## **Best target practice**

With some members reporting inaccuracies in the electronic targets at Bisley, here's what you need to know about them and how to get the best from them

he NSC employs electronic target systems originating from three different manufacturers, all of which record shots accurately. However, the concept of shooting at an electronic target is different from shooting at a standard target with a marker, and is not always well understood. There are some facts that must be accepted:

- If maintained correctly, the electronic targets employed at the NSC will record shots accurately in comparison to the electronic centre.
- It is impossible to paste a paper target face to the same degree of accuracy that the target electronics can measure.
- The Hythe frames within which the targets are mounted do not hold the target static, particularly in strong winds.
- When shooting at the target, the firer is aiming at the centre of the paper target face. The shot is recorded against the electronic centre.
- The centre of the paper target face and the electronic centre are unlikely to be 100 percent concentric.

When the shot strike is displayed on the monitor, it scores the shot in comparison to the electronic centre. There is no relationship to the paper target face. When Kongsberg targets are received, they bear a black circle aiming mark; there is no target face. Target faces were added by the NSC approximately four years ago at the insistence of shooters.

All electronic targets employed at the NSC claim an accuracy of 1mm or greater.

## Variable Factors

The NSC target staff go to great lengths and religiously employ a specially manufactured 'jig' to ensure the target face is located consistently. In addition, the target system is electronically calibrated regularly. However, when the target is re-centred,

the calibration will, to a certain degree, be compromised. A pasting error of just 5mm is approximately the width of a scoring ring and can cause an anomaly between the monitor score and the paper score, should they be compared.

The target frame moves in the wind; at the upper edge of the target, this an arc of 150mm or more. This is exactly the same for an electronic or paper target; unfortunately the results on an electronic target are subject to much greater scrutiny.

## Methodology

Before shooting at the electronic targetry, it is important that the rifle has been zeroed and you know that you are going to hit the screen centrally. Beware – any damage to sensors will be charged to the individual/club. More than 50 percent of the reports of a malfunctioning target are due to poor marksmanship and misses. Quite surprisingly, this applies equally at 100 or 1000 yards.

The following procedure is suggested:

- Aim at the centre of the paper target face and adjust your sight setting to obtain a Mean Point of Impact (MPI) over the centre (v-bull) of the target face displayed on the monitor.
- You should not look for the bullet strike on the paper target face – you must trust the electronics and adjust to the monitor.
- Do not request your target to be recentred during a competition or during a shoot where you are recording data.
- Once content with your zero, continue to shoot. Keep in mind that your rifle is zeroed to the electronic centre on that individual target. It may not be zeroed to the centre of the paper target face, though it will be close.
- Falling back and wind changes should be addressed in the normal manner.
- If you change lanes and shoot on a different target, you will need to adjust.



It is possible to increase the life of the target skins by offsetting the electronic centre, thus moving the MPI around the physical face of the target. However, I acknowledge that until we can broaden our understanding and acceptance of the targetry, this is probably a step too far and could damage the reputation of the target systems.

It is common practice for live quarry shooters to zero on the short-range electronic targets. Due to this, they are checked regularly against a paper target. Electronic targets are ideal for a quick 'check zero' or marksmanship training. It is recommended that an initial zero is checked on paper.

The skill in marksmanship is consistency, i.e. maintaining the point of impact accurately on the point of aim in all conditions. This is equally applicable to the electronic centre of a target that relays the point of impact to the monitor.

## In summary:

- There is no relationship between the target electronic centre and the paper target face, which is affixed solely to provide an aiming mark.
- You must adjust your settings to the fall of shot shown on the monitor
- Trust the electronics and enjoy your shooting.