Dear Colleagues

**Shooters have different perceptions of their techniques**

**The Problem:**a well-known TR shooter, who in the past year produced 20 scores of 50.10, has been trying to help fellow shooters use the techniques which will enable them to also shoot like this. However, he has been disappointed because very few shooters appear to be able to shoot this way. It would seem that it might be a case of: leading a horse to water and unable to get it to drink!

It is likely that shooters think differently about the techniques which would enable them to shoot 50.10. Yet, shooters are not stupid. Either the techniques can be learned or not. They need to be understood exactly.

The writer has often encountered this. It happens when shooters try to use a technique to avoid generating a bodily tremor at the moment when a shot is released. Some shooters have had some success, managing to reduce the number of tremor shots from 80 to 10 percent of all the shots they discharge. Yet, many still have difficulty following instructions on how to trick the body into not releasing a tremor that moves the muzzle at the critical moment.

This article describes how a shooter’s perception can affect the performance of an important technique, such as averting the release of a bodily tremor.

**Discussion:**a TR shooter may consider he or she is able to aim a rifle with the foresight held dead still. Yet many shooters experience very small movements of the foresight. When this happens the shooter immediately corrects the unwanted movement, bringing the sight back to the aiming mark. Then, while holding the correctly aimed rifle dead still, the slow trigger pull of the imagined second stage continues until the shot is released as a surprise. The shooter is justified in considering the rifle to be dead still because when the shot is released, the aim is back on the aiming mark. However the situation is complicated, when a biologist states when relying upon muscle tissue, nothing can be held dead still unless it is upon an inert rest.

On the other hand, another shooter is able to hold the rifle so still that it is not necessary to correct small movements. This shooter’s body position makes the dead still hold possible.

The views of these two groups of shooters arise from their different perceptions of what is meant by a dead still rifle. The body position of one shooter, not realised by the other, is the deciding factor.

On hearing this, an F Class shooter will silently think: this is why I changed from TR to F Class. Long before F Class shooting began, Percy Pavey frequently stated that the shooter’s hand holding the pistol grip was responsible for many poor shots. He was referring to unwanted tensions of the hand on the pistol grip, which affect both the triggering technique and the recoil mechanism.  This affects both TR and F Class shooters.

As well, F Class shooters know well that pulling the trigger faster than a particular rate will result in tremor shots, which cause a group to extend onto and even follow around the 6-ring. Tremor shots may also occur as a second group centred upon the bullseye, as a straight line, in haloes above and/or below the X-ring or cross the 6-ring and extend into the bullseye. Most shooters’ tremor shots produce a surrounding pattern of shots, within the bullseye or even within the inner ring. For the same reason, TR shooters find their tremor shot group extends outside the V-bull and may follow the boundary of the bullseye or the inner ring.

That is, shooters differ in their perceptions of what constitutes a dead still rifle. One TR shooter’s **body position makes it possible to avoid any movement while supporting the rifle**. However, **both TR and F Class shooters avoid generating a tremor by pulling the imagined second stage of the trigger at less than a required rate.** This leads to a group in the X-ring (F Class) or V-bull (TR). The required rate is found by discharging a dummy round from a dead still rifle using various degrees of care. One rate of pull is slow enough to trick the body into not generating a tremor. At this rate, the foresight or scope element does not move even the slightest off target.

**Practical**:   with a clear understanding of the meaning of a still rifle and rate of trigger pull, both TR and F Class shooters must also consider the other techniques that result in the greatest numbers of points lost. That is, shooters are aware of the need to simultaneously manage each of the following for every shot in a shoot:

* body position (TR)
* tension and placement of the butt against the shoulder (TR and F Class)
* sling position on the forearm and upper arm (TR)
* tensions of the forward hand (TR)
* wrist distortion and tension (TR)
* arm muscle versus skeletal tension (TR)
* tension of the hand holding the pistol grip (TR and F Class)
* placement and tension of muscles of the hand against the pistol grip (TR and F Class)
* anchoring of palm muscles on the pistol grip (TR and F Class)
* placement and tension of the thumb at the pistol grip (TR and F Class)
* positioning and tension of the fingers on the pistol grip (TR and F Class)
* placement of trigger at the first joint of the trigger finger (TR and F Class).

Perhaps the most important technique for a TR shooter is to set up the body position so that the rifle is dead still and no corrections are required to bring it back onto aim. For this, the rifle must be supported exactly above the elbow of the forward arm.

A shooter recently described to the writer that he experienced excessive tension in the shoulder and upper arm muscles when trying to force the elbow underneath the rifle. To set this up, the shooter  (RH)  was asked to first position the body in the approximate position on the mound, then with the butt still on the ground, place the forward elbow far out in front and under the imaginary line between the eye and the target. Upon raising and edging the rifle into the shoulder using the right thumb as a shoe horn, the shooter finds the rifle is aiming high left, well above the targets. Then, keeping the forward elbow still, the shooter should then move the left foot to the left until the rifle is pointing above the target. Keeping the forward elbow still, the shooter should then carefully slide the navel forward until the rifle is pointing down, directly at the target. On looking down and to the left, the shooter will find that the forward elbow is exactly under the stock, with no arm or shoulder tension felt.

The shooter (TR and F Class) should then discharge a dummy round to ascertain the rate of trigger pull, needed to avoid any movement of the foresight or scope element.

**Conclusion:**  when the TR shooter has set up a dead still body position as above, with the sling wrapped around the forearm using the Bisley twist, the forward hand will be fixed at a position on the stock which cannot move. The sling acts as the hand-stop. The weight of the arm, rifle and both shoulders is then balanced solely upon the forward elbow. When the other elbow is raised to reload, it can be replaced without disturbing the forward elbow. When the elbow of the loading arm is returned to aim the next shot, there is no need to be concerned about placing it in the correct position, but where it is comfortable. Otherwise, the shooter needs to ensure that each of the list of items is managed for every shot.

The group that results can be entirely within the V-bull (TR) or X-ring (F Class). A TR shooter may even find that the group is within the X-ring.

Best regards

Geoff