Where Are You Looking?

“But I Must Have a Precise Reference!”

Visual skills are very important in the target shooting sports. A great deal of time, money and effort are invested in attempting to optimize the athlete’s visual environment. Special lenses, glasses and apertures or other devices are often put to use. In some cases visual training activities and routines are utilized. As with many aspects of the sport, the visual fundamentals often become overlooked once an athlete passes the learning stage and moves to the “advanced” aspects.

Unlike shotgun athletes, target pistol shooters look at the front sight. No, not at the target! While looking at the front sight is fairly universally understood and accepted, there are subtleties that are generally overlooked. Where? Just as with the pistol shooter in the previous article, we strive to look at the front sight, yet often end up with our focus on the target and the front sight becomes blurry. Why is this? There are at least two primary reasons: eye physiology and outcome concern.

Our eyes, regardless of the use of corrective lenses, naturally focus at a great distance when relaxed. Bringing the plane of focus back from the distant target to the much closer front sight requires muscular effort. We may see a sharply focused front sight at first, only to see it eventually become less distinct and then fairly blurred as our eye rapidly fatigues. This situation worsens as the match progresses as the eye muscles fatigue, along with the rest of the mind and body.

For most people, adjusting their normal lens correction by +0.50 diopter sphere results in the front sight being so sharp that it almost seems to snap out of the picture. The eye is at rest and the front sight is crisp. For those who need no everyday eyewear correction, just wear a +0.50 diopter sphere lens.

At this point, many people notice the target is no longer sharply defined. See Figure 1 and notice the target is not crisp or deep black. (In practice, the target is not as grey as shown here, though it is still very indistinct.) Athletes either reject the lens or add an adjustable iris to their shooting glasses in an effort to re-sharpen the target. Although adjustable apertures are useful in some situations, this is not one of those cases.

It is a mistake to believe that the target must be sharp in order to shoot with precision. This has been proven by many, especially those who train on a special target with a black center that fades to white at the edge of the target card. There are no rings, center black or boundaries—just a continuous fade from black to white. Despite the lack of clear aiming reference, it is easier for most advanced athletes to shoot very tight groups on this training target than on a regulation target.

Outcome concern is the other major reason our eye ends up on the target. After all, we are looking at what we think is our “goal.” The target is not the goal. It is a mental and visual distraction—especially when worried about a poor shot. The target is only required for an aiming reference and scoring. This principle applies universally in all target shooting disciplines. Make sure to separate outcome from doing.

We now turn our attention to the topic of where to look when actually on aim. Though it seems obvious, pistol shooters often hear: “Look at the front sight!” Does that mean at the middle of the top edge, across the top edge or checking the white gaps on both sides?

When on aim, the eye should rest quietly on the center of mass of the part of the front sight that is visible through the rear sight. Figure 1 clearly shows a white dot on the spot where the eye must sit during the aiming process. When an athlete builds a solid physical and technical routine, he/she finds that when resting his/her eye on the white dot he/she is able to perceive whether or not the sights are aligned without “looking around” at the sight picture. With the eye resting in one spot, and the brain having less processing to perform, the hold area is dramatically reduced. Remember, active visual processing, or merely thinking, opens up the hold. Nothing raises confidence like steadiness!

Having determined where to look with respect to the front sight, now we must determine where to hold. Pistol shooters have a lot of choices: 1) center of the target, 2) bottom edge of the black, 3) very thin line of white between the front sight and the edge of the black, 4) measured white space between the front sight and the bottom of the black that equals the white space on either side of the front sight, 5) deep down in the white and possibly others. All have their proponents and detractors.

Center hold is very popular in standard pistol because of the mix of time limits for the 5 shot strings. It is essentially universal in the rapid stages of sport/center and in the rapid fire pistol event due to the design of the target. Some air and free shooters also choose this method.

Bottom edge of the black hold and thin line of white hold are two common aiming techniques, especially for the precision events and stages. Many athletes dislike the black-white-black-white “flicker” above the front sight as their area of hold takes the sight above and below the bottom edge of the black. This aiming technique is distracting as it magnifies the perception of movement, thus reducing athlete confidence.

Measured white hold reduces or eliminates the flicker problem (if the gap is large enough), while still providing an aiming reference that feeds the perceived “need” of many shooters to have a “precise” aiming reference; however, measuring is a very active visual and cognitive process and is counterproductive.

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Deep down in the white, interesting things happen. First, the athlete notices a lack of distinct aiming reference, which is frightening. Those who are willing to experiment, learn that, if they let their eye rest on the front sight – yes, the white dot spot – the aiming area is “sensed” and the target is so far above the front sight that its movement is no longer a distraction. Note that the apparent movement is now the target’s because the eye is gently following the front sight as if “locked on” and the perception of movement is diminished. Despite the target seeming to “float” well above the front sight, the brain is quite easily capable of finding the same “spot” for shot release. Of course, the aiming “spot” must be thought of as an area of hold and accepted without reservation. This hold method is conducive to deeper shot process techniques that result in shot delivery that is more consistent, confident and decisive.

This technique is especially powerful in air and free events. Decreased distraction of the target movement and a “quiet eye” allow an athlete to instinctively know where to hold. Yes, this takes guts and time to develop, but it is a rewarding and powerful technique that results in small, confidently delivered groups. A quick “try” will give a false result and the technique will be prematurely and erroneously rejected. Now you know why the bull is so high above the front sight in Figure 1.

Finally, we must explain why the gaps on either side of the front sight are so wide. Many pistol shooters, especially in the precision events of air and free, prefer very thin gaps and adjust their rear sight accordingly. Taken to an extreme, this is counterproductive, as will be seen in the discussion in the next article about rifle front aperture sizes. The same principles apply. This, and other related topics of interest to both rifle and pistol shooters, will be discussed in more detail in the next article.

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