Dear Colleagues

**The right-handed shooter who bends the right leg**

**The Problem:**many shooters in Australia and New Zealand, have since the 1960s emulated the prone position of their counterparts at Fort Benning, USA. Lying flat on the ground a RH shooter has the right leg bent or pulled up, enabling him/her to obtain a better stabilised body position. These shooters were fully justified in using this technique.

Locking body muscles with a leg in this position tended to overcome most of the unhelpful body positions in widespread use. At the end of World War II and as a result of National Service in the Australian Army, many shooters who learned to shoot without a sling acquired some very unhelpful body positions. Most found that as a result of recoil, their bodies tended not to remain in the same position, mostly as a result of movement of the elbows and/or trunk. A major shooting difficulty occurred due to the contorted shapes of the spine, such as:

* an arc flat on the ground
* a lengthwise rotation with one side of the pelvic girdle in the air and one leg partially on top of the other
* a vertical banana shape, where the shoulders and pelvic girdle are held much higher than the rest of the trunk. In this position the toes of the shooter’s boots were often anchored in depressions in the ground, to prevent recoil pushing the shooter back down the mound.

When the technique was introduced, with a leg pulled up, shooters found that the spine was not contorted into any of these positions.

Since the 1960s, some outstanding smallbore and fullbore shooters, with the leg pulled up, produced remarkably small groups. This included Olympic and World Champions. They did this in the knowledge that highly-experienced colleagues at Fort Benning recommended the technique. Some shooters became so highly skilled at dismantling the body position after each shot to reload, then re-assembling the positionexactlyas before. However, all knew from hard experience, that if there was the slightest difference in body position, during a shoot, then shots would fail to appear in either the 0.5 or the 1.0 MOA group.

For many years the writer was reluctant to suggest an improvement to the technique from Fort Benning, largely because of the plight of former Australian Army shooters was still fresh in the memory. It became clear however, that many shooters with a leg pulled up were getting into trouble trying to adjust the natural point of aim.

This article examines what a shooter must do to instantly re-establish the natural point of aim and achieve a 1 MOA group, i.e. with a leg:

* bent or pulled up
* positioned parallel to the rifle barrel to better anchor the body on the mound.

**Discussion:**an observer who watches a shooter with a leg pulled up, is able to clearly see at the start, that the shooter first estimated whether the rifle was aimed along the natural point of aim at the target. The observer would then see whether the forward elbow was held motionless, while the trunk was re-positioned forward or to the rear. Then the whole pelvic girdle and both legs would be moved to one side, initially establishing the natural point of aim. This initial setting of body position is fully required at the outset. However, upon the shooter releasing a couple of shots, it could still be found that further adjustment was needed. The shooter then moved the left leg sideways, followed by a movement of the right buttock and the right leg. At this stage the shooter hoped that no further movements of both legs would need to be made for the rest of the shoot.

The small movements of both legs and the buttocks caused many changes of group, together with some that continued to appear.

The last thing a shooter needs is to find that the forward elbow has moved for some unknown reason, which requires a resetting of the whole body position. If that happens, then many other muscle systems can be found to be out of alignment. The group will include shots on each side of a V-bull group and very likely, elevation shots as well. This can occur when a shooter is uncomfortable, whether a leg is bent or held straight.

The most common experience of many shooters who bend the leg, is to find that the group actually consists of two or three 1 MOA sub-groups, high or low on each side of the V-bull. Returning to a single group often requires the shooter to then continue his shoot, having to continue with the points already lost.

On occasion, the body position may feel uncomfortable during a shoot. Every shooter knows that raising and lowering the buttocks will change the natural point of aim. When the shooter does this, there is an ongoing need to keep adjusting the body position, because shots continue to appear out of the group. If this involves moving the pelvic girdle and both legs, one after the other, then the group will certainly be larger than 1 MOA.

The above difficulties occur for the shooter who has a leg pulled up. The need to move both legs and the buttock, to bring the foresight sideways onto the aiming mark, represents too much change in body position which needs to be made.

**Practical:**to overcome the above difficulties the shooter should first adopt the prone position with both legs straight. The first step is to imagine a line between the eye and the target. The forward elbow is then pushed out in front and onto the ground under the line, with the chest unmoving on the mound. The elbow and chest must not be moved from that moment at the start of the shoot. When the shooter raises the rifle to aim, it is found that the sight is pointed at the sky to high-left . Keeping the elbow motionless, a RH shooter should move the left leg to the left a cm or so, until the foresight moves to the right, in line with the target. Then, to bring the foresight down onto the aiming mark, the navel should be moved forward by a cm or so.

Each time the rifle is raised during the shoot, the shooter should keep the eye half closed to see where the rifle tends to be naturally pointed. If the rifle moves off to one side or vertically, then the shooter should be prepared to continually adjust the foresight to bring it back onto the aiming mark. This requires the left leg only to be moved sideways or the navel to be brought forward or to the rear. Both sides of the pelvic girdle remain flat on the ground and perfectly still. Neither buttock should be moved throughout the shoot, i.e. only the left foot of the RH shooter.

Note that the initial use of an imaginary line from the eye to the target, is the means of positioning the pelvic girdle, so that it never has to be moved during the shoot. Most importantly, this will automatically position the right leg for a RH shooter so that it is parallel to the rifle. This procedure largely overcomes sundry discomforts which cause the shooter to move. Even so, he/she must move, followed by automatic alignment sideways and vertically.

**Conclusion:**a shooter who sets up his/her body position relative to the target, using an imaginary line between the eye and the target, with the forward elbow immobile, should rarely have to readjust the pelvic girdle, only ever moving one leg to bring the foresight sideways back to the aiming mark. By comparison, a shooter who has one leg bent up, has a need to move both legs and buttocks to bring the foresight back onto the aiming mark. Moving the whole pelvic girdle affects muscle groups in many parts of the body and this may continue throughout the shoot.

Happy New Year

Geoff