

On-Range and Off-Range Skill Development Drills – Pistol by Ray Brummell

Note: The following drills and exercises are not listed in order of application. Some are suited to early stages of a development program, while others may be best suited to remedial work, or in the run-up to competition. Ideally, your coach will advise/prescribe the use of particular drills or a series of drills, accordingly to your needs and the current phase of your training program.

- #1. Assume shooting position (with pistol), in front of mirror. Align position with a vertical reflection in background, hold stable position for 10 seconds. Repeat x 5.
- #2. Assume shooting position (with pistol), 5 or more metres from a blank background. Hold stable, accurate sight alignment for 10 seconds, without triggering. Relax for at least 15 seconds between repetitions. Repeat x 10.
- #3. Place a "Holding Card" on the wall at pistol height in normal shooting position. Starting at approximately 3 metres distance, attempt to hold a sight picture within the white circle for 10 seconds. If necessary, move closer to achieve this. Repeat x 10. Note: This is a holding exercise, so accuracy of sight alignment is not critical. Over time, as ability to hold within the circle improves, move progressively further away to increase the degree of difficulty.
- #4. Apply same exercise with other arm (ability to apply normal grip is unimportant). Repeat by 5.
- #5. Use correct sequence to assume grip on pistol. Carry out alignment test (ie. with eyes closed). Repeat grip acquisition sequence until sights are automatically aligned through grip position without need for further adjustment. "Feel" the position of the hand on the pistol, by carrying out a conscious check on position of thumb, little finger, straight back pressure through centre pads of 2nd & 3rd fingers, review trigger finger position on trigger. Repeat by 2.
- #6. Use a sling, rest or stand at the correct height to support the pistol/hand in the shooting position. The aim is to establish and maintain a stable and **accurately aligned** sight picture for 10 seconds (no target is necessary). Repeat x 5.
- #7. Use sling or stand to support the **wrist only** while maintaining stable and accurate sight alignment for 10 seconds. Repeat x 5.
- #8. Assume normal grip on pistol. Using a comfortable sitting position, with pistol supported by off hand, arms resting on thighs, dry fire while concentrating on "feeling" the pressure and trigger release. Repeat x 20.
- #9. In normal shooting position, press uncocked trigger rearwards to the stop ("squeeze-fire"), *then release trigger at the same rate, without disturbing sight alignment.* Repeat x 20.
- #10 As for above exercise, but dry fire. Repeat by 20 (alternating with squeeze-fire drills in #9).
- #11 With arm in normal shooting position and hand/fingers outstretched, maintain wrist alignment while pushing fingers sideways against a door frame, range partition or similar resistance for 10 seconds. Repeat, applying pressure in opposite direction. Repeat x 5. Then carry out the above sequence using the non-shooting hand, repeat by 2.
- #12 As for Drill #11 but holding a pistol, apply sideways resistance against the barrel to load the wrist in both directions. Repeat by 3.
- #13 Drills #11 & 12 can also be applied in the vertical plane, but as with all forms of isometric exercise, they will have minimal value unless carried out in the actual shooting position. Check around the range or house to find a bookshelf, mantelpiece or similar, to provide resistance at the right height.
- #14 Assume normal shooting position, lift to area, align sights, close eyes, "feel" balance, "feel" trigger. Repeat x 5. Then lift to area, align sights, close eyes, fire dry shot, maintain trigger pressure, open eyes to check alignment, feel trigger return.

- #15** Assume timed-fire stance, check position. From the "ready" position, lift pistol into aiming area, concentrating on the "feel" of the lift and final position. Repeat x 5. Then execute one lift with eyes closed, open eyes, assess accuracy of lift.
- #16** Using a (new) reversed target, establish a shooting position which places the sights somewhere near the centre. Then, without attempting to hold within this, or any other any particular area on the target (ie. using the target only as a white background for the sight picture), **concentrate wholly on maintaining sight alignment** for a series of 15 shots. Do not scope or check the target during the series.
- #17** Set up an unpatched, used target (ie. one with shot holes) in the normal manner. Using your standard sighting area but again, concentrating wholly on sight alignment, fire a series of 15 shots. Do not scope or check the target during the series.
- #18** Complete Shot Call Exercise #1.
- #19** Complete Shot Call Exercise #2.
- #20** Without scoping or checking the target, shoot a series of 5 shots, move the sights up 10 clicks and fire another 5 shots, then right 10 clicks, fire 5 shots, then down 10, fire a further 5 shots, then left 10 clicks to return to the original setting.
- #21** Using the results of drill #20 as a guide, apply the required degree of sight adjustment to achieve two "8"s at 3 o'clock, two "7"s at 6 o'clock and one "9" at 12 o'clock (from 10 shots), when using your normal sighting area.

#22 On-range and off-range sequence training.

Sequencing exercises necessarily reflect the shooter's own technique and therefore cannot be prescribed by someone else. The following examples are provided simply to demonstrate the format that is generally used for exercises of this type. The key to the effective use of any sequencing exercise is careful analysis of what actually happens during preparation and production of the shot, to allow consistent application of this sequence without subsequent variation or interruption, regardless of the training or competition environment.

Slow Fire Example:

- Assume precision stance, shooting position and grip, relax stomach muscles and breath in while reaching up and out with shooting arm. Establish basic sight picture, then exhale while lowering pistol to approximate target centre. Stabilise shoulder at this point, then lightly inhale, causing pistol to rise slightly as chest inflates. Maintaining stable shoulder position, refine sight alignment and begin trigger squeeze as exhalation causes pistol to sink into aiming area.

Timed Fire Example:

- Assume timed fire stance and position. Acquire grip, relax stomach muscles and breath in while reaching up and out with shooting arm. Establish basic sight picture, then exhale while lowering pistol to the aiming area, before assuming the "ready" position (do not follow the sights down to the ready position). Take two shallow to medium breaths, then exhale, ready to raise pistol to aiming area. Lift smoothly into aiming area (allow air to flow naturally into lungs as lifting action expands the chest) while establishing sight picture and commencing trigger squeeze.

- #23** Assume your shooting position. Think of an object that you associate with stability (eg. a large rock, statue, building, etc). Relax. Take three deep, slow diaphragm (abdominal) breaths. Imagine you are the object. "Feel" your rock-solid stability. Repeat by 5.

#24 Relaxation Exercise, Series 1. (Jacobson, see supplement at end).

#25 Relaxation Exercise, Series 2. (Centreing, see supplement at end).

#26 Muscular Endurance Drills (Modified Skanaker, see supplement at end).

#27 Mentally rehearse the production of either one slowfire shot, **or**, one timed fire shot, Repeat x 10.

#28 Step Shooting.

- So-called "step shooting" is simply a series of performance exercises, each of which must be completed before moving on to the next step. Step shooting does not lift skill levels (only skill development drills will achieve this). The aim of step shooting is to improve the ability to reproduce **existing** performance standards **when under pressure**. Accordingly, as all steps should be reasonably achievable at the shooter's current performance level, each exercise must be tailored to suit the individual.

Also, it is important that the shooter is properly prepared for each series (warm-up, mental rehearsal, match plan, etc.), otherwise an exercise such as the example shown below can easily occupy two hours of range time and require 200 rounds of ammunition **without benefit**. Remember, success must be achieved on the first try in a competition!

Example for a shooter who normally scores between 44 and 47 points per series in a training environment.

- Step 1. Score 45 points in one series, with no shots below 8.
- Step 2. Score 90 points in two series, with no shots below 8.
- Step 3. Score 46 points in one series, with no shots below 8.
- Step 4. Score 92 points in two series, with no shots below 7.
- Step 5. Score 47 points in one series, with no shots below 8.
- Step 6. Score 93 points in one series, with no shots below 8.
- Step 7. Score 94 points in one series, with no shots below 8.

#29 Using a new or patched target, establish normal stance, position, grip, etc. and fire one shot. Break grip, change stance and position. Re-establish stance, position and grip, to again produce one shot. Repeat this process for a total of 20 shots. You may choose to retain this target, for comparison of group achieved using this exercise at the next range session.

#30 Mentally rehearse forthcoming match in detail, following match plan, with as much relevance as possible to range situation, sounds, smell etc. Concentrate on rehearsing successful **process**. Repeat at frequent intervals on and off-range, and during travel to competition.

#31 Establish grip, stance, check weight distribution and inner stance. Check position to ensure alignment with correct target. Lift pistol into aiming area, while establishing sight picture, to arrive in aiming area with sights aligned.

#32 Establish grip, stance, check weight distribution and inner stance. Check position to ensure alignment with correct target. Lift pistol into aiming area while establishing sight picture and commencing trigger squeeze. Trigger release should occur without conscious effort as pistol slows to a halt in aiming area with sights aligned.

#33 Establish grip, stance, check weight distribution and inner stance. Check position to ensure alignment with correct target. Lift pistol into aiming area while establishing sight picture and commencing trigger squeeze. Shot release should occur without conscious effort as pistol slows to a halt in aiming area with sights aligned. Release trigger, commence traverse to next target while re-establishing sight alignment and commencing trigger squeeze. Shot release should occur without conscious effort as pistol slows to a halt in the aiming area of the second target with sights aligned.

#34 As for Drill #33, repeating the process on the third, fourth and fifth targets.

#35 Set timer for 3 second / 7 second R/F cycle. On each target exposure, execute one shot, release trigger and re-establish sight alignment. Total of 15 shots.

#36 As for Drill #35, execute one shot, release trigger, then traverse to second target while re-establishing sight alignment and commencing trigger squeeze. Trigger release should occur without conscious effort as pistol slows to a halt in the aiming area of the second target with sights aligned. On third target exposure, fire shot 5, dry-fire shot 6. Repeat to a total of 25 shots.

#37 As for Drills #35 & #36, then traverse to third target while re-establishing sight alignment and trigger squeeze. Do not "force" this shot to occur during the 3 second exposure. Concentrate on applying the correct process; it does not matter if the targets turn away during execution of the shot. On second target exposure, after firing shot 5, dry-fire shot 6. Repeat to a total of 25 shots.

#38 Complete 6 x 8 second Rapid Fire series, 3 x 6 second series, 1 x 4 second series, on used, unpatched targets. Apply normal match procedures, and concentrate on process. Don't attempt to score.

Note Drills #31 to #38 may be used for live-fire and, where a training trigger unit is available, the progressive drills may be practiced dry. These exercises can also be carried out quite effectively without a training trigger, by using squeeze-fire technique in combination with dry-fire (eg. "click", squeeze, squeeze).

#39 Find a safe area 30 mins. prior to each match, to carry out warm-up and preparation drills (lifting, holding, traversing, sighting, triggering, etc.).

#40 Shoot a part match which includes all match requirements (eg. 1 of each time series in R/F, Std Pistol, etc.). Targets should be well-used, unpatched and no attempt should be made to score or assess the outcome. All procedures should follow match conditions. If possible, use an audio tape of a match, to provide the range commands and the sound of other shooter/s in each time sequence. Cartridges should include at least one faulty round to produce a malfunction for "contingency" training.

#41 Set up a temporary bench to shoot Air Pistol over 12 metres. Write a match plan which takes into account the need to shoot sighters, carry out sight adjustments and shoot 25 shots in a total time of 50 minutes (including target changing time, no more than two shots per card). When used as a "Control Competition", have an R/O oversee match conditions, score targets and sign score card and match plan. Submit score cards and match plan to coach.

#42 Assume normal stance, position etc. for slow fire. After lifting into aiming area, hold pistol in position for 10 seconds before commencing normal shot production. Repeat by 30.

#43 Using a new or patched target, establish normal stance, position, grip, etc. and dry-fire one shot. Break grip, change stance and position. Re-establish stance, position and grip for one live shot. Alternate live and dry shots to a total of 40 shots.

#44 R/F. Traverse from target #1 to #5, coming to a halt on each target. Concentrate on maintaining fixed shoulder/torso position during the traverse, ie. rotation should be restricted to the lower body (ankles, legs, hips). This drill should be applied frequently, both on and off-range.

The aim when applying all exercises is to achieve quality work. Practice makes permanent, so training sloppy process is counter-productive!

Appendix:

Training Drills - Supplementary Information
for use with
"On-Range and Off-range Skill Development Drills – Pistol"

Holding Card:

This is simply a solid white circle (usually about 30mm) on a black background. Even a large white patch (eg. to suit .45 cal) on a 25 metre precision centre will do the job.

#24 Jacobson Relaxation Technique

The Jacobson technique is a popular and successful method, used in many applications world-wide. Best learned lying down, commence by first tensing then relaxing the muscles of one foot, then the other. Apply the same process to the calf muscles, thigh muscles and so on, working progressively throughout the body. With time and practise, the Jacobson method can be used in any position. It is best applied before and after training sessions or competition.

#25. Centreing Technique (Mason, AIS).

Centreing is a relaxation technique that can also be used to improve concentration and “focus”.

Best learned in a sitting position, with the head lowered and eyes closed. Smile (this relaxes the cranial muscles) then progressively relax leg muscles and allow body weight to “settle” onto the seat. Allow arms to hang by the side, and shake gently to relax shoulders, shoulder girdle and neck muscles. Take three deep diaphragm breaths (stomach breathing) and mentally focus on the most critical elements of the next shot, or series. Maintain concentration, stand up and move to the shooting position to begin/resume the match, or training session. Once learned, centreing is relatively easy to apply in the standing position, so can be used at any time or stage of a match.

#26. Modified Skanaker Muscular Endurance Drills.

Ragnar Skanaker developed this exercise to increase muscular endurance in the shoulder muscle groups. He recommended holding two hand weights (approx. 1 Kg each) at arms length in the crucifix position for 10 seconds, with a few seconds rest between lifts. After 9 lifts, the weights were held out for as long as reasonably possible.

However, static load exercises of this type are quite specific to the position in which they are applied, and few shooters use Skanaker’s fully upright body position.

To make the exercise more specific to individual position, it is recommended that one weight be held out in the shooting position, while the other is held loosely by the side. Alternate lifts from one side to the other, adjusting the torso position according to the arm used.

Starting with 1x “set” (9+1 lifts with each arm) per day, add one set weekly, according to the time available each day. (During his reign as the world’s best, Skanaker applied this exercise eleven times per day!)

General:

The outcome of training sessions and other relevant information needs to be recorded somewhere, which highlights the need for one or more training books. These can take any form, (including electronic storage), but the combination of a master file of some kind and a small loose leaf binder for use as a day book is a good choice. The main file will contain everything from our goals and overall competition and training plan through to the objectives for each of the individual training sessions for the coming month/s, and may include the particular skill drills to be applied during these sessions.

The day book, or training diary, is used as a handy reference and general notebook for use on- and off-range in both training and competition. Apart from the normal information we should always have immediately available, such as instructions for the adjustment of sights and trigger weight, equipment and preparation checklists, our current Match Plan, a list of this week’s training sessions, etc., the day book is also used to record training session or match evaluations, technical instructions, reminder notes, scores, group diagrams, positive affirmations, and so on.

Some shooters include lots of detailed instructions, others limit entries to a few key words or phrases, and perhaps a few diagrams. The style and method chosen is not important, as long as it suits the needs of the individual. Few of us like paperwork but like it or not, a training book (properly used) is the most valuable accessory we will ever have in our shooting box.