Dear Colleagues

**A new shooter starts by mastering techniques and grouping 1 MOA**

**The Problem:**   it is traditional to start a new shooter with the rifle on a rest, then practise releasing shots, building confidence as groups become smaller and smaller. Then the shooter is progressed to shooting Target Rifle, where there is a need to learn to use a sling and support the rifle dead still.

Alternatively, a new shooter may be first taught the most important technique of F Class, releasing shots which group within the 6-ring to score a possible.

Whether in TR or F Class, a new shooter needs to learn the release of shots which group within the 1 MOA V-bull or 6-ring. This is well within the capability of most rifles, ammunition and shooters. However, after many years of shooting, most TR and F Class shooters have still not learned to reliably group within 1 MOA.

This article describes a shoot by a determined young person, who seeks to:

* understand and perform the techniques correctly
* then measure success from the size of the group.

**Discussion:**  shot-release in F Class depends upon:

* ensuring the rifle supported by a rest has no trace of movement between the target and scope element, prior to or at the moment of releasing the trigger (practise this in dry shooting, because the shooter’s nervous system and hand-muscle movements can cause the scope sight to move)
* awareness that releasing a shot without the shooter’s adrenaline system producing a very small body tremor, can overcome movement of the muzzle when the projectile departs
* identifying the moment when pressure on the trigger has reached a point where it begins to bite, after which there is an increase of trigger tension, until release suddenly occurs
* mentally identifying the time in seconds after reaching the bite point, then noting that within the first 3 or 4 seconds when dry shooting, a small tremor of the sight relative to the aiming mark, is always observed
* a shot being released at a shorter time, then a tremor will always be observed
* continuing to shoot with a longer period for release since biteg. 5 or 6 seconds, no sign of a tremor will be observed
* the shooter undertaking this estimation while waiting for the previous shooter to finish
* starting his/her own shoot with live shots, released at or after the critical time (e.g. 5 sec).

The shooter will be well aware that prolonging a release time far beyond the critical time will also result in difficulties associated with breathing and eye-strain. If an attempt is made to speed up release, shorter than the critical time, then a wide shot will occur as a result of a clash with a tremor. The critical time found this way changes slightly each day, but only by a second or so. Over many years a shooter may find the time may be as little as 3 seconds.

**Practical:** a new shooter was taught to follow the procedure as above. At 300m the shooter fired 10 factory-load rounds and produced the following group:

The score for this shoot was 57.2. Shots A and B were the first ever by the shooter using the critical time estimated as above. At shot no.6 the shooter began to feel more confident and tried to shorten the time by perhaps 1 second. This continued in shot no.7, which confirmed there was no need to change the estimate of the critical time. The new shooter’s shot numbers 8, 9 and 10 then returned to the 6-ring.

**Conclusion:**many experienced F Class shooters do not routinely achieve a 1 MOA group as done by this new shooter. Both F Class and TR shooters are able to avoid releasing during the period in which an adrenaline rush occurs, which causes the body to experience a tremor that moves the muzzle at the moment a projectile departs.

If a shooter devotes time to practising this technique, then it is necessary to use further techniques which enable shots to group within the 0.5 MOA of the X-ring, e.g. control of the tensions of hand and fingers upon the pistol grip which affect recoil of the rifle.

Best regards

Geoff