Dear Colleagues

**The most important technique to be taught to fullbore rifle shooters**

**The Problem:**  the 2019 Victorian Queen’s Prize meeting revealed once and for all, that the most important technique to be taught to fullbore rifle shooters is trigger-release, which enables a shooter to avert the damaging effect of a bodily tremor at the moment a projectile is released from the muzzle. The value of the technique was demonstrated by James Corbett when he won his 41st Queen’s Prize. This technique set him apart from all other fullbore shooters, enabling him to score an average 7 V-bulls per 10-shot shoot. The winner of each other shooting discipline achieved the equivalent, averaging about 6 Xs per 10-shot shoot throughout the competition.

The technique is important. This is despite the fact that hand-loading enables shooters to overcome many handicapping features of their rifles, i.e. projectile design and weight, loading for the dimensions of the barrelled chamber and of course, the design and load of charge. The experimental work undertaken to prove a load enables less effective barrels, projectiles, charges and assembled loads to be identified and rejected.

Shooters with the best hand-loads they can assemble, use shooting techniques that give their load the best opportunity to produce the smallest group. This means that these shooters tend to use shooting techniques which will definitely be the best available, otherwise they would waste all the effort spent in selecting the best load. These shooters do not allow tremors to occur, which widen the groups achievable with the best hand-loads.

For all TR and F Class shooters, trigger-release is the means of avoiding the generation of tremor shots. This involves:

* holding the rifle really dead still
* pulling the imagined second stage of a trigger, with the shooter doing his/her best to avoid disturbing the foresight or scope element
* pulling the trigger for a definite period, but slow enough to enable the shooter’s body to avoid generating a tremor.

At the completion of the Victorian Queen’s Prize meeting, the groups achieved showed conclusively, that the techniques used by the winner enabled him to produce the greatest average number of V-bulls. At this prize meeting were shooters in other disciplines whose use of the trigger-release technique enabled them to pull:

* the trigger without disturbing the foresight or scope element
* for a definite period, but slow enough to enable the shooter’s body to avoid generating a tremor.

The writer is able to verify that the second and third most prolific winners of the King’s or Queen’s Prize, who recorded 16 (the writer) and 15 Queen’s Prizes (Perce Pavey), respectively, also relied upon the trigger-release technique to avert bodily tremors.

The problem in 2019 was that the trigger-release technique to avoid a bodily tremor was barely known. Yet in previous years, trigger-release received the greatest attention among fullbore shooters. At the present time, most shooters fail to take any precaution to avoid generating a tremor. Most do their best to hold the rifle still while they pull the trigger, hoping not to disturb the aim. As a result, TR and F Class shooters tend to put a small number of shots into the V-bull or X-ring, while tremor shots often hit the target in a rough circle around the boundary of the bullseye or 6-ring, respectively. Shots that hit the centre of the target can be equated to those released without a tremor, which moves the muzzle of the rifle at the critical moment of discharge.

Hence, a problem exists for shooters to learn to release shots which do not disturb the muzzle when the projectile is released. The failure of shooters to learn this is considered to be the reason why most leave the sport. They do not know where they are going wrong. Nor can they better themselves beyond a mediocre level.

**Discussion:** there are numerous techniques which a new shooter needs to master, but none as important as avoiding the adrenaline rush that occurs at the moment of discharge of a shot. The disturbance of the muzzle at the moment when a projectile leaves the barrel can cause a shot to go anywhere but at the V-bull or X-ring. A shooter may however, trick the body into not generating an adrenaline rush and tremor. This is done by discharging a dry shot and watching to see whether the foresight or scope element moves relative to the target when the action is discharged. The shooter soon finds that if the imagined second stage of the trigger is pulled at a slow enough rate, i.e. with the required degree of care, no tremor is seen. This results from remembering the required rate for the trigger pull when no tremor occurs on firing a live round. Such shots are found to generally hit the V-bull (TR) or X-ring (F Class).

**Practical:**  a program to learn all the normal techniques for fullbore rifle shooting, including trigger-release, commenced in June 2015 for members of the most isolated rifle club in Australia. Most importantly, these shooters were assisted to overcome the tremor effect. The isolation of the rifle club enabled members to be taught without being exposed to the casual attitudes toward techniques practised by the majority of clubs across Australia. As a result, TR shooters in the test club all learned to support their rifles vertically, with the elbow directly underneath the rifle. They do not move their legs or any other part of the body during a shoot. Their slings are tensed to support bones of the arm, not the muscles. They focus upon the foresight instead of the target. Most importantly, both TR and F Class shooters pull the imagined second stage of the trigger at a rate less than that which would generate a bodily tremor. They all hold the pistol grip without absorbing recoil with the thumb. The progress of shooters in this club was monitored weekly for the four year period.

Nearly 20 shooters (about 16 TR and 4 or 5 F Class) of the test club demonstrated over 300m to 900m, that they could be individually taught shooting techniques by email. When the writer first thought of doing this the idea seemed laughable. During the period of individual teaching, each shooter’s groups were examined each week for technique difficulties. Suggestions were provided so that each shooter could immediately overcome the technique difficulties they were experiencing.

Several shooters now score double possibles whenever conditions allow. Many of these TR shoots contain 6 or more V-bulls. They often score from 7 to 9 V-bulls. All the F Class shooters regularly score possibles out of 60, with at least 4 Xs. When conditions allow, F Class shooters often score 6 to 9 Xs.

**Conclusion:**  it is possible to use email to teach rifle shooters using student-centred techniques. The test rifle club now consists of members who respect what each can achieve as a result of their work. There is no secrecy practised by members who want to win the club championship for the year. Instead, when a member experiences difficulty, others freely help. The weekly emailed teaching program provides details for each member to learn and master a particular technique holding the person back. This approach enabled each member to eventually learn and master every technique needed. As a result, members provided a sense of acceptance and belonging for each other. All members assisted the captain to manage the self-efficacy of each member upon mastering a technique. The rifle club is growing and regularly welcomes new members who are automatically brought into the teaching program. Academic readers will recognise the above terms in italics, which are included to raise the self-esteem and internal locus of control of individual club members.

Any club wishing to establish itself on this basis should correspond with the writer.

Best regards

Geoff