

Air Pistol Sights, Insights and Incites

Handgunning is one of the most challenging of all shooting pursuits, consequently also rife with obstacles, pitfalls, opinions and misinformation. I took on the challenge in my late teens after an epiphany of conscience relating to the shotgun's efficiency for blood-sport. I had become quite a Terminator with my Remington 870 twelve gauge. Too much so! But realizing my hunting instincts too strong to suppress, I started emphasizing the degree of hunting challenge over the size of the bag. In other words, emphasis on *quality* of the hunting challenge, rather than *quantity* of the take. However, I little realized just how challenging a pursuit handgun hunting would be.

Learning handgunnery through voracious reading was my first attempt at self-education on unfamiliar subjects; something I've done a few times since to varying degrees of success. However, developing handgun skills proved slow going.

Probably didn't help that my first real handgun was a .41 magnum, or that my shooting buddy and I were too young and dumb to protect our hearing. The sharp report and recoil of a .41 magnum are not particularly conducive to developing good habits, or experiencing early success. Joe and I had the exuberance of youth on our side, but little else. More than anything else, our competitive natures and drives to outdo one-another probably had the most to do with eventual success in becoming good pistol-shots.

Most of our pistol shooting emphasized practical hunting accuracy; much of it from offhand. Think small to medium varmints at 20 to 50 yards with open sights. However, varmints don't stick around long when coming under magnum-pistol fire. Once we became relatively proficient against *moving* targets, we found rolling running jack-rabbits in a cloud of dust downright addicting. It eventually became clear Joe was a little better on still targets; but once they took off, I was the more deadly shot.

In the ensuing forty-odd years I've explored all manner of handguns and sighting systems for them. I've done so in target, hunting, and competition scenarios ranging from plinking, to hunting, to state and national championships. In such long and deep involvement, One cannot help but form opinions based on first-hand experience. A **lot** of first-hand experience. As relates to this chapter, understand that many awards came virtue not only of superior shooting talent, but deeper insight into the best sighting system for any particular purpose 'at hand'. And while I'm fully aware opinions are like assholes in that "every asshole has one", the opinions of an asshole with titles and records might be somewhat more credible than those of some pop-star wannabe and his brother-in-law blowin' smoke on YouTube!

This chapter will explore handgun sighting equipment in hopes of bringing the strengths and weaknesses of each option into focus. And as with many choices in life, any given sighting choice may be undeniably correct for a particular circumstance, a compromise in other situations, and completely inappropriate for yet others.



Virtue of a convex top edge of the rear sight and sharp, undercut front sight, I find the simple open sights of early generation, 'two-piece barrel' Crosman 150s very effective.



Three Czechoslovakian ten-meter pistols; three sighting systems (top to bottom)-
A .177 Tau MK 08 PCP with 6X Burris Mini rifle scope; .22 Brno Chameleon Co2 pistol with non-magnifying red-dot scope; .22 Tau 7 Co2 pistol with excellent adjustable sights.

Open 'Iron' Sights

Open or 'iron' sights were, and remain, absolutely appropriate for their original intents, purposes and applications; those being portability, durability, close-range utility, and/or last-ditch efforts! However, not all iron sights are created equal.

Basic, non-adjustable iron sights often give such a coarse sight-picture as to preclude fine accuracy, especially at extended ranges. As early handgun-hunting pioneers recognized that handicap to their efforts, adjustable sights became more common. But by now, open/iron/mechanical sights may have evolved about as far as they're likely to.

Even the best adjustable sights are handicapped by human shortcomings; mostly our inability to focus on multiple distances at any one moment. The iron-sight shooter must focus on the target, or his front sight, or the rear sight; leaving two of three objects in the sight-picture out of focus. That's not conducive to great precision. My best results used to come from alternately focusing on each of the three points, before finally concentrating on **the front sight** before breaking the shot. Unfortunately my eyes no longer manage such vigorous calisthenics, so my iron-sight shooting ain't what it used to be!

Iron sights have other foibles limiting their precision. For instance, decades ago I was shooting my .45 auto at a public shooting range that was also used by local police departments. I noticed the only other guy on the 25 yard line was also shooting a .45 auto; not very well. As we checked targets, he complimented my groups and expressed dismay with his own. He'd gotten good results that morning, but worse groups and at a different point-of-impact that late afternoon. Consequently he was very nervous about re-qualifying with his pistol the next day, as Dallas SWAT officers have to occasionally do. I explained how the direct sun hitting his sights from extreme left earlier and extreme right later creates a sight-picture illusion responsible for his issues. He was very thankful to learn light intensity and angle affects POI with iron sights. That I hear nothing about that elsewhere I assume is because few shooters are good enough shots to notice it.

Some pistol competitions remain iron-sight specific, and others include Iron Sight classes or divisions. I still enjoy iron sights; nowadays mostly in competitions rewarding a balance of speed and accuracy. And while my past runnin'-varmint experiences and current speed-plates competitions are separated by decades, those early, runnin' jack-rabbit lessons return huge dividends in Steel Challenge competitions forty years later.

Competition being the best acid-test of equipment, the types of sights most successful in various shooting competitions accurately reflect the strengths and weaknesses of each type. For example, the fastest times of all classes in action-pistol competitions are usually posted with non-magnifying red-dot optics since they reduce iron sights' three focal points to a one-dimensional 'picture'. Also, optical sights eliminate the optical illusion inherent with iron sights where point of impact on target is affected by the angle and intensity of light illuminating the sights and target.



Some of the finest adjustable open sights are standard equipment on ten-meter pistols. Clockwise from top/right- Benelli Kite 'Kid' model PCP, Walther LP2 Match Co2, Steyr LP1 PCP, Pardini K60 Co2, and .22 caliber Tau 7 Co2 (with snakeskin grip adornments).



*No matter how simple or extravagant the sights, the longer the sight radius, the better the **practical** accuracy capabilities; meaning, the easier it is to shoot well! With its long barrel producing power exceeding 550 FPS and 10 foot-pounds, this .22 Crooked Barn Tomcat Co2 pistol has excellent accuracy and small game hunting capabilities.*

Non-Magnifying Red-Dot Optics

My gradual embrace of red-dot sights paralleled a (likewise) gradual, age-related decline in eyesight. Red-dot sights are an excellent compromise between open sights and magnifying optics for some purposes, and 'clearly' the best choice for others. I consider them the best choice for most offhand shooting since they don't magnify human wobbles, and also allow better concentration on a one-dimensional sight picture rather than three focal points. And unlike magnifying optics, red-dot sights' non-critical eye-relief allows them to be used at arms length or from the tighter, steadier, 'taco hold'.

Magnifying Optics and the Taco Hold

Of course nothing beats magnifying optics for realizing the most accuracy from a good rest. The degree of accuracy realized relates to not only the amount of magnification, but also reticle and aiming-spot size and shape, the reticle/aiming-spot picture, and how steady is the rest. Truth is, no matter how accurate your rig, you won't shoot many 1/2" groups if your reticle covers 1" of target, or your rest isn't very steady.

Long eye-relief, low-magnification scopes have been used on hunting pistols for about a half-century; long eye-relief being necessary to avoid 'scope eye' injuries with hard recoiling handguns. However the nature of long eye-relief scopes makes them less conducive to high magnifications. That being the case, for a few decades rifle scopes have been popular in NRA offhand pistol silhouette competitions in classes where light-recoiling cartridges make sense. In fact, nowadays rifle scopes are standard equipment in NRA rimfire and air pistol silhouette competitions to such a degree that long eye-relief scopes are seldom seen. And despite my early aversion to the untraditional taco hold, it didn't take long for this old throwback to embrace it once I realized how superior it is for offhand shooting! Some silhouette shooters use **very** high magnification rifle scopes (up to 24X or more), but I prefer no more than 12X or red-dot scopes for air pistol competitions. Higher magnifications just magnify my wobbles so much as to take all the fun out!

The use of rifle scopes on air pistols is a purpose-specific phenomenon mostly relegated to silhouette and field target competitions. The taco hold is necessary when shooting rifle-scoped pistols offhand, and also to be competitive at the highest levels. However the sitting, 'freestyle' position employed in pistol field target is also conducive to the use of rifle scopes; 12X being the maximum magnification allowed in PFT.

To better approach their accuracy potentials from a rest, air pistols capable of phenomenal accuracy at 50 yards also benefit from higher magnifications than usually found in long-eye-relief scopes. But 50 yard air pistol testing being mostly a Ron Robinson thing, outside my own little world the use of high-magnification rifle scopes on air pistols remains almost exclusively a silhouette and field target competition phenomenon. Regardless, all these applications well illustrate the strengths of magnifying optics for the purposes of this discussion.



Three types of scopes (bottom to top) - The Walther CP3 has a Leupold Gilmore non-magnifying red-dot scope. Crosman's excellent 1701P, as equipped with a 2-7X Thompson-Center long eye-relief pistol scope. A Tau MK 08 with 6X Burris rifle scope.



Author's 12X rifle-scoped custom FT pistol and red-dot equipped Benelli Kite both captured 2012 National Champion titles with scores of 42/42 and 39/40 (respectively).

The Upshot on Air Pistol Sighting Systems

To synopsise air pistol sighting systems- as pursuits or competitions evolve, equipment becomes more specialized. Some sights excel for certain applications, but might suck for other purposes. In other words, the more specialized-purpose the sight, the more compromised it often becomes the farther it strays outside its comfort zone.

Iron sights are the simplest, smallest, lightest, most durable and dependable sights. They work well for close-range, speed-shooting, and moving targets. But for long-distance shooting, it can be said iron sights “come up short”.

Magnifying scopes offer great precision, but almost **require** a good rest and are not conducive to speed-shooting or moving targets. Generally speaking and regardless of the amount of magnification, magnifying scopes are the largest, heaviest, most cumbersome, complex, temperamental and fragile of all handgun sighting systems. And the higher the magnification, the more ‘magnified’ those weaknesses.

Though you wouldn’t know it in today’s political climate, compromise is not a four letter word. Sometimes compromise is the best course of action, and non-magnifying red-dot sights may be the best compromise to handle the widest array of handgun applications and scenarios. In my opinion, red-dot sights are the best choice for speed-shooting, moving targets, and most offhand shooting. I feel they are also second only to magnifying scopes for long-range and/or precision shooting, and fall between iron sights and magnifying optics in size, weight, complexity, durability and dependability.

Tube-type red-dot sights are available in 1”, 30mm, and 33mm diameter tubes; all shorter than magnifying scopes. Miniature, or sometimes called ‘reflex type’ dot sights are the smallest, lightest optics; some small as 1” x 2”, and light as a few ounces.

The smallest **dot** size I’ve seen available in a red-dot sight is 1 minute-of-angle, and some are available with dots as large as 8 MOA or more. But in my experience, the dots actually cover more target area than their published minute-of-angle specs. Sometimes considerably more target area.

That said, dot sights are not conducive to shooting smaller groups than the dot covers. Consequently smaller dots do better as priorities shift from speed to precision, or from offhand shooting to rested. In my opinion even a small, 2 MOA dot sight makes little sense on a gun capable of 1 MOA accuracy unless the rig is being used for close-range or offhand shooting like hunting and NRA silhouette competition. Larger dots are used more in competitions emphasizing speed over accuracy, as small dots can be slower to locate in a sight’s field of view in quick-action situations.

My experiences at the 2012 AAFTA Field Target National Championships provide poignant ‘insights’ into magnifying scopes versus non-magnifying red-dots. Having carefully set up two rigs to contest two different pistol matches at 2012 Nats, a 5 foot-pound pistol with a non-magnifying red-dot scope and a 10 foot-pound pistol with a 12X rifle

scope, both rigs dominated the matches they were assembled for. But as an afterthought, I shot a third match with my red-dot rig that results confirmed it ill-suited for.

My 5 foot-pound, red-dot equipped Benelli Kite ten-meter pistol dominated the Iron-Sight/Red-Dot 'Sporter' match I assembled it for; its 39/40 score 7 points ahead of second place in a 14 shooter field. That match featured 1" to 2" kill-zones at distances of 6 to 18 yards, and required all shots be taken from standing position (offhand).

But in the afterthought, Sporter Pistol match featuring smaller kill-zones at longer ranges shot from freestyle (seated) position, the same red-dot rig finished in the bottom half of the field! The difference in results with the Benelli red-dot rig was because its 4 MOA red-dot fit nicely INSIDE the kill-zones in the offhand match, but completely obscured more target area than the actual kill-zones in the Sporter Pistol match!

Keeping that in mind, in the main event shot on the same course as the Sporter Pistol match, my 12X rifle-scoped pistol won Hunter Class with a perfect 42/42 score. The difference in results came because the 12X scope on my Hunter Class rig allowed drawing a bead on tiny spots, rather than covering over 4 minutes of angle!

In other words, "One sight does not fit all". At least not very well.

With handgunning being **such** a challenging pursuit, finding the best sighting system for the specific purpose can return huge dividends in accuracy and results. Certainly as compared to some popular retentive airgun nonsenses that return little to none!



*The author's first National Champion title came in a match that allowed iron sights and non-magnifying red-dot sights, but I was the only shooter to use a red-dot. That my 25/42 score was higher than all 7 iron sight scores **combined** illustrates how important can be choice of sighting equipment, and how ill-suited iron sights are for field target! I subsequently gave the National Champion plaque to the top-placed iron sight shooter.*