Training for Target Pistol Shooters

ISSF Basics Training Programme
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12 Commonwealth Games Medals at 7 Commonwealth Games
2 Olympics + 1 as Coach, 70+ National Titles
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1. Introduction

This Basic Training Program is to assist you during your initial training covering handling and use of target pistols. Proper initial training will enhance your enjoyment of the sport, by giving you the knowledge and confidence required to build a set of fundamental skills and, with practice, the confidence to participate in the activities of the club. This program addresses the basic knowledge needed for you to be a safety-conscious skillful member of the club.

Purpose of this manual
This guide has been developed as a resource to assist you during your initial training, gaining better competitive scores with higher levels of accuracy. It is in a simple format and only covers the basics. Its purpose is to set some guidelines that can easily be referred to by you.

You need to know
All the following information is either stolen with respect or comes from personal experience. I have been very fortunate, at times to have some of the best support knowledge from coaches, shooters, doctors and sport psychologist. Assisted by the fact I am a perfectionist and have very critical analyzing skills and sharp body awareness instincts I feel this enables me to compile the following
2. **Safety Rules**

*Always keep the pistol pointed in a safe direction, muzzle down range*

It is important that you are always aware of the direction the muzzle is pointing while on the range, at an angle of 45° downwards, facing the target area.

*Only load the pistol when you are told to do so by the Range Officer*

3. **Pistol Shooting Fundamentals**

Essentially, accurate shooting with a pistol requires only the elements described in the following sentence:

**ALIGN THE SIGHTS PROPERLY, CAUSE THE SHOT TO BREAK WITHOUT DISTURBING SIGHT ALIGNMENT**

All fundamentals of pistol shooting such as position, grip, sight alignment, breath control, trigger control, physical condition, and psychology of shooting, when perfected, simply enables the shooter to perform the action described in the above key sentence. These fundamentals must be properly performed every time a pistol is fired.

In order for a shot to be accurate, it is necessary to make sure that the pistol will be held as motionless as possible to do so during the time that the shot is being fired.

The stance used by the shooter must provide the greatest stability possible for both the shooter's body and the pistol.
Correct body position points the pistol directly to the target center.
Likewise, the vertical movement of the pistol is confined to the aiming area.
In order to keep the pistol as immobile as possible the shooter must hold his breath for the length of time required to deliver an accurate shot.
To obtain correct sight alignment, it is necessary for the shooter to hold the pistol in a relaxed grip and that trigger pressure is applied straight to the rear.
This ensures that the delicate balance of sight alignment and minimum arc of movement is not disturbed.
In order to deliver an accurate shot within the shooters ability to hold, the shooter must not only press the trigger evenly, but he must to so with correct sight alignment. The size of the shot group will, therefore, not exceed the dimensions of the arc of movement, provided the shot breaks as a surprise and no reflex action of muscles disturbs the delivery of the shot.
To help the shooter acquire the necessary knowledge to master all the factors that control his shooting we shall analyze in detail each separate element of accurate shooting - stance, position, grip, holding the breath, sight alignment, and control of the trigger.
Also included will be methods of training that will accelerate the shooter's development into a champion pistol shot.
This status is achieved only after the shooter has mastered the technique of executing the fundamentals.

**Determining the best shooting hand**

Before any practice can be carried out, or indeed a shot fired, the shooter must first determine which hand will be used to
grip and fire the pistol. As a general rule of thumb it is recommended that a shooter use the hand which is on the same side of the body as the dominant eye.

**Natural Point of Aim**

Proper body position is essential in order to shoot a good accurate shot.

For one handed, standing position shooting following these basic steps.

- Carefully study, and practice adopting the correct body position
- Practice the position without holding a pistol.
- Practice the position with a pistol.
- Practice obtaining and maintaining the correct relaxed grip.
- Adjust your body position so that the pistol points naturally at the target when you raise your arm to sight
- Feet should be shoulder-width apart
- Non-shooting arm secured close to body.
- Stance should be straight with head held upright, eye to the center of the target.
- Elbow and wrist of shooting arm straight.
- Eyes in line with sights.

**Grip**

To achieve a proper grip, the following basic steps must be followed.

- Keep the pistol pointed in a safe direction
- Using the non-shooting hand, place the pistol in the grip of the shooting hand.
- Fit the ‘V’ formed by the thumb and finger of the shooting hand as high as possible into the top back of the grip
• Align the pistol so that it forms an imaginary straight line from the barrel, along the barrel through the wrist and forearm.
• The pressure of the grip should be directed straight to the rear.
• Hold the pistol firmly, but without exerting so much pressure that you are straining or causing your hand to shake.
• The thumb should lie relaxed and level along the side of the frame.

Uniformity is the most important feature of a proper grip. The grip should be the same each time the pistol is handled.

**Breath control**
In order to minimise body movement, the breath must be held while firing, take a breath before the shot, let out a little air to be comfortable and hold the remaining breath while firing the shot.

**Sight alignment, Sighting**
Sight alignment is the relationship of the front and rear sights. The eye must be lined up with the front and rear sights and the sights positioned so that their alignment is correct. Proper alignment of the two sights means that the top of the front-sight is even with the top of the rear-sight. The front-sight must also be centered in the notch of the rear-sight so that there is an equal amount of space on each side of the front-sight. Correct sight alignment is the key to accurate shooting. Angular misalignment of the front-sight with the rear-sight introduces an error that is multiplied with distance.
Hold in the white area below the black.
Focus on the front-sight only.
Maintain a steady, balanced sight-picture.

To fire an accurate shot, it is essential to concentrate on the front-sight while squeezing the trigger. The eye is capable of focusing clearly on only one object at a time. It cannot keep the rear-sight, the front-sight and the target in focus at the same time. When the eye is focused properly for a shot, the front sight should appear sharp and clear, the rear-sight should appear a little less sharp and the target should look blurred.

There will always be movement while holding in your aiming area. This movement is called the ‘arc of movement’.

The very best that any shooter can do is to keep the arc of movement at a minimum.
While maintaining a correct sight-picture the shooter should gently squeeze the trigger while concentrating on minimising the arc of movement.

4. **Dry Firing**

Dry firing is the shooting of an unloaded firearm. It is useful in practicing marksmanship skills and allows a new shooter to concentrate on sight alignment and trigger squeeze without being distracted by the noise or recoil of live ammunition. Dry firing is a good training exercise and can be practiced at home by picking out a point on the wall and going through a firing sequence. Dry-firing practice will provide an opportunity to the new shooter to become familiar with properly applying
good shooting fundamentals, trigger squeeze and sight alignment.
You should continue regular training and add in regular daily sessions of dry firing practice.
This will help keep your stability, strength, trigger control and mental sharpness
By aiming carefully and noting attentively everything that happens to the pistol, you will discover the correct technique and soon eliminate your errors
Training by means of dummy rounds and dry firing is of great benefit. It makes it possible to develop correctly and carefully the technique of pressing the trigger, and contributes to acquiring proper habits in controlling the trigger.
A mixed training session, dry fire and live fire should involve firing at a blank target, rather than at a target with a black aiming area.

5. **Trigger – Trigger Squeeze & position**

One of the harder skills, you must start to apply trigger pressure as the movement of the pistol reduces, trigger finger continues to apply steady pressure while concentrating on sight-picture waiting for shot to break.
If the shot does not break as movement is reducing, lower pistol, relax, start again at the beginning of your sequence.
ISSF shooters use the positive approach to trigger control, that is, once it is initiated, it becomes an uninterrupted, constantly increasing pressure of the trigger until the shot breaks
Trigger control is of very great importance in producing an accurate shot, exerting pressure on the trigger in a manner that keeps the sights aligned.

The pistol is in some degree of motion throughout the period of sighting and aiming so the trigger must be pressed in conjunction with maximum concentration, peak visual perception of sight alignment and minimum arc of movement. The trigger must be activated in conjunction with correct sight alignment, minimum arc of movement, and maximum undisturbed concentration. This might be called cadence, rhythm or timing. Under any name, it comes only to those who practice frequently.

It is necessary during firing to press the trigger under varying conditions of pistol movement in conjunction with correct sight alignment. In order to apply coordinated pressure on the trigger, the shooter must wait for definite times when all factors and conditions are favorable, the shooter must only fire when completely settled into a minimum arc of movement but must start the trigger press when the movements reduces.

Trigger finger needs to be an independent movement. The gripping fingers and the thumb do not move or tighten. Keeping the grip pressure constant, align the sights, settle into your normal area of aim, below the black.

It is also necessary that the index finger clears the side of the grip, the trigger shoe near the first joint of the finger. The trigger must be pressed straight to the rear.
**Follow-through**

- As shot breaks continue to focus on sight-picture.
- After recoil sights will return to position held before the release of the shot.
- Hold this sight-picture for 1-2 seconds before lowering arm.
- The sight-picture at instant of shot breaking will indicate probable position

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<th>Time (Seconds)</th>
<th>Trigger Pressure</th>
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**Trigger Control**

Start to apply trigger pressure when you are in the aiming area and the movement of the pistol starts to reduces.

Trigger finger continues to apply pressure - whilst shooter focus on sight picture and waits for trigger to break.

If the shot does not break between 8 to 10 seconds, lower the pistol, relax and breathe and start the sequence from the beginning.
6. **Common Shooting Errors**

Target Analyzing Guide – Right/Left Hand

- Pushing anticipating recoil or no follow through
- Healing anticipating recoil
- Too much trigger finger
- Squeezing finger tips while applying trigger pressure
- Snatching
- Breaking wrist down or relaxing too soon
- Healing anticipating recoil
- Thumbing
- Squeezing whole hand with trigger pull

**Right Hand**

**Left Hand**
It is impossible for the eye to focus on a close-up object and a distant object simultaneously.

Control of sight alignment will not be precise, distinct focus on target makes sights indistinct; often this is not readily apparent.

You must work hard in maintaining front and rear sights in precise alignment while maintaining a minimum arc of movement and pressing the trigger to cause the shot to break without disturbing sight alignment, focusing the eye on the front sight during the delivery of the shot.
7. **Shooting Skills Procedures**

**Trigger Programming** - 45 degrees, zero sight movement

**Body Point** - Closed eyes, raise arm, open eyes, your arm should point to target centre

**Pistol Grip** - Relaxed grip, finger pad on the trigger – keep it that way

**Pistol Point** - Closed eyes, lift arm, open eyes, check front sight in middle of rear sight

You are now pre programmed to learn the..................

**10 Step Shooting Procedure**

**Step one**
Achieve correct sight picture while pistol is on the bench, front sight level, and even in the rear sight

**Step two**
Lean body back by dragging pistol backwards on the bench, pivoting from ankles until weight is on the heel area

**Step 3**
Head level and straight, eye to center of the target, eyes level

**Step 4**
Raise pistol in a controlled smooth lift to the top of the scoring target, use your shoulder to lift the pistol, keep your grip relaxed

**Step 5**
Stop, realign sights

**Step 6**
Slowly, real slowly lower pistol into and staying in the aiming area just below the black of the scoring target

**Step 7**
Keeping sights aligned, smoothly and slowing keep squeezing the trigger as the movement of the pistol is reducing

**Step 8**
After firing shot, keep finger on trigger, sights lined up, eyes still looking at the sights, then target, slowly lower pistol, relax only when pistol touches the bench

**Step 9**
Think about where the shot should have gone, check and analyze, adjust

**Step 10**
Smile, good or bad, start again at **Step 1**

*Rule – the only rule, progress to the next step only when that step is correctly executed*

**Training with Purpose**
My first goal was to establish a training system where my first shot was perfect and 60 more of them came along real easy, so all I had to do was shoot one sighting shot at a competition and I was at my best without having to lift the pistol in-between matches
My second goal was more realistic, discover what is needed to shoot a good shot and then establish training techniques that will teach me these skills I guess that is where I have stalled, I analyzed what I believe I needed to train, the parts that make good shots and wrote my shooting/training bible
8. **How Much Training**

If you wanted to compete in the Olympic and Commonwealth games, shooting is your job, you work at it six days a week, eight hours a day, 500 to 700 rounds a day, mix in some physical training and spend time on the mental aspects of match preparation and you should finish with a medal.

Train a couple times a week after work and on weekends, 200 to 300 rounds a session, add in dry firing everyday you are looking good some national and international success. Shoot at the club on the weekend, put up an air range at home and use it, get some good coaching you will be better than most shooters.

Choose your level you know you can work at, work at 100% intensity in your training, in other words make a plan and work your plan, if you are going to the range to train don’t mess around, get in and do it physically and mentally.

Stand on the line and recall what each shot is costing you, family, time, money? Ask your self can you work harder, can you focus more, can you do better?

**Enjoyment is in the successes**
9. Ten Shot Training Skills Sheet

**Task #1**

**Focus on Balance**

**Goal**

To reduce body movement to a minimum  
Relax down, feel weight position on feet cancel on any body movement

**Task #2**

**Commitment to Shot**

**Goal**

Shot to break on the way in on the first lift  
Be prepared to shoot, think press trigger straight back, do it-expect a 10

**Task #3**

**Focus on Hold**

**Goal**

Steady small movement  
Hold in the same place Discipline in movement, relaxes and even

**Task #4**

**Focus on Shot Plan**

**Goal**

To follow shot sequence  
Train in components, relax, visualize, commit to a smooth trigger press, call the shot, analyze, relax.........

**Task #5**

**Focus on Focus**

**Goal**

100% focus on the task  
Tell yourself, steady hold, clear sharp sights Smooth trigger press, steady hold, clear sharp sights.............

**Task #6**

**Focus on Relaxed grip**

**Goal**

Consistent relaxed grip pressure  
Grip hangs on finger; shoulder lifts the pistol Hand relaxed at the start and end of each lift
10. Tuning the Pistol

Sight Widths - Most quality pistols come with adjustable rear sight gaps and different front sights - use these combinations to produce a sight picture that holds your focus in different light conditions and at different distances.

Trigger position - The position of the trigger shoe when the finger is on the trigger should be at a little before ninety degrees and have full contact with the whole finger pad.

Natural Point of Aim - ISSF Pistol shooters are always tuning their grips, removal of wood or placement of a filler so the pistol points naturally down your arm to the target, even when your eyes are closed the sights should be aligned vertically and horizontally.

Grip Pressure - If, when you place your pistol on the bench after a shot you have to relax your hand then you have been gripping or holding too tight. When you raise your pistol for the next shot just lift the pistol without increasing the pressure keeping it the same.
11. **Dry Fire Body Awareness Program**

This program, simply put, will teach or enhance your pistol shooting body awareness skills. I was introduced to this program by John Chandler, English Pistol Coach. John has written books on shooting, his real forte was the skills of the mind. I spent hours with him, as at the time these were the skills that I processed but didn’t know how to train or really use. The learning of John’s knowledge set the platform for my shooting - thank you JC.

Dry Fire Body Awareness Program, can and should be used as part of a pre-match entry. The complete exercise will teach you muscular memory, consistently reproduce your own natural point of aim, and trigger control and mental rehearsal.

Prepare to dry fire a shot making sure you have your correct stance and normal grip point. Correct sight alignment, perfect control lift to your hold area on the target, commit to the trigger and then close your eyes. The shot will break in its normal timing as you were already committed to firing the shot. Keep your eyes closed (for a beginner 3 to 4 seconds and as you become more in tune with your body awareness skills extend the time out to 10 seconds). You need to see in your mind the clear sharp sights holding perfectly still in the hold area.
This is essential to the success of your skills, open your eyes, the sight picture you now see is where the shot would have gone Mark this position on your scoring target. (if the pistol sight picture has moved up and to the right, you score a 9 at 2.00)

I have always practiced scoring only in the 9 ring however you can score as per your normal scoring target

As this exercise may be used by shooters learning the skills of shooting there are a couple of guide lines that need to be considered If for example the sight picture is not perfect, perhaps the front sight is always to the right and up then you need to work on the grip point, this may be as simple as repositioning your hand in the grip but more likely you will need to modify the grip, add or remove “wood”, do this with caution, a little at a time is best or if possible have a knowledgeable grip person help you. The glasses you wear may need to be adjusted for your natural point of aim If the body point is always on one side of center your stance will need adjustment This exercise needs to be practiced, like all fundamentals of shooting at 100% intensity, focus hard on the basics, natural point of aim for the grip and the stance. Clear sharp sights, small holding pattern, being committed to the shot trigger release. If you wish to train at 3 meters then the target size or black dot size will be about 22mm.
Scoring target

Aiming target

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Mark your shot value
12. ISSF Pistol Competitions (Appendix 1)

Pistol Competitions
All ISSF matches are shot single handed, pistols must comply to rules that govern the weight, length, grip dimensions, sight radius and trigger weight
Extreme accuracy and accuracy at speed, reproducing the same skill set time and time again, giving a focus for any shooter seeking a sequence of perfect shots for the perfection of pistol shooting
Shoot a shot in the middle of the x ring, the hole just sitting perfectly in the middle of the x ring circle, true Zen shooting

50 Meter Pistol (Free Pistol)
This match is one that requires very specialized pistols; it consists of shooting 60 shots, offhand at 50m. The 10-ring is 50mm in diameter. The pistols used are long-barreled .22 caliber single-shots that are exceptionally accurate and have full wraparound orthopedic grips, very light set triggers and high precision sights.
Scoring well in this match requires a very high mastery of the elements of accuracy skills.

Rapid Fire
The Rapid Fire match is shot on five turning targets, spaced 75cm apart. The match consists of four series of five shots each in 8 seconds, 6 seconds and 4 seconds. The course of fire is in two 30-shot segments of two series in each time sequence. The shooter must wait with the pistol arm at 45° to horizontal until the targets start to turn.
The handling characteristics of rapid-fire pistols are perhaps their most important feature. When the pistol is raised to the shooting position, it must point and recover from recoil with a minimum of effort, as the shooter has little time to make corrections in the faster time series.

**Air Pistol**
The Air Pistol match is a slow-fire match demanding high levels of precision that it is shot at 10m on a target with a 10mm “ten ring”. The match consists of 60 shots in the men’s events and 40 shots for woman
Air Pistol is a great teacher of pistol shooting fundamentals, as the highly accurate pistols with their minimum allowable trigger weight of 500g are easy to control and have no recoil. They are also very economical to shoot and are noiseless compared to cartridge firearms.
All good-quality target air pistols have adjustable grips, sights and triggers and are highly refined shooting tools that offer extreme accuracy to those that are master of their shooting skills
Most Air Pistol ranges are indoors and this offers shooters the advantage of shooting of an evening and getting plenty of low-cost practice.

**25 Meter Pistol and Junior Sport Pistol (Ladies Sport Pistol)**
These matches are identical to the Centre fire match except that the pistols are .22 caliber semi-autos that comply with the Standard pistol specifications.
Centre Fire
The Centre fire match consists of two separate 30-shot courses of fire. One is the Precision course shot at 25m on a target (50mm 10-ring), with 5 minutes allowed for each five-shot series.
The other is the dueling or rapid fire course, which is also shot at 25m, but on turning targets. One shot is fired with each exposure of the target as it turns toward the shooter for 3 seconds and away for 7 seconds, with the shooter lowering the pistol to 45° between each exposure of the target.
Any centre fire caliber from .32 to .38 can be used, a revolver or semi-auto, provided the barrel is no longer than 150mm and the trigger pull is no lighter than 1000g.

Standard Pistol
The Standard Pistol match is shot at 25m with a .22 caliber semi-auto on a target with a 50mm 10-ring, in timed series of five shots on turning targets. Four series, each of 150 seconds, 20 seconds and 10 seconds are fired for a total of 60 shots. Each series starts with the pistol at 45°
The pistol used in this event must have a barrel no longer than 150mm and trigger pull no lighter than 1000g. Recoil handling characteristics are important in a standard pistol, especially in the 10-seconds series.
The Standard Pistol match is a challenge to old and new pistol shooters, as a momentary lapse in concentration in the faster series can see many points disappear from the score. The Standard Pistol match combines both Precision and Rapid Fire match techniques in its course of fire and the mixture of both in the same match guarantees an interesting match.