.

On the positive side, pistol shooting offers some appealing advantages. Equipment costs for a fully equipped pistol athlete are one-fourth or less of the costs for a fully equipped rifle or shotgun athlete. Pistol training is much easier to do than rifle or shotgun training because doing dry fire or air pistol practice at home is a simple matter of uncasing the pistol and starting to work. Coaches, juniors and their parents should also realize that one of the advantages of junior pistol participation is that with fewer participants, the chances for a young athlete who wants to work really hard to make the National Team or Olympic Team are actually better.

Classical Bulls-Eye Pistol and the Olympic Path

There are two fundamental types of target pistol shooting in the USA, classical bulls-eye pistol shooting and two-handed practical, defense, silhouette, or speed shooting.



The National Trophy Pistol Team Match during the annual National Matches features a Junior two-person team championship where juniors compete with 22 rimfire pistols. This team, the New Jersey State Junior Team Number One, with team members Tanya Chowdary (l.) and Angelina Chudoba (r.) won the 2022 competition. Chowdary and Chudoba were first and second respectively in the individual junior National Trophy Pistol Matches aggregate.

An insightful analogy for comparing the two is to compare soccer with American football. American football is popular in the USA and Canada. Soccer is popular all over the world. Two-handed pistol events are usually shot on steel or hit-miss targets and have competition events in the USA and a few other countries. Classical bulls-eye pistol shooting is shot on ring targets with the more difficult standing one-handed stance and has competitions all over the world.

This guide focuses on classical bulls-eye pistol shooting because this form of pistol shooting embraces the world's oldest, most challenging, and most revered traditions of target pistol marksmanship and it fully supports following the Olympic Path. The features that distinguish classical pistol shooting are:

- **SHOOTING WITH ONE HAND.** The classical pistol design concept is of a gun that is held and shot with one hand.
- **SHOOTING STANDING.** Shooting is done in the standing position while holding the pistol with one extended arm.
- **PRECISION SHOOTING.** Shooting is done on graduated bulls-eye or ring targets that award higher scores for greater precision.
- **SHOOTING WITH OPEN SIGHTS.** Accurate aiming with traditional open sights is an added challenge; optical aiming aids are not permitted.
- **SHOOTING AS A SPORT.** Classical pistol marksmanship skills are practiced strictly as a sport and not as military, police or personal defense skills.

A key distinction for bulls-eye pistol shooting is that it offers participants opportunities to follow the "Olympic Path," where they can pursue the supreme challenge in sports, the dream of competing in the Olympic Games. Pistol is one of three Olympic shooting disciplines and is practiced in more than 150 countries.

In the USA, the Olympic Path is a succession of training and competition programs that can lead young athletes from their first instruction through progressively more challenging steps that could ultimately lead to winning a place on USA National Teams that compete in World Cups, World Championships, and the Olympic Games. Junior pistol programs should give youths the possibility of following the Olympic Path.



A woman shooting a percussion pistol with a bent-arm position in a 1850s French shooting gallery.

Classical Pistol History

Flintlock target pistols with rear sights to facilitate aiming began to appear in the second half of the 18th century. 18th and 19th century target pistols were closely related to dueling pistols. Percussion dueling pistols and dueling practice on targets became forerunners of early forms of today's rapid-fire pistol events. Breech-loading single-shot pistols were developed in the late 19th century with target pistol features such as adjustable sights, carved grips, and finely adjustable triggers. These pistols were used in 50-meter and 50-yard precision pistol contests.

Pistol shooting in the USA attracted much early fame from exhibition shooting. In the 1880s, "Buffalo Bill" Cody and Annie Oakley brought attention to accurate pistol shooting through "Buffalo Bill's Wild West" exhibitions. Both Cody and Oakley accomplished their marksmanship feats while shooting pistols with one hand.



Abbie Leverett, younger sister to the Leverett brothers (p. 1), became just the eighth woman and second junior to earn the 22 Rimfire Pistol Distinguished Badge (# 171) in 2021.



These .44 cal. Gastinne-Rennet target dueling pistols were formerly owned and shot by Olympic Games founder Pierre de Coubertin. These pistols are now displayed in the German Shooting Museum in Coburg, Germany.

There is evidence that women enthusiastically participated in target pistol shooting as early as the mid-1800s, particularly in France and Germany. National shooting federations, however, did not actively encourage women's participation with women's pistol events until well after World War II. Change began in 1958 when the World Shooting Championship program first included a separate women's pistol event. The biggest change came in 1984 when a separate women's pistol event (25mm Pistol Women) was added to the Olympic program.

In the late 19th century, target pistol shooting became popular in many European countries including France. One famous early pistol competitor was French nobleman Baron Pierre de Coubertin, who was a seven-time French national pistol champion and founder of the Modern Olympic Games. When the first Modern Olympic Games began in 1896, de Coubertin supported the in-



JIN Jongoh, Korea, winner of four Olympic gold medals and three World Championships, has been the greatest precision pistol competitor in the world during the post-WWII period.

clusion of two rifle and three pistol shooting events on the program. The World Shooting Championships were inaugurated one year later in 1897 and a 50-meter “free pistol” event was added to that program in 1900. A 25m rapid-fire pistol event appeared in 1935. Center-fire pistol was added in 1947, the first women’s World Championship pistol event took place in 1958 and the first men’s and women’s air pistol events were in 1970. The Olympic program change that had the biggest impact on the worldwide growth of pistol shooting was the introduction of 10m air pistol events for men and women in 1988.

The National Board for the Promotion of Rifle Practice (predecessor to the CMP), the United States Revolver Association, the NRA and, most recently USAS, have governed and promoted USA national target pistol programs. The National Board awarded the first Distinguished Pistol Badges in 1903 and conducted the first National Trophy Pistol Matches in

1904. The Pistol National Match Course was standardized in the 1920s. The NRA inaugurated its National Pistol Championship in 1936. The United States Revolver Association, which was founded in 1900, was the USA’s early promoter of international and Olympic pistol events. After World War II that responsibility transferred to the NRA and in 1994 to USAS.

The greatest pistol competitors in modern Olympic and World Championship history were Ralf Schumann of Germany, who won three Olympic gold medals in rapid-fire pistol, and JIN Jongoh of Korea, who won four Olympic gold medals in 10m and 50m precision pistol events.

Pistol Events for Juniors

There are four bulls-eye pistol courses of fire that are most appropriate for junior pistol programs. These events include two types of shooting, precision, or slow-fire, and rapid-fire.

PISTOL EVENTS FOR JUNIORS

Event	Distances	Pistol	Type of Fire	Course of Fire
Air Pistol	10 meters	4.5mm air pistol	Precision	Instructional matches: 20 or 30 shots Competition: 60 shots
Sport Pistol	25m or 50 ft.	.22 rimfire semi-auto	Precision and Rapid-Fire	30 shots precision plus 30 shots rapid-fire <i>(Low-gun ready position with 3-sec. exposures)</i>
National Match Course	50 & 25 yds. or 50 ft.	.22 rimfire semi-auto	Precision, Timed and Rapid-Fire	30 shots: 10 shots slow-fire 2x5 shots in 20 sec. 2x5 shots in 10 sec. <i>(Low-gun ready position for timed and rapid-fire series)</i>
Precision Pistol	50m, 50 ft. or 25 yds.	.22 rimfire pistol	Precision	20, 30, 40 or 60 shots

Organizations that promote junior pistol need to decide which of these events to feature in their programs. Decisions should be based on these alternatives:

Air Pistol or Rimfire Pistol. If a shooting club has a 50-foot indoor range or a 25 and 50-yard outdoor range, they can shoot .22 cal. rimfire pistols. The best choice for most programs, however, is to start juniors with air pistols. 10-meter air pistol ranges can be set up in many locations, ammunition costs are about one-fifth of the cost of smallbore practice ammo and all-year training is possible.

Mixed or Separate Male and Female Events. Junior pistol competitions in most countries except the USA have separate junior male and junior female events. Separate junior female events could give more incentives for females to participate.

Ready Position for Timed and Rapid-Fire. When junior pistol athletes are ready to shoot Sport Pistol or National Match Course events, program leaders must decide whether to teach the low or high gun ready position for timed and rapid-fire. In the high gun ready position, which is used in CMP Match and Service Pistol events, as well as in NRA pistol matches, competitors start with loaded pistols aimed at the target. In the low gun start, competitors begin each series with loaded pistols down at a 45-degree angle. They can raise their

pistols up to the targets only after the targets turn or the firing time starts. The low gun start position is compatible with the Olympic Path; the high gun start position is not. The low gun start for timed and rapid-fire series is mandatory for CMP National Trophy Match 22 Rimfire Pistol events for juniors and for all 22 Rimfire Pistol Excellence-in-Competition Matches, where competitors can earn credit points that count towards the awarding of the Distinguished 22 Rimfire Pistol Badge. The low gun start is used in all USAS and collegiate events.

Metallic or Optical Sights.

Many adult pistol competitors shoot pistols with optical sights, but for juniors, this is not the way to start. Juniors should start with pistols that have traditional open, metallic sights. This is the way that supports the Olympic Path.

Advanced Junior Events. As the best junior athletes advance, progressive junior programs should also introduce them to advanced events. These events include 25m Rapid-Fire Pistol where five-shot series are fired at five different targets in times of eight, six and four seconds. Juniors who demonstrate an aptitude for high precision shooting should be encouraged to specialize in the 10m Air Pistol event.

Programs for Learning Pistol Shooting

Youth who want to learn target pistol shooting need a program that offers basic instruction and an introduction to competition shooting. Junior pistol instructional programs must take juniors who have never fired a pistol and teach them the skills that will allow them to complete basic courses of fire (see “Pistol Events for Juniors” above). Junior pistol programs that fulfill this objective and can start youth on the Olympic Path include:

Progressive Position Pistol Program. This grassroots youth air pistol program was developed by the USAS and the NRA “to introduce young pistol athletes to competitive pistol target shooting and give them a natural progression into the Junior Olympic competitions sponsored by USAS and the conventional pistol competitions sponsored by the NRA.” The program is no longer promoted or supported, but some junior pistol instructional programs still apply its principles. Since very few young pistol athletes begin with sufficient arm and shoulder strength to hold a pistol steady enough with one hand to fire accurate shots, this program takes new athletes through a developmental sequence:

- 1. Basic Supported.** Athletes hold pistols with one or two hands while sitting and supporting the butt of the pistol grip on a support placed on a table or



In the low-gun ready position, the pistol must be lowered to a 45-degree angle before the targets turn or time starts. The athlete shown here is from China.

bench. The maximum age was 12. This starter position allows young athletes who do not yet have sufficient arm strength to hold a pistol with one free arm to experience the first challenges of target pistol shooting.

2. **Standing Supported.** Athletes hold pistols with one hand while standing and supporting the pistol in a counterbalanced T-stand. The maximum age was 14. The first two stages of this program were usually combined with a weightlifting or resistance training regimen designed to build arm and shoulder strength.

3. **International Standing.** Athletes hold pistols with one hand and no support while standing. Athletes up to the age of 20 were eligible as long as they are able to safely hold and fire their pistols in this position.

Junior Pistol Clubs. Unfortunately, only a few CMP, NRA and USAS shooting clubs offer junior pistol programs. The fact that there are so few is one of the great weaknesses in the USA pistol program. There are approximately 2,000 clubs with junior rifle programs that could become **junior shooting clubs** by offering both rifle and pistol opportunities. There are also a lot more adult bulls-eye pistol clubs that could offer junior pistol programs. If USA pistol fortunes are going to improve, junior rifle clubs must consider becoming Junior shooting clubs and more senior pistol clubs must support junior pistol athletes. Junior pistol programs offered by the New Jersey and Texas State Rifle & Pistol Associations have proven to be productive exceptions to this urgent need.



There are young people all over the USA who want to become target pistol athletes. Youth who want to learn pistol shooting who live in areas where programs are available are fortunate.

4-H Shooting Sports Pistol Program. The National 4-H Shooting Sports Program has a long history of supporting youth pistol shooting at the grassroots level. 4-H wants its members to have a variety of shooting sports experiences; target pistol shooting is one of them. The 4-H program now primarily utilizes their version of the PPP progression and offers instructor training courses to certify shooting sports instructors to teach pistol marksmanship in local 4-H Shooting Sports clubs. The annual 4-H Shooting Sports National Championships have events for both air pistol and .22 pistol.

Individual Junior Pistol Athletes. There are youth all over the USA who want to become target pistol athletes. Their problem is they don't live in communities where there are 4-H, junior pistol club or other pistol programs. Until this dearth of local opportunities improves dramatically, one possible source of young pistol athletes will continue to be individual juniors and their parents who are willing to learn and practice pistol shooting on their own. To do this, it takes a parent-child team that wants to get involved in a challenging sport. Then they will need an air pistol, a place at home where a 10m range can be set up and good basic instruction. That instruction can start when both the parent and child study this guide. It is possible to learn pistol skills while shooting and practicing alone. The highly successful young pistol athletes depicted on the cover and first pages of this guide are examples of how productive this parent-child team approach to junior pistol training can be.

Pistol Coach Training Courses. The NRA has a generalized coach training program (<https://coach.nra.org/>) that persons interested in coaching junior pistol athletes may find to be of some value. USA Shooting offers occasional advanced pistol coach training courses (<https://usashooting.org/get-involved/events/>). The CMP offers a Range Officer Training Course that similarly may be useful to individuals who want to be better prepared for leadership positions in junior pistol programs (<https://thecmp.org/training-tech/range-officer-training-course/>).

Junior Pistol Competitions

Junior pistol athletes must have good competition opportunities to measure their real progress and keep them motivated. The junior pistol competition situation in the USA is slowly improving and there are increasing numbers of local, regional, and national pistol competitions that are organized for juniors or that are suitable for juniors. Here are competitions that are appropriate for junior pistol participants.

Club Record Matches. The first competition experiences for most junior pistol athletes should be club record matches conducted by their own club leaders. Club record matches are usually for club members only. They are conducted like regular matches and should start with random squadding and use regular Range Officer commands, rulebook time limits and the full application of competition rules. Targets are scored and ranked, results are posted and recorded. Record matches are a great way for athletes who are new to competitions to learn how they are conducted and to gain confidence in their ability to perform when their scores count.

Junior Pistol Virtual Matches and Postals. Virtual matches allow two or more teams to shoot at the same time on their home ranges while comparing scores via an Internet connection and a shared results system. The Orion Results Center pioneered in the development of virtual matches that overcome many of the disadvantages of postals. Postals still involve shooting targets on home ranges and mailing them to someone who scores the targets and produces a results bulletin. Virtual matches use instant Internet communications that permit firing under shoulder-to-shoulder match conditions. Virtual matches or postals that can be fired on home ranges are a great way to get started in competitions or to find competitions when none are available locally. Junior pistol programs should consider the following program opportunities (see the chart for contact information):

- **Orion Monthly Virtual Air Pistol Match.** Clubs that use the Orion Scoring System can sign up to shoot in monthly 10m air pistol virtual matches for individuals and 3-member teams. The course of fire is 60 shots and there are categories for international standing, standing supported and basic supported.
- **Orion National Air Pistol League.** The National League is a team league, with each team composed of four or more members. Each team competes in 8 games over 10 weeks that take place in the January to April time frame. Each game lasts one week and is conducted virtually, meaning both teams compete on their home range. Additional information and resources are available at <https://www.national-leagues.com/air-pistol>.
- **CMP Aces Postal.** This quarterly postal offers air pistol events. Competitors can fire on electronic targets and submit score documentation or order targets from the CMP that must be shot and returned to the CMP for scoring with the Orion Scoring System.

State Junior Olympic Championships. USAS sanctions State Junior Olympic Pistol and 25m Sport Pistol championships, with separate junior men and junior women events. Approximately four-fifths of the states offer junior pistol athletes in their states shoulder-to-shoulder championships that also serve as qualifiers for the USAS National Junior Olympic Championship.

CMP 22 Rimfire Pistol EIC Matches. The CMP 22 Rimfire Pistol Distinguished Badge program now offers 125-150 CMP-sanctioned 22 Rimfire Pistol Excellence-in-Competition matches at ranges throughout the country every year. A 30-shot National Match Course is fired. These events are open to adults and juniors, but they are ideally suited for juniors because the 45-degree angle low gun ready position is required when starting timed and rapid-fire series. That makes these matches more relevant for junior athletes who also want to compete in USAS and collegiate shooting pistol matches.



WHERE TO FIND JUNIOR PISTOL COMPETITION INFORMATION:

- **Orion Monthly Virtual Matches**
<http://www.orionscoringsystem.com/orion/MonthlyVirtualMatches.aspx>
- **CMP Aces Postal**
<https://thecmp.org/youth/aces-postal/>
- **USA Shooting State Junior Olympic Championships**
<https://usashooting.org/get-involved/events/>
- **CMP 22 Rimfire Pistol EIC Matches**
<http://thecmp.org/competitions/cmp-pistol-program/>
- **CMP National Trophy Pistol Matches**
<https://thecmp.org/cmp-national-matches/national-trophy-pistol-matches/>
- **CMP National Air Pistol Championship**
<https://thecmp.org/cmp-national-matches/air-gun-national-matches/>
- **National Junior Olympic Pistol Championship**
<http://www.usashooting.org/7-events/njosc>
- **USA Shooting National Championship Junior Events**
<http://www.usashooting.org/7-events/match-information>

National Junior Pistol Championships

Junior pistol athletes who qualify for higher level championships or who are placing high in local and regional competitions will want to focus their training on preparing for major national competitions that often are restricted to athletes who qualify or who are performing at the highest levels among junior pistol athletes.

CMP National Trophy Junior Events. The CMP National Trophy Pistol Matches conducted during the National Matches at Camp Perry offer three junior pistol events. They are fired with .22 caliber rimfire pistols and require low gun ready positions (arm down at 45-degree angle) to start timed and rapid-fire series. The Junior President's Pistol Match features a 40-shot course while the Junior National Trophy Pistol Individual course is 30 shots. The third event is a two-person team match where both team members fire the 30-shot National Match Course.

Winning athletes during the 2022 CMP National Trophy Matches Junior Events were (top to bottom): Abbie Leverett, Georgia, National Trophy Individual; Charisma Owen, Texas, President's Match; and Tanya Chowdary, New Jersey, National Trophy Match Aggregate. The author Gary Anderson was the award presenter.





The USA Junior Pistol Team that competed in the 2014 ISSF Junior World Cup in Suhl, Germany. Members are (l. to r.) Team Coach In Kim, Irina Andrianova, Darian Shenk, Lydia Paterson, Brian Kim and Alex Chichkov. The USA 10m Air Pistol Women Junior Team won a silver medal in the team competition.

National Junior Olympic Championship. Young athletes must qualify to advance to this Championship through State Junior Olympic Championships that are sanctioned by USAS. Junior Olympic pistol events include air pistol and 25m sport pistol events for men and women juniors and 25m rapid-fire pistol for men juniors. State qualifying takes place early in the year with the National Junior Olympic Championships taking place at the U. S. Olympic Shooting Center in Colorado Springs in the summer.

CMP National Air Gun Championship. The CMP inaugurated a new National Air Rifle and Air Pistol Championship in 2022 that takes place during the annual National Matches at Camp Perry, Ohio. The Air Pistol Championship is a two-day competition with a 60-shot event each day and an elimination final on the second day. There are separate open and junior titles, plus team events.

USAS National Championships and Team Trials. For the very best junior pistol athletes, there are the USAS National Championships and National Team Trials. These competitions select juniors to become members of the National Junior Team. Junior pistol athletes who will represent the USA in ISSF Junior Cups and the ISSF Junior World Championships are selected from this team.



Athletes from Asian countries have been the most successful athletes in recent international junior pistol championships. The winning teams in this 2018 World Junior Championship 25m Pistol Men Junior Team event are from India (1st), China (2nd) and Korea (3rd).

The Best Pistols for New Athletes

Juniors should start with air pistols, if possible, or with .22 rimfire pistols. Center-fire pistols are not appropriate for junior pistol instruction. Getting interested juniors to try pistol shooting is greatly facilitated if clubs have loaner pistols for new athletes. The best pistols for beginning juniors have these features:

- **Caliber.** 4.5 mm compressed air pistols are best, although single stroke pneumatic pistols can be used to get started. .22 rimfire pistols can be semi-autos (recommended) or revolvers.
- **Sights.** Junior pistols must have metallic square-notch rear sights and square-top post front sights. Rear sights must be adjustable for elevation and windage.
- **Weight.** The ideal weight for a junior pistol is 700-850 grams (25-30 ounces).
- **Trigger.** Air pistols must have a minimum trigger weight of 500 grams (1.1 pounds). .22 rimfire pistols should have a minimum trigger weight of 1000 g (2.2 lbs). The CMP and NRA require minimum trigger weights of 2.0 pounds, but since USAS rules require 1000 g/2.2 lbs., it is best to have trigger pulls that measure at least 2.2 lbs.
- **Grips.** Pistols used to instruct new athletes often have symmetrical grips without thumb and heel rests so they can be used by right or left-handed competitors. Pistols brought by individual juniors may have asymmetrical grips with thumb and heel rests. These grips need to be adjusted or fitted to the competitor's hand.

Finding a starter pistol suitable for juniors at an affordable price can be a challenge. There are a few pneumatic (single-stroke cocking) and compressed air (pre-charged cylinders) pistols available for one-thousand dollars or less that are suitable for initial 10m target work. All have limitations, however. The Gamo Compact Target Pistol is a pneumatic that sells for about \$250 and weighs an acceptable 885 g. The Air Arms Alpha Proj is a reasonable quality compressed air target pistol that costs about \$1000 in the USA and weighs 880 g. At the high end of this class of target air pistols are the Hammerli AP20 and the Pardini KID. The AP20 is powered by compressed air, weighs 870 g and sells for \$850. A truly ideal junior air pistol may be the Pardini KID. This high-quality compressed air pistol has adjustable, ambidextrous grips and weighs just 700 g. It retails for about \$1,250. *Note: All prices quoted here are prices that prevailed at the time of publication.*



The Pardini KID air pistol weighs just 700 g and retails for about \$1000.

Juniors or clubs that can afford higher priced air pistols should also consider the “compact” versions of Steyr, Walther or Feinwerkbau high performance air pistols that weigh 850 g to 950 g and are designed especially for juniors and women. Some of these pistols retail for around \$1,500.



The Walther LP500 is one of the lighter weight (910 g) high precision air pistols available from European manufacturers that are suitable for juniors.

There are many .22 rimfire target pistols available both used and new, although most are on the heavy side for young athletes. The selection includes Ruger, Smith & Wesson and High Standard target pistols made in the USA plus a full array of imports from Pardini, Walther, Feinwerkbau and other manufacturers.



Almost no additional equipment is required for pistol shooting, but hearing and eye protection are required when firing .22 cal. pistols.

One of the great things about pistol shooting is that besides a suitable target pistol, other special clothing and equipment are not required. The only additional items to take to the range are ammunition (training grade 4.5mm pellets or 22 rimfire standard velocity ammunition), a small screwdriver to adjust sights, hearing protection (ear plugs or ear muffs), eye protection, and a small gun case or box for transporting the pistol to and from the range.

Gun and Range Safety

Every new shooting sports participant must begin with safety training. Safety instruction does not need to be long or complicated, but it must emphasize the fundamental rules of gun safety and the mandatory use of safety flags. Safety rules that must be stressed are:

- 1. Muzzle Control.** When handling a pistol, the muzzle must always be pointed in a safe direction. If a pistol is carried outside of a case or pistol box, the muzzle should be pointed up or down. On the range, muzzles must always remain pointed downrange towards the targets. Developing muzzle awareness is especially important for new pistol athletes because short pistol barrels make them easier to unintentionally misdirect.



When handling a pistol on a target range, it is especially important to keep the pistol muzzle pointed downrange at all times.

- 2. Actions Open.** A second fundamental safety rule is that pistol actions must remain open at all times when pistols are present and uncased on shooting ranges. Pistol actions can be closed for dry firing or loading and firing only on an assigned firing point during preparation and shooting times or in a designated dry fire area. Pistols can only be loaded after the Range Officer gives the commands **LOAD** and **START** for a sighting or match firing period. When pistols are returned to secure storage in an armory or home, actions may be closed and firing pins released.
- 3. Mandatory Use of Safety Flags.** To confirm and demonstrate that pistols are unloaded, safety flags must remain inserted in pistols at all times when they are on a range. Safety flags may only be removed when a pistol is on an assigned firing point and the Range Officer has started a preparation, sighting, or match firing time. A pistol cannot be removed from a firing point until a Range Officer confirms that its action is open, magazine removed (.22 rimfire pistol) and safety flag inserted. Many clubs and ranges require that pistols be brought to the firing line in cases or pistol boxes that can only be opened after a Range Officer gives instructions to do so. Similarly, pistols must be returned to their cases or boxes in a cleared condition before they may be removed from the firing line.



Safety lines or CBIs (clear barrel indicators) that extend out of both ends of the barrel must be used as safety flags in air pistols.

How to Clear, Load and Unload the Pistol

Before a new athlete can get started, they must know how to clear, load and unload the particular pistol that will be used. The basics for clearing, loading and unloading pistols are:

- 1. Clearing the Pistol.** Pistols must be kept in a cleared condition anytime they are on a shooting range, except during authorized preparation, preparation and sighting or match firing times. The first step in clearing a pistol is to open its action. Air pistols typically have a lever or bolt that opens and closes the action. Lift or pull this device to open the action. To open a .22 rimfire semi-auto pistol, pull the slide to the rear and lock it open. Clearing or unloading .22 rimfire semi-auto pistols also requires removing their magazines. The final step in clearing a pistol is to visually check the chamber or breech end of the barrel to be sure it is unloaded and then to insert a safety flag to confirm its unloaded condition.



Cleared semi-auto pistol with slide back, magazine removed, chamber empty and safety flag inserted.

- 2. Loading the Pistol.** Loading an air pistol is done by placing a pellet on the loading port or inserting it in the breech end of

the barrel and closing the action. When .22 rimfire semi-auto pistols are first used by beginners, they should be fired by loading only one shot at a time (single-loading). In some pistols, the breech end of the barrel is exposed so that single loading can be done by inserting a cartridge in the chamber and releasing the slide catch. For pistols where the chamber is not readily accessible, loading must be done from a magazine. Do this by placing one round only in the magazine; insert the magazine in the pistol and cycle or release the slide to chamber the round. Semi-auto pistols are normally loaded from magazines containing five rounds, but this should not be attempted until the new athlete demonstrates a consistent ability to handle the pistol safely while loading one round at a time.

- 3. Unloading the Pistol.** Unloading an air pistol presents a unique challenge because after a pellet is inserted in the barrel, it can only be removed by firing or pushing the pellet out with a cleaning rod inserted in the muzzle. The proper way to unload an air pistol on a target range is to inform a Range Officer that there is a loaded pistol. The Range Officer should then bring a PDC (pellet discharge container) to the firing point and direct the athlete to fire the pistol into the PDC. Then the pistol action can be opened and a safety flag inserted. Unload rimfire semi-auto pistols by first removing the magazine, then pulling the slide to the rear, locking it open and inserting a safety flag.



The best method for unloading a loaded air pistol is to use a PDC (pellet discharge container). Most are homemade by filling a can with a pellet stopping filler and mounting it on a stick.

Safe Range Procedures

Whether a young athlete is participating in one of their first club practice sessions or in their first competition, it is essential to have an understanding of safe range procedures and the actions that are expected of every participant when they are on a shooting range.

The Range Officer. All range firing activities must be supervised by a Range Officer (RO). Instructions and commands given by the RO must be followed exactly. The RO's first responsibility is safety, making sure everything done on the range follows strict safety rules and procedures. The RO's second responsibility is to conduct the firing activity or competition according to the rules.

Squadding. Competitors are normally assigned to relays (when there are more competitors than firing points) and specific firing points. This is called squadding. In competitions, relay and firing point assignments are usually decided by random draws.

Call to the Line. Competitors are instructed to move their pistols to their firing points when the RO calls them to the firing line. In most ranges, pistols must be kept in a box or case until they are brought to the firing line. The RO then gives instructions to uncase the pistols.

Preparation Period. After competitors bring their pistols to the firing line and uncase them, the RO will start a preparation period, usually with the command **“YOUR PREPARATION PERIOD STARTS NOW.”** The length of the preparation period varies according to the rules. It is permitted to close pistol actions and dry fire during preparation periods. Air powered pistols can only be dry fired if they have a dry fire mechanism. Discharging air during a preparation period is not permitted.

The Start of Firing. After the preparation period ends, the RO will explain the stage of fire and give the command **“LOAD.”** It is especially important that no pellet, cartridge or loaded magazine contact the pistol until after the **“LOAD”** command is given. The RO will ask if all firers are **“READY”** and, after being sure everyone is safely loaded, give the command **“START”** or **“COMMENCE FIRING.”** Commands vary according to the rules.

Completion of Firing. After the **“START”** command, competitors must complete that stage of fire within the time limit. When competitors finish they must clear their pistols by opening actions, removing magazines (if applicable), inserting safety flags and placing pistols on the bench. At the end of the time limit the RO will command **“STOP”** or **“CEASE FIRING.”** When these commands are given, no further shots can be fired.

Leaving the Firing Line. Competitors may fire one or several stages of fire while they are on the firing line. After the last stage, they must clear their pistols and have them inspected by the RO. Competitors will then be instructed to case their cleared pistols and remove them from the firing line.

PART II – PISTOL TECHNIQUES AND TRAINING

Part II of this Guide presents detailed instructions regarding pistol techniques and training. This instruction tells how to shoot pistols in target events and how to train to develop the skills needed to be successful in them.

Right or Left-Handed Shooting. Every new athlete must decide whether to shoot with their right or left hand. Natural handedness, comparative arm strength and eye dominance are the deciding factors. Individuals who are naturally right or left handed usually develop greater arm and shoulder strength in their leading arm and in most cases should use that hand to hold the pistol. For a new competitor who cannot decide, doing an eye dominance check may help because aiming should, if possible, be done with the same eye as the arm that holds the pistol. A cross-dominant situation can also be solved by placing a strip of cardboard or translucent plastic in the headband or cap to block the non-aiming eye's view of the sights.

Supported Positions. The instructions in this Guide focus on teaching the classical one-handed pistol stance, but coaches and athletes who will be teaching or using supported positions can certainly apply the lessons described in this Guide in the supported positions. Basic supported position instruction must emphasize the grip with one or two hands, shot preparation with its double breathing technique and shot technique with correct sight alignment, sight picture, hold control and trigger control. Standing supported instruction must teach the same stance that is taught for the unsupported standing position except, of course, for placing the wrist on the counter-balanced support.

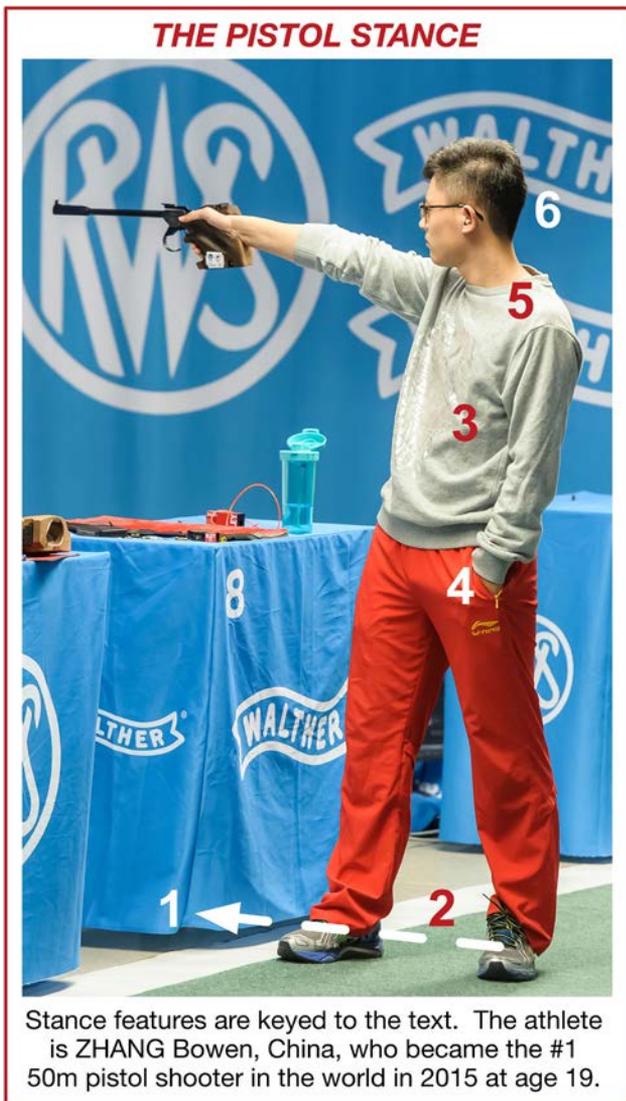
Pistol Stance and Grip

The stance or body position and how the pistol is gripped provide the foundation for firing accurate pistol shots. The proper shooting position and grip must be learned in the first stages of instruction.

The Pistol Stance. The body position in the classical one-handed pistol stance must be balanced and relaxed and structured so that the body and shooting arm provide optimal stability for the pistol and the strength endurance needed to fire a long series of accurate shots. An ideal pistol stance should feature the points described below and depicted in the illustration (Each stance feature corresponds to a number in the photo on the right.):

1. The feet and body are turned 85-90 degrees from the target.
2. The feet are spread shoulder width apart or slightly less. After the pistol is raised, body weight should be divided equally between the two feet
3. The body is erect with a moderate bend to the left to counter-balance the weight of the outstretched arm with the pistol.
4. The left hand is anchored in a pocket or belt so that the left hand, arm and shoulder can relax as much as possible.
5. The shoulders are turned slightly towards the target, but should remain level as the arm lifts the pistol up to the target.
6. The head is erect and relaxed as it turns to see the sights and target.

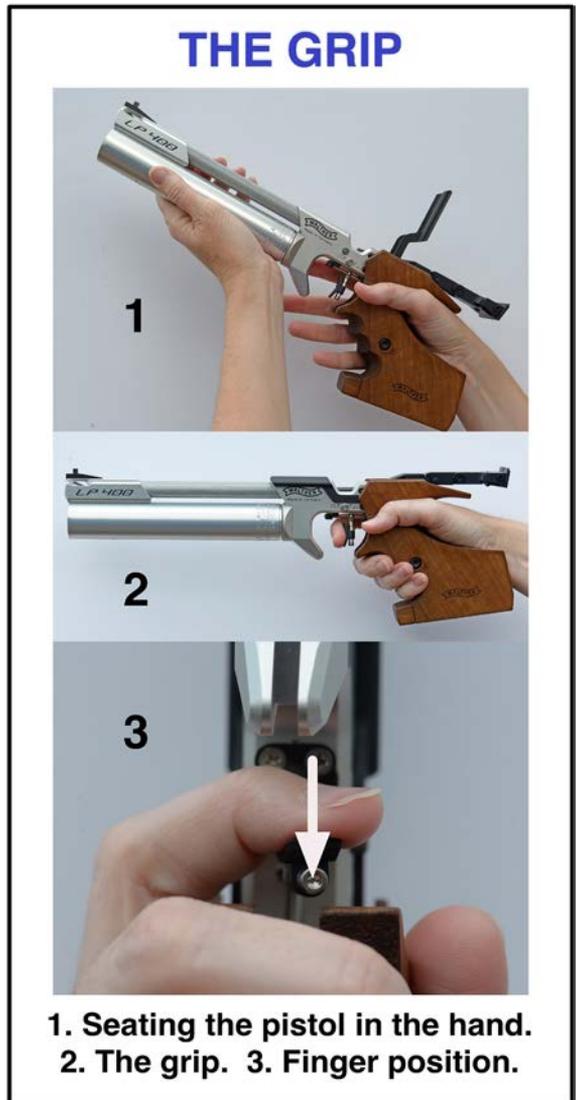
The Grip. The grip must facilitate pistol stability, free index finger interaction with the trigger and consistent recoil control.



Stance features are keyed to the text. The athlete is ZHANG Bowen, China, who became the #1 50m pistol shooter in the world in 2015 at age 19.

The features of an ideal grip are:

1. The pistol is seated in the “V” formed by the thumb and index finger. This is normally done by using the left hand to grasp the pistol and seat it in the right hand. The wrist remains straight as the hand holds the pistol. The thumb is a straight-forward extension of the arm.
2. The weight of the pistol rests primarily on the middle finger. Grip pressure or tension between the three fingers on the grip and base of the thumb may be light or moderate, but must always be the same. Some tensing of the thumb (downward pressure) helps to stabilize the wrist joint.
3. The position of the index finger is especially critical. The first and second sections of the finger must be able to move freely without contacting the grip. The point where the finger tip contacts the trigger must be selected so that trigger pressure is directly to the rear and not to the side.

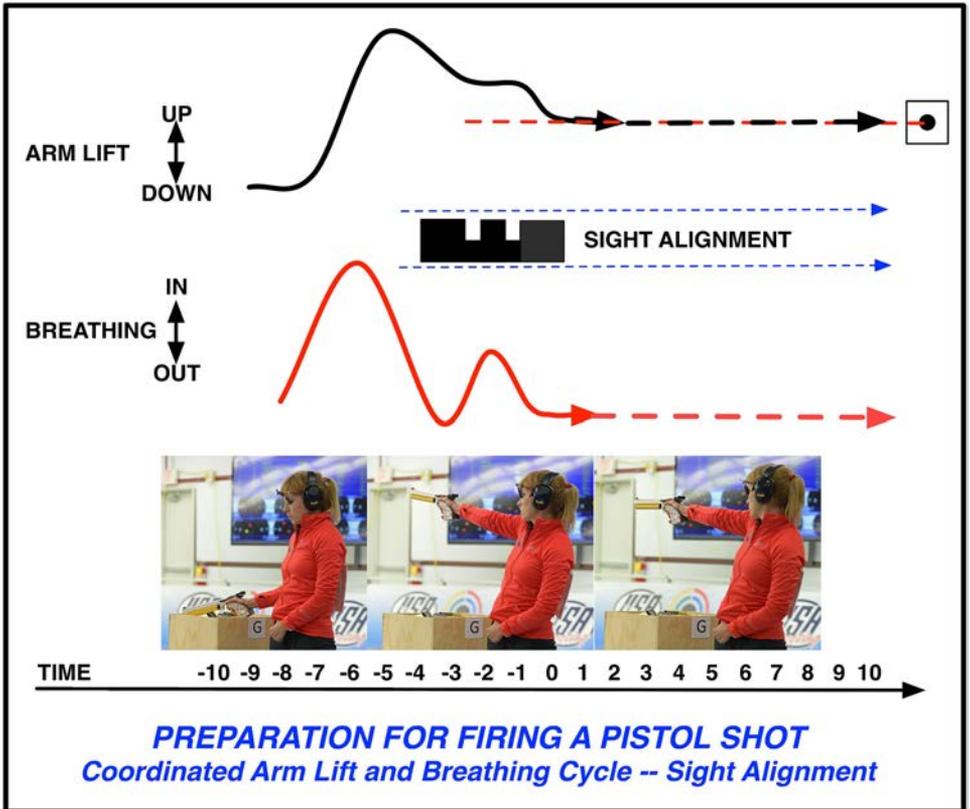


In pistol shooting the body stance and grip provide the sole support for the pistol, but having a correct stance and grip alone is not enough to attain high results. It is necessary to do extensive training with this stance and grip in order to develop the ability to hold the pistol as motionless as possible.

Preparation for Firing Precision Pistol Shots

Techniques for pistol shooting can be divided into shot technique for precision or slow-fire shots, where ample time is allowed to fire each shot, and shot technique for rapid-fire shots, which must be fired within very short time limits. Target pistol training must begin with learning shot technique for precision or

slow-fire shots. Only after a beginner masters this phase of shot technique and is sufficiently trained to produce good pistol scores should they advance to learning rapid-fire shot technique. This section of the CMP Guide for Junior Pistol Shooting describes correct pistol shot technique for precision stages of fire.



The athlete in the diagram is Olena Kostevych, Ukraine, Olympic gold medalist and one of the top-ranked women pistol competitors in the world.

The preparatory phase for firing precision pistol shots starts with a coordinated arm lift and breathing cycle that culminates in starting the approach down to the aiming area, aligning the sights and applying preliminary pressure to the trigger (taking up first stage and applying initial pressure to the second stage). The diagram (above) shows how these actions fit together. The diagram (below) shows the steps in the pistol arm lift. Here is a description of the actions involved in preparing to fire a precision pistol shot.

- 1. Cocking or Loading—Preparation.** The pistol normally remains in the hand (grip) while resting on the bench or table between shots. Cocking for dry firing or loading is done with the left hand, which is then returned to its anchor position in or on a pocket or belt. This is followed by a short pause to relax and refocus (See Arm Lift, Step 1).

2. Pistol Lift and Breathing Cycle. Lifting the arm and pistol to the target and initiating the breathing cycle must be done simultaneously and in coordination with each other. This step begins by extending or straightening the arm and elbow (See Arm Lift, Step 2). Then the athlete lifts the pistol up to a point above the target while simultaneously taking a deep breath by inhaling and exhaling (See Arm Lift, Step 3). The height of the arm lift may be quite high, as shown in the illustration, or it may lower, to a point only slightly above the target, but it must be the same for every shot.

3. Second Breath and Approach to Target. After exhaling the first deep breath, the athlete takes a second normal breath and lowers the pistol to the target (See Arm Lift, Step 4). While doing this, visual attention concentrates on the sights to align them. When the pistol is lowered and the sights are aligned, the athlete's index finger must also make contact with the trigger and begin to add pressure to it. The pistol with its aligned sights is then lowered to the aiming point to complete the sight picture (See Arm Lift, Step 5).

4. Sight Alignment. The sight alignment concept is simple; the front sight must be in the center of the rear sight notch with the top of the front sight aligned with the top of the rear sight. Maintaining precise sight alignment during the firing of the shot is especially critical in pistol shooting. Pistol competitors must focus primarily on the sights and

PISTOL ARM LIFT STEPS

1
**Preparation,
Focus, Relax**



2
**Arm
Extension**



3
**Arm Lift
with Deep
Breath**



4
**Lower Pistol
to 2nd Level
with 2nd Breath,
Align Sights**



5
**Exhale &
Lower to
Sight Picture**



The athlete in the diagram is JIN Jongoh, Korea, 4-time Olympic gold medalist.

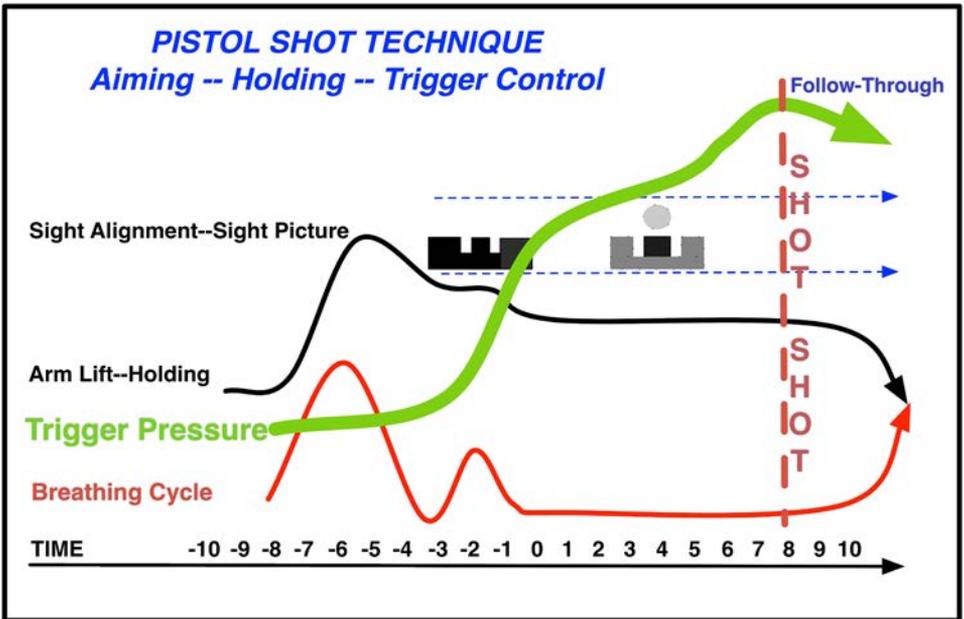


Pistol Sight Alignment

only secondarily on the target because pistol accuracy depends more on maintaining precise alignment of the front and rear sights and not as much on maintaining a precise relationship between the front sight and bulls-eye.

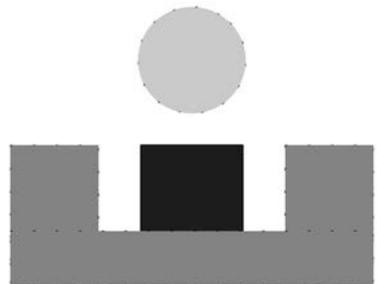
Firing Precision Pistol Shots

When the aligned sights are brought down onto the target, the third phase of firing a pistol shot that includes sight picture, holding and trigger control begins. In this phase, breathing stops, sight alignment transits into sight picture, pressure is added to the trigger and finally, the pistol's sight picture movements are stabilized within an arc of movement or hold area while additional pressure is applied to fire the shot. The diagram (below) shows how these actions fit together.



Here are descriptions of the actions involved in firing a pistol shot:

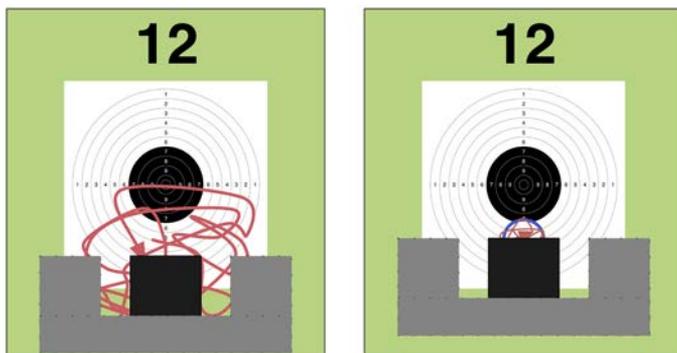
- 1. Sight Picture.** The recommended sight picture for precision pistol shooting is to hold the aligned sights in the six o'clock position below the aiming black with a gap of white between the top of the front sight and the bottom of the bull (See "Pistol Sight Picture Concept" diagram). The size of the gap between the top of the front sight and the bull depends upon how steadily the pistol is held.



Pistol Sight Picture Concept:
Primary focus is on front and rear sights; target will be slightly blurred

2. **Hold Area.** As soon as a new pistol athlete brings the aligned sights onto the target, one of the realities of pistol marksmanship becomes clear. The sights move over a large area in an **arc of movement** or **hold area**. The recommended sight picture is to hold this entire arc of movement below the bottom edge of the aiming bull. The aiming point for a perfect sight picture is the center point of this arc of movement. Especially for beginners, this hold area will be quite large, typically as large as the white area between the bottom of the bull and the bottom of the target. The best sight picture for new pistol competitors is to try hold the aligned sights in the middle of that white area. Training,

of course, will substantially reduce the size of the arc of movement. The illustration (to the right) compares a beginner's hold area with that of a trained athlete. It also shows how a beginner's aiming point must be lower than that of a more experienced competitor.



Arc of movement or hold area for a beginning pistol shooter (left) and a more experienced shooter (right). Correct sight picture for each shooter is with the aiming point in the center of the hold area.

3. **Trigger Control.** The application of pressure on a pistol trigger must be absolutely smooth and gradual. Trigger pressure begins when the second breath is taken and the pistol's aligned sights are lowered to the target. Many pistol triggers have a first stage that must be taken up when initial pressure is applied. It is especially important to get pressure, as much as one-half to two-thirds of the pressure needed to fire the shot, on the trigger during the preparatory phase and before precise aiming begins. Trigger pressure continues to increase while the sight picture is stabilized over the aiming point. When the hold is stabilized and centered over the aiming point, final pressure is applied to the trigger to fire the shot. The "Firing a Pistol Shot" illustration (page 22) shows how trigger pressure must be applied during the firing of the shot.

4. **Follow-Through.** After the shot breaks, the athlete must perform two additional functions, calling the shot and follow-through. Even beginning pistol competitors should attempt to call their shots by making mental snapshots of where the sights were when the shots broke. The athlete should try to say whether the sights were aligned and whether they were high, low, left or right. Calling the shot also ensures after-the-shot follow-through where the athlete continues to focus on the sights until recoil begins.

5. **Performance Concept.** Learning what a good sight picture is can be done in a matter of seconds. What is difficult is developing the ability to keep sight

picture movements stable and centered over the aiming point while gradually and decisively increasing trigger pressure. Especially for beginners who have not yet developed good hold stability, there is the great temptation to speed up the application of trigger pressure and force shots in fleeting moments when good sight pictures appear. What is needed instead, is the mental control or will to focus on centering sight picture movements over the aiming point while gradually and decisively applying trigger pressure. This disciplined skill comes from developing the mental discipline or resolve to apply trigger pressure during well-centered holds, not suddenly during momentary perfect holds. Consistent application of this mental emphasis on hold control will in time yield gradually improving sight picture stability.

Firing Rapid-Fire Pistol Shots

Some of the most compelling and dynamic phases of pistol shooting are the rapid-fire stages. There are three different types of pistol rapid-fire. In the ISSF 25m Pistol Women and 25m Pistol Men Junior events, competitors load five shots and after an **“ATTENTION”** command, bring their pistols down to a 45 degree ready position. After seven seconds at the ready, the signal lights turn green or the targets turn for a 3-second exposure during which the athlete must raise the pistol to the target and fire one shot. This sequence continues until the five shots are fired and then is repeated. In the ISSF 25m Rapid-Fire Pistol Men event, athletes load five shots and after an **“ATTENTION”** command and a seven second delay, five targets in a group turn and the competitor must raise the pistol and fire one shot at each target in eight, six or four seconds. In the ISSF Standard Pistol event and CMP National Match Course events, athletes load five shots and on command, bring their pistols down to the ready position. When the lights or targets turn, they must raise their pistols and fire five shots at one target in 20 or ten seconds. In CMP Match Pistol or Service Pistol timed- and rapid-fire, competitors start with loaded pistols pointed at the targets and begin firing without an arm lift.

Some young pistol athletes may decide to stay with precision pistol shooting, usually the air pistol event, but other young competitors will want to expand their horizons by shooting pistol events that involve rapid-fire shooting. Learning rapid-fire tech-



Jean Quiquampoix, France, birth year 1995, won the 2014 World Junior Championship, a silver medal in the 2016 Olympic Games and a gold medal in the 2021 Olympic Games in the 25m Rapid-Fire Pistol event.

The Rapid-Fire Arm Lift



The rapid-fire arm lift begins with the loaded pistol down at a 45 degree angle or just above the bench. When the signal lights or targets turn, the pistol must be lifted to the target to begin firing the rapid-fire shots.

niques should come after precision skills are mastered. When the time comes to try rapid-fire, there are some new skills to learn.

1. **Stance and Grip.** The stance and grip for rapid-fire are essentially the same as for precision shooting except that the feet may be spread a little wider (see the photo on page 24) and the grip should be somewhat firmer because recoil control is essential in good rapid-fire shooting.
2. **Pistol Lift.** Here there is a big difference. Because of short rapid-fire time limits, the pistol must be lifted directly to the aiming point, with no preliminary lift above the target. The lift technique varies; some athletes lift at a constant speed while others accelerate quickly and then slow the lift to ease the aligned sights to the aiming point.

3. **Sight Alignment and Sight Picture.** The aiming sequence begins by glancing down at the sights on the lowered pistol to give them a preliminary alignment, then looking up at the target to await the start signal. As the pistol comes up, the eyes must look down slightly to pick up the sights and precisely align them as they approach the aiming point. In ISSF rapid-fire stages where targets with large aiming blacks are used, the aiming point is the center of the target. For CMP and NRA events where the aiming black is proportionately smaller, the aiming point is usually at the bottom of the bull. In all events, concentration must remain fixed on the aligned sights through the firing of the shot.
4. **Trigger Control.** The key to good rapid-fire shooting is learning to apply fast, but absolutely smooth pressure on the trigger while centering the aligned sights on the target. In no case, should the competitor ever attempt to time the trigger release to coincide with a perfect sight picture. The application of pressure on the trigger must begin while the pistol is being lifted to the target so that when the sight picture is centered the remaining pressure can be quickly, but smoothly applied. The rapid-fire competitor must learn to focus on sight picture, trust their hold and press the trigger as smoothly as possible.
5. **Recoil Control.** In pistol events where five shots must be fired after one arm lift, it is important to let the pistol recoil naturally (don't fight the recoil) and then with full concentration on the sights to quickly bring them back to the aiming point (or the next aiming point in 25m Rapid-Fire Pistol) as trigger pressure for the next shot is being applied.

Pistol Training

There are three components of accurate pistol shots, 1) sight alignment stability, 2) sight picture or hold stability and 3) the smooth, well-timed application of trigger pressure to fire each shot. Pistol training drills must advance one or more of the three components. That means to become a good pistol shot, great amounts of purposeful practice are required to:

- 1) Develop the ability to keep the sights precisely aligned and eliminate sight alignment tremors;
- 2) Develop the strength, strength endurance and muscle control necessary to minimize sight picture movements over the aiming point and extend the length of time the pistol can be held stable before fatigue sets in; and
- 3) Perfect the ability to coordinate the application of smooth pressure on the trigger while stabilizing sight picture movements over the aiming point.

Eliminating sight alignment tremors depends primarily on immobilizing the wrist joint, the source of most sight alignment oscillations. The best drill for doing this is a drill where the athlete aims at a blank target while focusing visual and mental attention on keeping the sights rigidly aligned.

Developing sufficient strength endurance in the arm and shoulder to support the performance of correct shot technique is of singular importance. This is done with strength building exercises, holding drills and lots of dry and live fire work with the pistol. Perfecting the ability to stabilize sight picture movements and

coordinate them with the correct application of trigger pressure can only be done through dry and live fire repetitions with the pistol.

The mental attitude that one takes into pistol training is decisive in determining progress. The most productive mindset recognizes that there are no secrets, special methods or short-cuts to pistol success and that progress can only be attained through diligent and persistent hard work. There is a direct correlation between training volume and pistol success, as long as training repetitions are done correctly.

In this regard, the examples of the very successful Chinese and Korean junior pistol athletes are instructive. At the end of 2015, four Chinese and Korean juniors ranked in the top ten in world in open men's and women's pistol events. 19 year-old ZHANG Bowen ranked number one in the 50m Pistol Men event. The stories of these outstanding young athletes are similar. They started pistol training early, typically at age 12 or 13. They were enrolled in schools where they could dedicate many hours to sports training. Their normal training regimens included four to five hours of shooting each day for five or six days a week plus two hours of physical training plus their school work. They were successful because they worked harder than everyone else.

The key factor in developing sight picture or hold stability is the strength endurance of the arm. Developing strength endurance

is done by applying the overload-compensation principle of sports training. This occurs whenever the arm muscle is stressed to the point of fatigue by a training overload. When the body recovers from this overload, it compensates by creating a new, higher level of strength (see illustration). When this overload-recovery-overcompensation cycle is repeated thousands of times during training the muscles that are stressed become stronger and stronger.

To apply this principle in pistol training, the muscles that support the arm and pistol must be overworked to the point of exhaustion so that after a short recovery period they will become stronger than before. The esteemed Russian shooting professor Lev Vainsteyhn stated the task clearly, "*only an exhausted arm will promote the development of stability.*" The goal of a pistol athlete's strength endurance training should be to gain the ability to hold the pistol in the aiming position one and one-half times longer that is needed to fire the shot before starting to feel muscle fatigue. As a working standard, the competitor should have enough strength to hold the pistol stable for 25-30 seconds before muscle fatigue starts to disrupt the hold. It will take a lot of persistent, hard work to reach that standard, however.



The best training drills for developing pistol skills are:

1. **Progressive Skill Development.** The developmental stages of the Progressive Position Pistol Program offer alternatives for starting younger athletes who don't have the strength to hold the pistol on the target while standing with one free arm. This program takes youthful beginners through three stages of development:
 - a. **Basic Supported.** The athlete sits at a table or bench and rests the butt of the pistol on a sandbag support or table while holding the pistol with one or two hands. Using only one hand may not be as stable, but it offers better training because that accelerates the development of wrist and sight alignment stability.
 - b. **Standing Supported.** The athlete stands and fires the pistol while supporting it with one hand and an extended arm while resting the butt of the pistol on a counter-balanced support stand.
 - c. **International Standing.** In the most advanced stage of this program, the athlete fires with the classical one-armed pistol stance. The objective of the progressive skill development steps is to advance young athletes to this stage.

This progression will not work, however, unless it is accompanied by exercises to build wrist, arm and shoulder strength. Each shooting session should be concluded by doing holding drills or arm lifts with the pistol or a similar weight. It is also critical that when using the supported positions, advancement to the next stage should come as soon as the young athlete is ready for a more difficult level. Getting "hooked" on using a support can create psychological dependencies that will hinder future development.

2. **Strength Building Exercises.** Strength building exercises are essential to build the hand, wrist, arm and shoulder musculature needed for successful pistol marksmanship, especially in the first years of pistol training. Pistol athletes must have sufficient strength to be able to lift and hold the pistol on the aiming point long enough to allow the firing of accurate shots. Pistol athletes as young as 11 or 12 should be taught to do arm lift repetitions with their pistols after they finish a practice session or on days when they are not shooting. In a simple holding exercise, lift the pistol to the target and hold the aligned sights on the aiming area for 10 seconds or longer. Then lower the pistol for a 15-20 second rest and repeat. If the pistol is too heavy for a young athlete, start with a lighter weight. Gradually increase the number of lifts per training session and adjust the holding time according to the athlete's strength.

Dr. Cathy Arnot, USA Shooting Team exercise physiologist, has prepared an excellent presentation and resource on "*Physical Conditioning for Pistol Shooting Athletes.*" Copies of this presentation can be downloaded from the CMP "Coaching Resources" website at <https://thecmp.org/training-tech/coaching-resources/> (look under "PowerPoint Presentations").



One of the best drills for developing sight alignment stability is the holding drill the two Chinese athletes are practicing here. Aiming or dry firing is done at a blank wall while concentrating on perfect sight alignment.

3. **Sight Alignment Drill.** This drill should be done while standing next to a plain, light colored wall or with a blank (reversed) target. Assume the stance and grip and go through the preparatory phase of lifting the pistol and aligning the sights. The objective is to try to hold the sights precisely aligned for 10, 12 or 15 second repetitions. While trying to keep the front sight motionless in relation to the rear sight notch, focus some attention on controlling the wrist joint as a means of making the sights become immobile.
4. **Holding Drill.** Holding drills are similar to sight alignment drills except that a target or aiming dot is used and the objective is reducing the arc of movement or hold area. Hold the aligned sights over the aiming point as steady as possible for 10, 12 or 15 second repetitions.
5. **Dry Firing.** Dry firing is one of the most convenient and efficient ways to improve pistol skills because it can be done almost anywhere and especially at home. Place an aiming bull at the correct height on a wall and correctly repeat all of the steps involved in firing a shot, without loading, of course. Most air pistols now have dry fire mechanisms to facilitate this.
6. **Live Fire Practice.** No pistol training regimen can omit live fire training with either the air pistol or the .22 cal. rimfire pistol. During live fire drills, the athlete initially shoots groups of five or ten shots on a target and begins to adjust the pistol sights to place further shot groups in the center of the target. After a few months of dedicated practice, the beginner will be able to advance to shooting 20, 30, 40 or even 60 shot courses of fire in training and ultimately in competitions.

Shooting in Pistol Competitions

One of the primary reasons young people learn sports skills is so they can play games in that sport. It is no different in shooting. After young athletes spend several months learning and practicing pistol skills they will be ready to try competition shooting.

Competitions offer lots of great experiences and benefits. Shooting is a sport and competition is part of sport. There are important life lessons to be learned in competitions where one must perform complicated sports skills under pressure. Successfully performing those skills in competitions teaches young people to believe in themselves. The difficult path to pistol excellence does an exceptionally good job of teaching concentration skills, perseverance, self-discipline and self-control. Competitions can involve travel and meeting new friends; they can be a lot of fun.

- 1. Where to Start.** A young pistol athlete's first matches should be simple interclub matches (club record matches) or postals (see virtual match and postal information on page 10) where shooting is done at the athlete's home range. It is important to have experiences with real match conditions such as formal commands, rigid time limits and the pressure that comes from knowing you are in a competition. Once those initial experiences are gained, it is important to start entering and competing in competitions that are offered in the area where the young athlete lives.
- 2. Know the Rules.** Before shooting in any competition, learn the rules that apply. What target will be used? How many shots will be fired? What is the time limit? What instructions and commands will the Range Officer give? When can I bring my pistol to my firing point; when is the "preparation and sighting time" and what can I do during this time? Are there any special rules that I must follow? What do I have to do if I want to talk to my coach or a parent during the competition?
- 3. Practice the Competition Event.** To prepare for the competition, it is essential that athletes practice the competition course of fire ahead of time so they understand what to expect and how to pace their shooting. Rehearse so there will be no surprises during the competition.
- 4. Focus on Performance.** A key to successful match shooting is mentally focusing on the correct shot technique performance for each shot during the competition. The athlete must believe that their task in a match is to perform the same skills they learned in practice and to believe that their training has prepared them to do this correctly. This is necessary both to ensure a good match performance and to prevent thoughts about scores or final rankings.
- 5. Don't Be Disturbed by Distractions.** Shooting in competitions is not like shooting in practice. There are competition officials and coaches and parents who will be moving and talking behind the firing line. There will be other athletes who may or may not keep themselves under control. There are fixed procedures for handling and changing targets that may be different from practice. The key is to be mentally prepared for these distractions and to decide in advance that they will not bother you.

6. **The Right Mental Attitude.** Decide before the match that regardless of what happens during the match, whether it is good or bad, that ***“I am going to remain cool and calm no matter what happens.”*** Successful competitors develop a disciplined mental attitude that tells them to remain calm and under control at all times and to never allow anger to overcome them even when bad shots or disturbances occur. A second component of the ‘right mental attitude’ is to learn to evaluate match performances by how well the athlete performed the skills learned in training and not by where the athlete placed or whether they won any awards.
7. **Make Nervousness a Friend.** It is natural to be nervous in competitions, but some level of nervousness can actually help an athlete perform better. Nervousness increases alertness and the ability to focus clearly. Trained athletes should not fear being nervous.
8. **Sportsmanship.** Fair play and good sportsmanship are important values to apply in all sports competitions. It is important to show respect for match officials and to try to resolve any competition issues with polite requests. Fair play also means no athlete should do anything to gain an unfair advantage.
9. **Enjoy the Experience.** One of the real rewards of shooting in competitions is that they can be a lot of fun. Traveling to new ranges, meeting new friends and experiencing the exhilaration of the competition can be very enjoyable. Go to matches with the idea that they are going to be fun.
10. **Finals.** One of the newer features of shooting competitions that has added a lot of appeal for youth and spectators is using “finals” to conclude competitions. When finals are included in a match program, all competitors entered in a competition shoot a regular course of fire and then the eight highest scoring athletes advance to a final. Finals that are conducted today are usually start-from-zero finals where the athletes who advance to the final start a new event with no previous scores being carried forward. Finals are usually shot in front of spectators where scores are announced and applause is common. Since finals are now a big part of shooting, it is important that even young pistol athletes be introduced to finals as soon as possible.



The start of the 10m Air Pistol Junior Men final in the 2018 World Shooting Championship. The finalists are from (l. to r.) Germany, China, Greece, Italy, India, Korea, India, and Korea. Chaudary Saurab of India (#5 position) was the Junior World Champion. The Republic of Korea was the Team Champion.

It's Time to Get Started

Pistol target shooting is one of three disciplines in shooting, one of the world's great sports. Whether a young person decides to start pistol shooting to learn a fascinating sports skill and have some fun or wants to become a successful competition athlete at local, national and even international levels, target pistol marksmanship offers tremendous opportunities and challenges as well as many rewards.

Juniors who want to become active target pistol competitors must be motivated to work hard and persevere through the slow process of developing the skill and strength necessary to become successful pistol athletes, but great rewards await young people who respond to these challenges.

The CMP hopes that every youth who studies this Guide will want to try pistol target shooting and excel in it and that every adult who reads this Guide will be motivated to help young people experience these opportunities.



WHAT WAS YOUR GREATEST SUCCESS?

Ralf Schumann, Germany, 3-time Olympic gold medalist in Rapid Fire Pistol and one of the world's all-time great pistol athletes, was asked this question. His answer can guide new pistol competitors in setting progressively more challenging goals for their shooting:

I can name many different successes. When I started, it was great just to hit somewhere on the target. Then success was shooting all my shots in the black. Later, success was keeping more and more shots in the middle of the target. Beginning to win matches was a great success. The most rewarding successes came in the most difficult competitions. Then came the first medals in our national championships, then the European Championship, the World Championship and for sure my first Olympic gold medal.



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