Dear Colleagues

**The shooter who pinches the trigger between thumb and trigger-guard**

**The Problem:**many F Class shooters watch with interest as a shooter scores a 60.3, releasing shots by pinching the trigger. The trigger is pinched with the thumb behind the trigger guard, while the tip of the index finger applies pressure in the same way as the normal trigger-pull. Some of these shooters who previously scored from 50 to 56, amaze their friends by scoring 58.3 to 60.3 using the pinched trigger technique. However, shooters who adopt this technique often find they cannot lift their scores to the 59.6 and 60.8 level.

There are also some shooters who have used this technique in the past and have no wish to go back to it. Many conclude over the longer term that they did not really score any better. Some felt they were doing something wrong and were unable to put their finger on it.

This article discusses the benefits for shooters who adopt the trigger-pinch technique and why it offers no advantage in the long run.

**Discussion:**many F Class shooters find they are unable to reduce the sizes of their groups to less than 1 MOA. They are usually unaware that their scattered sub-groups across the 6-ring, bullseye and the inner ring, result from the way the hand contacts the pistol grip. About 50 percent of F Class shooters have the butt in contact with the shoulder, while the remainder position it about 7 cm in front, so that recoil is absorbed by friction as the rifle slides back across the rest. Except for those who use the trigger-pinch technique, all have the hand in contact with the pistol grip. However, nearly all differ from one another because very few shooters perform the following techniques exactly as described:

* the two large palm muscles and the muscle behind the index finger, are all in contact with the pistol grip, anchoring the hand in exactly the same position for every shot (the slightest change in position results in shots wider than a 1.0 MOA group)
* the thumb is always positioned to avoid absorbing recoil from the rearward movement of the rifle, although it can be allowed to rest on the rifle without applying tension (if the thumb is wrapped around the rear of the action, a RH shooter can experience bullseyes and inners at 7 o’clock)
* fingers 3, 4 and 5 are placed around the front and sides of the pistol grip, without applying tension sideways (if random sideways tension exists, bullseyes and inners occur at 9 and 3 o’clock)
* the index finger pulls the trigger at the first joint, never against muscle tissue of the first or second segments (otherwise shots may occur in any direction and enlarge the group)
* upon reloading, the hand is replaced against the pistol grip with exactly the same tension (otherwise sideways shots occur from the bullseye and out to the inner rings, which are indistinguishable from 2 to 3 MOA wind changes)
* the mind must be emptied of thoughts of where the hand is located (e.g. envisaging the finger pulling the trigger has been found anecdotally to result in a bullseye or inner group at 3 to 4 o’clock)
* the generation of a nervous system tremor can be overcome by:
	+ first ascertaining with a dummy round how much care is required to release a shot without the scope element moving slightly at the moment of release
	+ ensuring each shot with a live round is released with at least this same degree of care
	+ quickly pulling the trigger until it feels to just start to bite, then very slowly while the mind monitors how far the pull has gone, until release occurs as a surprise (an experienced shooter can learn to do this routinely for every shot, taking only an extra 2 to 3 seconds for the second stage and altogether, a total of 13 seconds from releasing the previous electronically marked shot (the US Olympic Team standard since the 1970s).

The above techniques are routinely used by F Class shooters who group within 0.5 MOA, i.e. the X-ring. Many TR shooters also practise these techniques and find that among 8 to 10 V-bulls scored, about 80 percent are in the X-ring. This makes F Class shooters stop and look!

Pinching the trigger and releasing shots with the thumb held against the rear of the trigger guard, creates a forward force against the direction of recoil. This widens the group to a minimum of 1 MOA, with many shots across the 2 MOA bullseye and the inner ring. When pinching, it is important to apply exactly the same tension with the thumb. Otherwise shots tend to appear in any direction across the bullseye. As well, the pull of the trigger finger needs to be as described above, otherwise tremor shots appear. These are the most sensitive steps for the pinch-trigger shooter. To summarise, a score of 60 can be achieved, but with few Xs.

**Practical:**a shooter who adopts the pinch-trigger technique, usually does this after finding he/she has not been able to achieve a 1.0 MOA group, much less 0.5 MOA. A shooter who is unable to fully comply with the above list of techniques, tends to score each week from 51 to 56, usually with fewer than 4 Xs. Upon starting the pinch-trigger technique, the shooter soon finds that pinching the trigger requires a higher degree of care. This realisation should have suggested to the shooter what was happening.

In the past, with the hand on the pistol grip, the shooter produced a wide group across the bullseye, with an occasional inner. If the shooter had been advised by club members, that he/she was experiencing tremor shots, then this should have indicated the origin of much greater difficulties.

The writer has often observed shooters, TR as well as F Class, when they release a dummy round before a shoot. The tremor can be clearly seen from behind by a scorer, as a very small shudder of the head, hat and shoulder. If this occurs when releasing live rounds, the group due to a moving muzzle is as wide as the bullseye and more. This has been measured when coaching shooters every week for several years. The effect of a tremor is now well-documented. However, when the shooter applies the required degree of care, or uses the two-stage trigger technique described above, the group is soon found to occur within the 6-ring and with practice, the X-ring.

**Conclusion:**it is recommended that the shooter should not use any technique where the thumb absorbs recoil from the rifle. This indicates the shooter should return to the list of techniques, used routinely by F Class shooters who can group within the X-ring.

The pinched-trigger technique temporarily overcomes the difficulty for those who are unaware of the widely-used techniques and as a result, cannot group within 1.0 MOA. If these shooters had been encouraged to persevere with the list shown here of widely-used techniques, then it would be found that their groups would soon rival trigger-pinching by grouping within the 0.5 MOA X-ring.

Best regards

Geoff