STANCE

AIM OF STANCE

1. To provide the greatest possible degree of equilibrium and stability of the body and firearm with the least possible strain on the muscular/skeletal system.
2. To maintain a minimum arc of movement of the shooting arm and the pistol.
3. To keep the head and eyes in optimum position for the operation of the eyes during aiming.
4. To provide a comfortable, stable platform for shooting.

VARIATIONS

In describing the ideal stance, it must be remembered that minor variations may be necessary for different individuals.

Different weights and shapes of shooters will force minor changes, but the shooter should analyse his stance and be aware of the reason for any variation used.

TRAINING

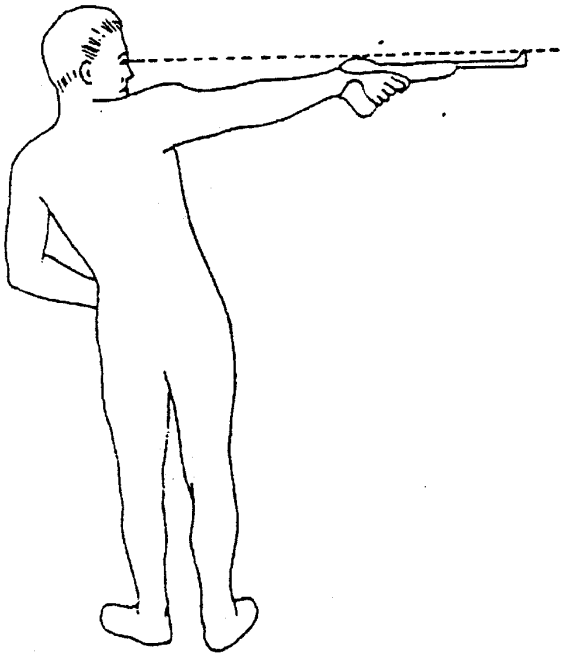
The shooter should become totally familiar with assuming his correct stance and practice assuming the same stance each time he steps to the line or even dry-fires.

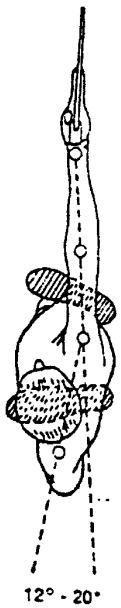
A gradual development of an incorrect stance or body position will require a breaking of habits and the difficult process of un-learning at a later stage, if technique is to improve. It is therefore advisable to try the IDEAL stance for a few months before attempting any variation.

IDEAL STANCE

1. Feet approximately shoulder-width apart, in a natural position, but as parallel as possible. In timed events it may be necessary to move the feet about 10 cm wider apart.
2. Combined weight of body and pistol should be evenly distributed on both feet.
3. Stand erect, but relaxed, settling weight evenly on level hips to avoid strain of body and back muscles.

4. The shooting arm must be extended, with a (psychologically) “locked” wrist and elbow joint.
5. Seen from move, the angle of the arm to the shoulder should ideally be between 12 degrees —20 degrees.
6. The non-shooting arm should be relaxed but secured in either belt or pocket.
7. The head must be upright enabling the eyes and neck to function correctly and without strain.
8. In the shooting position, correct balance is obtained by leaning the upper body away from the target slightly.
9. In the “READY” position (45degrees), the “locked” arm is moved only at the shoulder joint. Nothing else moves! Only the large top shoulder muscle is used to raise the arm to the shooting position.
10. For the rest of the body, the keyword is RELAX.
11. In adopting such a stance, you will be able to stand sufficiently still with neck, shoulder, body, back and leg muscles devoid of tension. This will enable total concentration on sights, tripper control and follow-through, without dropping from exhaustion.





GRIP

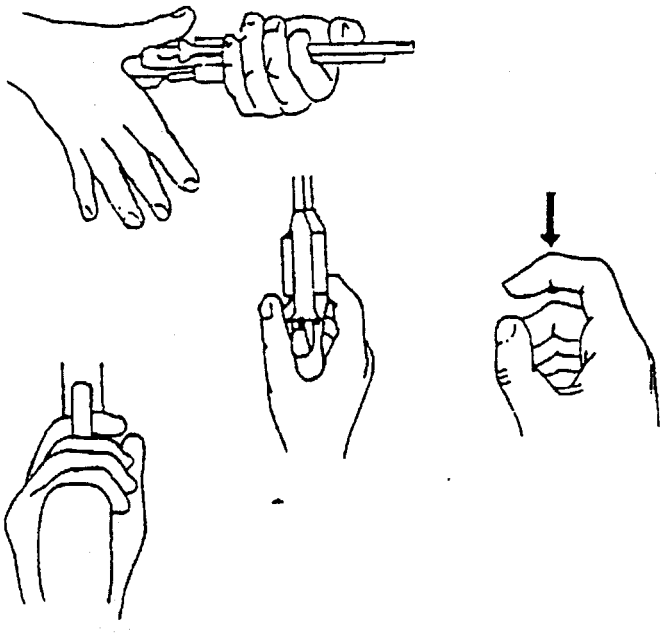
A STEP-BY-STEP SEQUENCE TO PROVIDE PROPER GRIP

1. With the non-shooting hand, pick up the pistol by the barrel end, being careful not to mar the blackened sights and to keep the muzzle pointed DOWN RANGE.
2. Spread the index finger and thumb of the shooting hand apart to a “V” with the thumb held slightly lower than the index finger.
3. Bend the wrist down slightly to obtain the correct angle of contact.
4. Fit the pistol straight and firmly into the web of skin between thumb and index finger.
5. Press downward on the barrel, to pivot and push the grip firmly against the inside of the bulge of flesh at the base of the thumb and into the depression in the approximate centre of the heel of the palm.
6. Stretch the fingers forward, letting the trigger finger come to rest flat against the pistol frame, just above the trigger guard. Safety dictates the trigger must not be contacted at this time.
7. The lower three fingers should come to rest closely touching each other, with the centre bone of each finger resting on the curved surface of the ‘front strap’ of the grip.

   Little or no pressure should be exerted on the fingertips extending around the front strap to the surface of the left-hand side of the grip. Pressure exerted by the little finger on the front strap should be lighter than that brought to bear on the middle and ring fingers. Too much pressure with the little finger may cause the muzzle to depress slightly, resulting in the front sight aligning low in the rear sight notch.
8. The thumb should be raised to a higher level than the index or trigger finger. Only the joint at the middle of the thumb is turned up and away from the stock, as it has no function. Pressure exerted on the side of the pistol by the end of the thumb tends to disturb sight alignment. The thumb should not exert great pressure on the side of the pistol, as early fatigue will result. Only required substantial supporting force should be exerted to hold the firearm firmly in place in the shooting hand.

9. A controlling grip can be effected by the lower three fingers, directing primary pressure on the front strap, straight to the rear pressing the main frame firmly against the side of the centre depression and the heel of the palm at the base of the thumb and the loose flesh in the “v” of the thumb and index finger, respectively. This can be compared with a vice, with the inner surfaces of the palm as the stationary jaw of the vice and the lower three fingers pressing on the front strap as the moving jaw.
10. The non-shooting hand should be used to adjust the ‘fit’ of the pistol into the shooting hand. A slight rotation of the firearm in the gripping hand as it is alternately gripping and releasing will allow the equalisation of a forceful grip.
11. The gripping hand must reach around to the right far enough to allow the tripper finger to reach into the trigger guard and also to position itself on the trigger at the exact point at which the trigger pressure can be applied straight to the rear.
12. According to the size of the hand, the trigger finger will apply pressure with the tip, the ball of the first joint (section), the crook of the first joint, or elsewhere. The primary concern is not what portion or spot along the trigger is the standard point of contact, but at what spot on the finger you can best press the trigger and press straight to the rear without disturbing the sight alignment.
13. When the ‘fit’ is correct, remove the trigger finger from the trigger, free the pistol from the non-shooting hand and tighten the grip with great force, until a tremor is noticed. Release a small percentage of this gripping pressure immediately, enough so that the tremor disappears and leaves the shooter with a hard, solid grasp that will result in absolute control The tighter the grip the better the control.

    The shooter is now exerting correct pressure for maximum recoil control.



BREATHING CONTROL

WHAT IS BREATHING

Breathing is a simple, natural, every day, all day and night physical action that we take for granted. It is the intake of oxygen to the lungs, where it is used to cleanse and purify the bloodstream. The resultant residue becomes a gas which is useless to the system and is exhaled. This gas is, in fact, a poison known as carbon dioxide.

This process is repeated at various speeds, depending on the individual and upon the amount of oxygen being expended. The more energy that is used, the faster the heartbeat, the faster the blood flow and the greater the amount of oxygen required to cleanse the blood — hence faster breathing.

Breathing requires the movement of the stomach, chest and back muscles. We, as pistol shooters, desire the minimum amount of body movement. Hence, we tend to reduce our breathing during the execution of a shot to a minimum and ultimately to none at all during the shot release.

HOLDING THE BREATH

The first thing that happens when we hold our breath is that the blood is not being oxygenated. If the breath is held long enough, dizziness occurs and ultimately — fainting.

This dizziness and fainting is a break down in the brain cells because of not receiving sufficient oxygenated blood. Therefore, in shooting, we must learn to use our breathing to the best advantage.

The average pistol shooter requires between six and ten seconds without breathing, to execute a precision shot. Therefore, during the preparation period, the shooter should include a systematic breathing pattern, suitable for the match for which he is preparing — but in all cases it will be basically the same.

NORMAL BREATHING PATTERN

In a normal breathing situation, only about a third of the lungs are used. This is why, during a lecture, or after sifting quietly for some time, it becomes necessary to sigh or take an extra deep breath to expel all stale air and take in a fresh supply to prevent drowsiness.

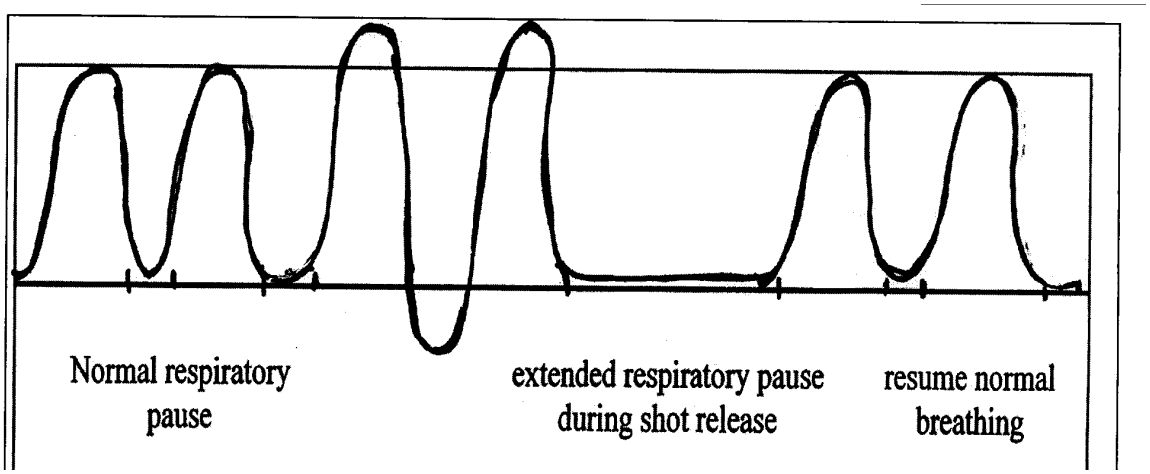
The period at the end of this normal exhalation is known as the natural respiratory pause. This pause can easily be extended for some seconds without discomfort — an ideal time to execute a shot before resuming normal breathing.

ADAPTING THIS PATTERN TO SHOOTING

To extend the natural respiratory pause for the purpose of firing a shot it is advisable to ensure well-oxygenated blood, prior to doing so.

Expel all stale air in the lungs, then take a couple of slightly deeper breaths (using the diaphragm rather than the upper chest cavity), before raising the pistol. The exhalation can be used as a form of physical relaxation, also.

BREATHING PATTERN DURING SHOT RELEASE



PRECISION SHOOTING

1. Assume stance and before raising pistol from the bench, take two long breaths and exhale.
2. As the pistol is raised, breathe in normally. As the pistol approaches the holding area, exhale to the natural respiratory pause.
3. As the respiratory pause is extended, the shot may be executed with the skeletal structure stabilised, optimum visual acuity, and with concentration at a premium.
4. After follow-through, lower the arm and resume the normal breathing pattern.

TIMED FIRE

In all timed fire events, the procedure remains the same as for precision shooting, with the exception that the duration of the respiratory pause varies according to the length of the timed sequence and the number of shots to be fired in that time.

SIGHTING

AIM OF SIGHTING

1. To control all fundamentals through and after shot release.
2. To evaluate the execution of the shot with a view to improvement.

Perfect control of a shot demands full attention, as the critical moment of actual shot release cannot be precisely determined.

To ensure that concentration goes beyond the hammer falling and the projectile leaving the barrel, all efforts towards creating a perfect shot must be extended beyond the actual shot release. Only full awareness of all basics can bring about correct analysis of technique.

SIGHTING

Definition of sights: Appliances attached to a pistol to help in aiming the pistol precisely.

1. The front sight must be clearly visible.
2. The rear sight must be broad; blocks shaped and have straight shoulders. It may be either square or a U-shaped notch.
3. Enough light must be visible on either side of the front sight to enable easy checking of errors. A ratio of 2 : 1 or 3 : 1 makes this possible, i.e. the width of the gap in the rear sight is two or three times greater than the apparent width of the front sight.

POINT OF FOCUS

The aiming eye focuses on the sights only, in particular the front sight. The target will appear as a blur, because the eye cannot focus on sights and target simultaneously. By focusing on the sights, any minute errors are easily detected and should be corrected immediately.

Preferably, both eyes should be open during sighting. Some people find this easy to do, but for those who cannot, the non-focusing eye can be blocked off by using a patch over the lens of shooting glasses. This will allow light to reach the non-focusing eye and prevent a dilation of the pupil of the focusing eye during aiming. This method is therefore preferable to using a patch of the eye, or closing the non-focusing eye.

SIGHT ALIGNMENT

The front sight is positioned in the middle of the rear sight notch with an equal amount of light on either side. The top of the front sight is level with the top of the rear sight.

AIMING AREA

Definition: The area of the target which the shooter chooses to aim.
There are three main areas:

1. Centre hold — Sights held in the centre of the target.
2. 6 o'clock hold — Sights held at bottom of black.
3. Sub 6 o'clock hold — Sights held in an area beneath the black somewhere in the white of the target between the 1 and 6 rings.

For precision shooting the SUB 6 O'CLOCK HOLD is recommended, because:

1. White area gives appearance of decreasing wobble of sight picture
2. White background provides greater front sight definition.
3. No distinction from the aiming area.
4. White background provides more awareness of trigger control faults (seen in misalignment of sights as shot breaks).

For rapid fire target shooting the aiming area should be the middle of the target, as this is the most natural thing to do.

AIMING

Definition: The process by which a pistol is directed at the aiming area of a target. As no shooter can hold a pistol still for the time required to fire an accurate shot, it is recommended that an area be chosen, rather than a particular spot.

The size of the area depends on the ability of the shooter to hold steadily. As NO shooter can hold a pistol absolutely motionless, the shooter must accept a 'wobble area' within his ability to hold. This 'wobble area; is the smallest amount of movement in the shooter's body, shooting arm and pistol, whilst executing a shot.

SIGHTING ERRORS

1. Parallel - When the front sight remains perfectly aligned in the rear sight, but the arc of movement causes a shift up, down, left or right, within the area of aim.
2. Angular - When the front sight is misaligned in the rear sight.
3. Compound - When the sights are misaligned (angular error) and the aim is not within the 'wobble area' (parallel error) a compound error is made.

IDEAL SIGHTING

Keep both eyes open. If this causes problems with focus, determine which is the master eye, and then cover the other eye, preferably with a patch stuck to the lens of shooting glasses. Focus on the front sight the rear sight edges will appear slightly blurred and the target will be out of focus.

Concentrate hard on sight alignment whilst maintaining a minimum arc of movement (wobble area). Trigger press starts automatically as concentration on sight alignment intensifies.

Intense concentration can only be maintained for about 6 to 8 seconds, so if the shot has not gone within this time, place the pistol on the bench and start the whole sequence again.

FOLLOW THROUGH

Keep the whole sighting process 'set up' until AFTER the shot has left the barrel. Continue to DO and SEE during the shot break exactly what you were doing before it broke. You must see the sight alignment well through the shot break. Hold the mental images of the 'bang' — the images before or after the break are not important.

NOMINATING THE SHOTS

A shooter must acquire the skill through concentration and point of focus on front sight through follow through, to see DISTINCTLY the relationship of the front sight to the rear sight, through the shot break and to be able to state from this mental image whether the shot was perfect, high, low, right, left, etc.

ANALYSIS

This is the examination of each shot, series of shots, or complete matches from efficient follow through, nominating and shot plotting, to determine which area of the basic fundamentals needs attention and/or correcting. This leads to awareness of— and the ability to correct — any faults in technique, body control or adverse mental or emotional conditions.

GUN HOLDING

DEFINITION OF HOLD

To hold the sights in alignment with a minimum arc of movement in any designated area of aim.

When you first begin to shoot, your ability to hold the pistol may appear to be uncontrollable. But others have learned to hold their pistol quite steady.

Their secret? HARD WORK.

It is something that can be practised. The shooter who practises his hold only when he comes to the range will find it hard to see real improvement in that skill from one practice to the next. This is because when you go to the range, it is a very active time of watching and talking with people, setting up targets and equipment, etc. Then there is the recoil and disturbance of hold when the shot is fired. All these factors are against you and your ability to work on your hold. You need. to work on just being able to hold your sights in a minimum area of wobble, without all these range distractions.

PURPOSE OF GUN HOLDING EXERCISES

You need to learn the type and nature of your hold, in order to change from having your sights wander all over the target, to having them remain in alignment in a minimum area of wobble in your area of aim.

SUGGESTION: Combine this homework assignment with the watching of your favourite television programme.

GUN HOLDING EXERCISES

1. Prepare a small sheet of paper, approximately 8 x 13 cm.
2. Draw a small circle on the paper, and blacken the circle. This circle may be about the size of a pencil eraser. (If practising for 25M shooting, the circle should be about 8 mm in diameter when standing one metre away. For 50M practise, diameter of 8 mm at a distance of two metres). Enlarge diameter accordingly in relation to distance.
3. Tape paper to wall at shoulder height or in top right hand corner of television.

4. Set yourself at the correct distance from your ‘target’ as explained in (2). With the pistol uncocked, magazine removed, assume your normal shooting position.
5. Try to remain in position for your allotted training time or during your favourite television programme.
6. Try to keep looking at the sights for as much of the time as you possible can.
7. While in position, mentally rehearse your delivery of the shot and the shot sequence.
8. Observe the pattern the sights make as they wander around in your wobble area. Record the type of pattern the sights make in your area. Remember, you are an observer of the pattern. Do not try to force your sights into a particular pattern.
9. From time to time, pretend to go through the trigger release movement while holding.
10. Record sight picture and pattern at time of imaginary shot release.

TRIGGER CONTROL

Trigger control is the act of applying pressure on the trigger to fire a controller, accurate shot. Correct trigger control is the final important factor government the delivery of an accurate shot. The placement of the trigger finger is dealt with in GRIP, so here we are concerned with the pressing of the trigger up to, through, and after the shot release.

HOW?

The trigger is pressed directly to the rear with increasing, positive, rearward pressure. Desirably, the action of trigger press is to perform sub-consciously, as total concentration is placed on focus on the front sight, incorporating sight alignment.

The sub-conscious performance of the trigger finger can be practised with an aggressive trigger release, that is, start the press as soon as the sights have settled into your area of aim and keep pressing, even after the shot release and into follow through.

During the firing of the shot, the finger is the only part of the hand that moves. Any other movement, no matter how small, will result in shot displacement through mis-alignment of sights.

WHEN?

Whilst aligning the front sight in the rear sight notch, begin the smooth, positive press. Continue to align the sights while pressing continually to the rear and continue to focus on the sights. Press the trigger — through the shot release and after (follow through).

The harder the concentration of the sights, and smoother the trigger is pressed, at the moment the shot is released there should be a peak in concentration, maximum stability of stance, grip and breathing, and correct alignment of the sights in the chosen aiming area of the target.

During the aggressive trigger release, total thought and focus must be upon the front sight. When to press, depends on the event. In the Rapid Fire stages of Centre Fire/Sport Pistol, and Standard Pistol, it is recommended the commencement is from the upswing of the arm. In precision the press begins as soon as the pistol settles in the aiming area.

THE ULTIMATE GOAL is to have trigger control refined to the point where no conscious effort is exercised to make the shot break. Rather, the trigger release becomes a conditioned reflex that simply happens when:

A. The front sight is in very sharp focus
B. There is awareness that the front sight is accurately aligned in the rear sight.
C. The aligned sights are within the chosen area of aim
D. Stability is optimal.

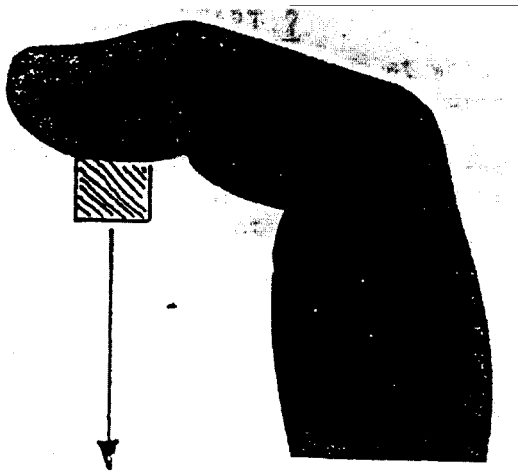
CANCELLING THE SHOT is necessary if any of the above factors are missing, or if concentration wanders. In such an event, release the trigger finger immediately, THEN lower the pistol to the bench. Keep in mind that any precision shot that has not broken within a reasonable time (that is, about ten seconds) should be cancelled.

IN ORDER TO FOLLOW THROUGH — continue to press the trigger directly released, for a perceptible period of time.

DRY FIRING is the pathway to the ultimate goal of a controller trigger release.

Practices to improve trigger control:

1. Correct positioning of the finger on the trigger, every time the grip is renewed.
2. “Dry” firing to co-ordinate brain and muscles.
3. Range Practice: Blank white card (back of target), aiming at the centre should produce a vertical group, because being able to see both vertical edges of the target allows lateral alignment of the sights, but because the bottom of the target is obscured, elevation will wander up and down. Any shots to the left or right of the vertical group indicate trigger control or grip faults.
4. Take up backlash on the trigger with direct rearward pressure — pistol uncocked watch for movement at the muzzle and practice until no movement occurs.
5. REMEMBER: Positive and automatic, directly to the rear.



FOLLOW THROUGH

Follow through is the ability to continue to employ through and after the shot release all the factors that the shooter was endeavouring to employ before and during the shot. It is part and parcel of any sport one can name. Indeed, of most physical activities, to ensure the smooth continuation of physical effort.

IDENTIFY a lack of follow through when there is:

1. Increased muzzle wobble at the time of the shot break.
2. A sudden rise in the muzzle — often whilst the bullet is still in the barrel.
3. Inability to correctly nominate shots.

CAN FOLLOW THROUGH BE SEEN

It is advisable to continue the sight alignment, trigger control and other basics for a perceptible period of time after the shot is released. In doing so, the ability to nominate the shot correctly is facilitated.

It is essential that each component of the basics not only be employed up until the shot breaks, but continue through and after the shot break, to ensure a smooth, uninterrupted shot release.

This applies to stance, grip, breathing control, holding, sighting and trigger control — all of which must be maintained through the entire procedure of delivery, until well after the shot has hit the target.

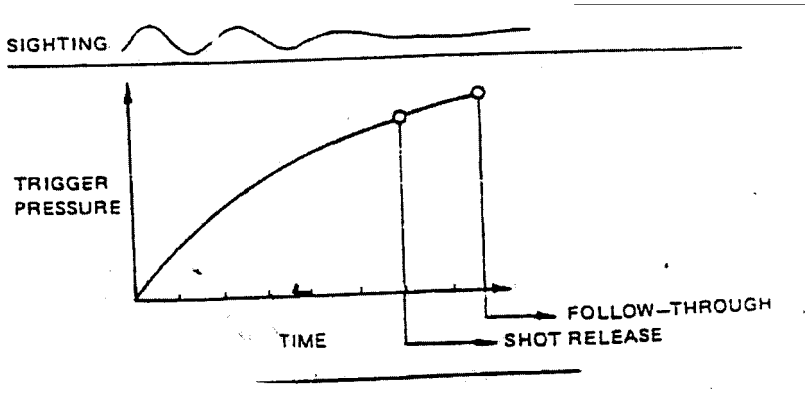
WHEN DOES FOLLOW THROUGH START

It is not possible to state a specific time at which follow through begins, as it is simply the continuation of employment of the basics…… through ……and after the shot break.

FOLLOW THROUGH ON SIGHT ALIGNMENT. Continue to focus on the front sight to ascertain the exact position of the front sight in relationship to the rear sight at the moment the shot is released — regardless of where the sights finish in recoil.

FOLLOW THROUGH ON TRIGGER CONTROL. Maintain a uniform, rearward increase in pressure on the trigger until well after the shot is released, to further enhance stability and ensure the continuation of sight alignment during the release of the shot.

REMEMBER CONTINUE TO DO THROUGH AND AFTER THE SHOT WHAT YOU ENDEAVOURED TO DO BEFORE THE SHOT.



SHOT SEQUENCE

1. Pick up the pistol — place carefully into shooting hand, using non-shooting hand.
2. Check grip — that sights are naturally aligned.
3. Assume stance — check if aligned correctly with target. Adjust if necessary.
4. Take one or two comfortable deep breaths.
5. Extend arm and pick up focus on sights.
6. Extend natural respiratory pause whilst settling into aiming area.
7. Begin initial trigger pressure.
8. Maintain sight alignment.
9. Increase positive, rearward trigger pressure.
10. Concentration sight alignment.
11. Shot breaks during continued trigger pressure and constant alignment of sights.
12. Follow through on all the basics.
13. Recall sight picture at moment of shot break.
14. Recall method of trigger release.
15. Analyse and nominate the shot.
16. Check analysis. Correct where necessary.

A shooter will become a champion if he/she analysis and corrects mistakes every time a shot is fired.

SHOT ANALYSIS

1. Check all aspects of follow through.
2. Describe sight alignment as it appeared when shot broke.
3. Recall details of trigger release.
4. Nominate shot position as result from 2 and 3.
5. Compare target hit location with shot call.
6. If target hit is good or bad, determine cause.
7. Watch for error pattern to form.
8. Did the shot break in normal holding area?
9. Did you hold too long?
10. Did you apply positive rearward pressure?
11. Did you maintain concentration throughout the shot release? (What did you think about, other than sight alignment?)
12. Did you get a surprise shot break?
13. Were you concerned about results?
14. Make positive solution statements in your shooting diary, in order to ensure a technically correct delivery.

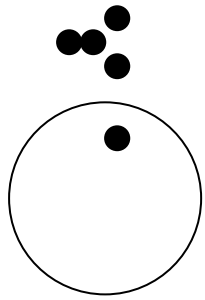
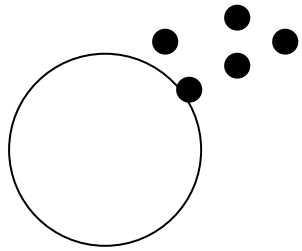
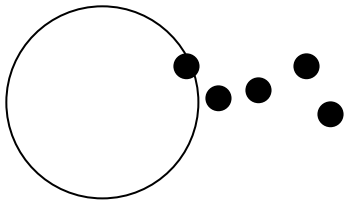
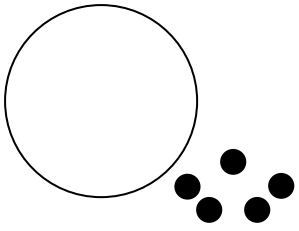
Do not neglect analysing your GOOD shots! This is just as, if not more, important than analysing mistakes. You must KNOW how you fired those good shots, the way they feel and how to duplicate them, again and again.

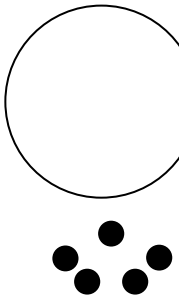
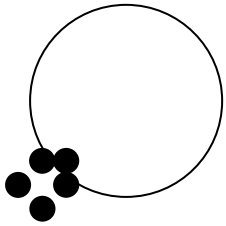
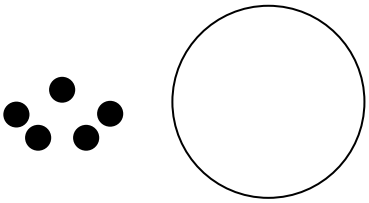
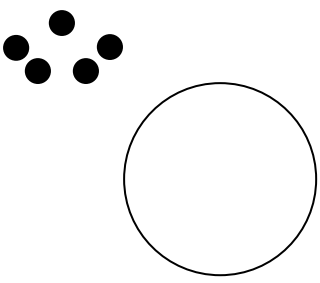
There is no secret to winning pistol matches. A correct application of the fundamentals will result in a perfection of performance that will give the shooter exacting control of his actions.

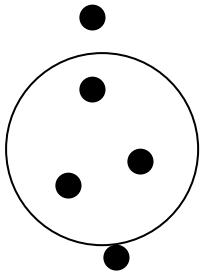
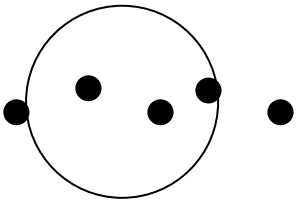
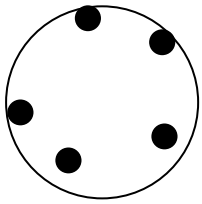
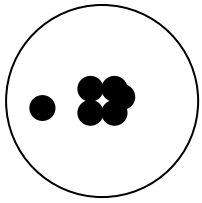
GROUP EVALUATION

Fire a number of shots without observation. Maintain the same aiming area and grip on the firearm. If all hits are grouped closely, but not in the centre of the target and you are quire sure you are applying all the fundamentals of a technically correct shot, you should adjust your sights.

The groups below are offered purely as a guide to analysis.

	**HIGH / VERY HIGH** a. Was the front sight level with the rear sight, or high? b. Was your wrist locked? c. If the sights were correctly aligned, did you drift high in your aiming area? Why? d. d. Did you relate the centre of the front sight to the target rather than to the rear sight
	**HIGH / RIGHT** 1. Did your wrist stay locked during the trigger press? 2. Was your trigger press smooth and continuous? 3. Did you grip remain constant? 4. Did you follow through on the trigger press?
	**RIGHT / FAR RIGHT** a. Was the front sight aligned in the rear sight, with an equal amount of light on either side? b. Did perfectly aligned sights drift to the right during hold? Why? c. Was your thumb lying relaxed alongside the pistol? d. Is your stance in natural alignment to the target?
	**LOW/RIGHT** a. Was your wrist locked throughout the shot release? b. Were you smoothly pressing the trigger rearward before, through and after shot release?

	c.
	**LOW/VERY LOW** a. Was your trigger finger placed on the centre of the trigger? b. Was your little finger applying too much pressure? c. Did the front sight stay level with the shoulders of the rear sight? d. Did your trigger press continue until after the shot break?
	**LOW/LEFT** a. Did your grip remain even and firm during firing? b. Was your trigger finder clear of the pistol frame/wood? c. Did your finder placement on the trigger allow for a direct rearward press? d. Was your trigger follow through smooth?
	**LEFT / FAR LEFT** a. Was there an equal amount of light on either side of the front sight? b. Did perfectly aligned sights drift to the left during hold? Why? c. Was there a gap between your finder and the pistol frame/wood? d. Did you avoid all pressure on the tips of your fingers?
	**HIGH / LEFT** e. Where your elbow and wrist locked during firing? f. Did you have a smooth, directly to the rear pressure on the trigger without side pressure? g. Did you complete the shot smoothly with full

	awareness of sights and trigger?
	**NARROW / VERTICAL** a. Did you relate the front sight entirely to the rear sight rather than the target? b. Was the front sight level in the rear sight notch? c. Did you refrain from breathing during the shot release? d. Are you doing sufficient holding exercises to develop stamina and endurance in the muscles?
	**NARROW / HORIZONTAL** a. Was your stance in natural alignment to the target? b. B. Does your grip ensure natural alignment of the sights? c. c. Is there sufficient front to rear pressure on the grip?
	**AT RANDOM ON THE TARGET** A greater attention to all basics is needed, in particular sighting, tripper control and follow through.
	**CENTRE GROUP** Congratulations! This is the end result of applying all the basic fundamentals correctly

SUGGESTED FURTHER READING

“Pistol Shooting”	by Hans Standl
“Target Handgun in Australia”	by Bruce A. Coiling
“Competitive Pistol Shooting”	by P. C. Freeman Faber and Faber, London
“The Target Gun Book of Pistol Shooting”	by John Chandler A Peterson Publication
“Pistol Marksmanship Guide”	by US Army Marksmanship Training Unit Publication

Apart from these suggested titles, the State Coaching Council has leaflets on improving performance such as:

- Relaxation
- The Seventy Second Formula (Isometric exercises)
- A Guide to Competitive Pistol Shooting
- Training Programme and Sample
- Technical Exercises Rapid Fire, Free Pistol, Standard Pistol, Centre fire
- Goal Setting
- Stress Management
- Mental Training
- Motivation