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JANUARY NEWSLETTER

DRILL OF THE MONTH

Throughout 2024 we will be running a Drill of the Month in each edition of the newsletter. The goal is help motivate folks to get to the range and actually shoot their defensive weapons, and to have some fun in the process. Each month we'll post a drill or a short course of fire. You are encouraged to go to the range, shoot the drill, and then post your thoughts and a photo of your target on the Rangemaster Facebook page, https://www.facebook.com/groups/rangemaster/ .

The Super Test

Ken Hackathorn is generally credited with having designed a drill known as The Test. Ken's idea was to have a simple, ten round drill that could separate the incompetent from the competent in short order. Using a B8-C bullseye at 10 yards, starting at the ready, on signal the shooter fires ten rounds in ten seconds. With a possible score of 100, a score above 90% indicates core competency.

Two Texas trainers, Wayne Dobbs and Darryl Bolke, came up with an extension of this drill that really serves as a good indicator of skill. Use a B8-C bullseye. Start at the ready for each string. A total of 30 rounds are fired, as follows:

5 yards 10 rounds in 5 seconds

10 yards 10 rounds in 10 seconds

15 yards 10 rounds in 15 seconds

30 rounds total 300 points possible 270 or above is the goal

Here is a video demonstration by the Apache crew

https://youtu.be/q1-jYsFCZ5Q

December a Very Busy Month!

In December, we held two special events at the fabulous facilities of Royal Range in Nashville, TN. The first event was our Professional Trainers' Symposium, on Dec 2. Over 30 of the most active firearms instructors in the US attended, with presentations by some of the best in the business. This one-day event was intended to lay groundwork for collaboration, cross training, networking, and a consensus on best practices among the trainers.

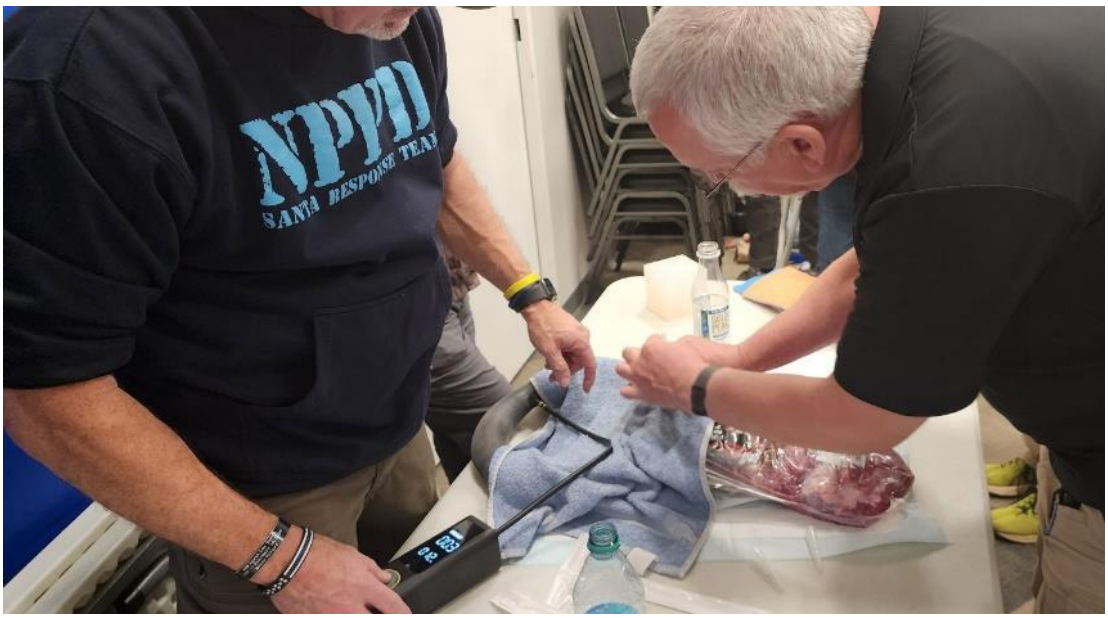
Trainers who delivered presentations and led group discussions on their topic included Massad Ayoob, John Holschen, Erick Gelhaus, Steve Moses, Lane Thayer, Tim Kelly, and Mark Fricke. Also in attendance were Chuck Haggard, John Farnam, Greg Ellifritz, Lynn Givens, Aqil Qadir, John Hearne,

Tiffany Johnson, Riley Bowman, Jason Paletta, Bryan Eastridge and many more.

Professional Trainers' Symposium Group Photo

The next weekend, we held the first Professional Pistolcraft Instructor Development Course. Students in this class had to be prior graduates of our Instructor, Advanced Instructor, and Master Instructor courses. As you can imagine, the skill level was quite high, and we saw some remarkable performances on the range and in the classroom.

There was a continued emphasis on the history and development of our Art, on adult teaching/learning, and an extensive block on range trauma care, taught by two 30+ year emergency room trauma doctors, Dr. Andy Anderson and Dr. Troy Miller. Shooting included man vs man bouts and some very demanding teaching drills. We'll be doing this course again next Spring in Texas (sold out already). Watch for a date in 2025.



Beyond Skills: Why Enthusiasm Matters in Pistol Mounted Optic Adoption

By Rangemaster certified Master Instructor, Jeff Boren

The date is October 22, 2023, and I find myself at a shooting range in Middle Tennessee, surrounded by a remarkable group of instructors and shooters who have all dedicated a weekend to training. We are in the middle of day two of Gabe White's exceptional Pistol Shooting Solutions class. After finishing lunch and practicing the "Split Bill" drill a few times, it's time for Gabe to assess our skills. We are about to shoot our fourth and final scored run of the weekend. All that separates me from the coveted Turbo Pin is one solid performance on the split bill drill. I'm the next-to-last shooter, and as I await my turn, I glance up at

the sun positioning itself firmly above me. By the time Gabe makes his way to me, I take one more subtle look at that beautiful high sun. I know what's about to happen when the beep goes off and I draw my pistol to shoot that drill. I smile just a bit as he says, "Shooter Ready." There are no excuses; I chose to mount an optic on my gun. It's time to put my training to use. If you're curious to what happened, stay tuned till the end.

It's no secret in the firearms industry that we're firmly seated in what Sig Sauer's marketing machine deems the "Red Dot Revolution." Those in the know are aware that optics mounted on pistols are not a new concept, but they have now become mainstream. Initially, competitive shooters used pistol-mounted optics, and over time, they have gained widespread acceptance. As technology advanced and companies invested time, money, and effort into producing quality products, even the harshest critics of pistol-mounted optics now have a hard time denying the platform's capabilities. However, despite the mainstream acceptance of pistol-mounted optics as viable sighting systems on fighting handguns, the application and use of pistol-mounted optics are not solidly embraced by end-users who adopt the platform.

I have engaged in multiple conversations with subject matter experts I know and trust, and the conclusion we initially came to concerning the use of pistol-mounted optics on defensive handguns still holds true. Our conclusion is that pistol-mounted optics in a defensive role are best suited for enthusiasts. That may sound smug, but I assure you that the individuals subscribing to this perspective have the end-users' best interests at heart. The concern revolves around the technical aspects of using a pistol-mounted optic on a firearm that one may rely on to save their life. Due to some fantastic marketing and promotion, many unsuspecting consumers have been led to believe that it's as simple as mounting a red dot on their pistol and heading out into the world, better prepared to defend themselves than before.

So, why do I feel that pistol-mounted optics are for enthusiasts? The short answer is that the amount of time and effort required to understand how to properly mount, care for, and use a pistol-mounted optic far exceeds what the average gun owner is willing to invest. The comprehensive answer delves much deeper, and I will explore my theory in detail as I continue. The crux of the matter is that if an individual decides to transition to or begin with a pistol-mounted optic on their defensive handgun, they must make a significant commitment.

With traditional iron sights, life is simpler. Using the tried-and-true car analogy, iron sights are like driving an automatic, while pistol-mounted optics are like a high-performance race car with a manual transmission. Like the high-performance race car, many things can go wrong. This is not to belittle the importance of iron sight care. Iron sights can come from the factory woefully off zero, be of poor quality, break, or even fail at any time. However, the likelihood of quality iron sights that have been properly installed and zeroed failing is very low.

Pistol-mounted optics are much more complex. Some of the things one must consider are the brand, model, MOA, reticle color, quality of materials, emitters, and more. The list goes on and on. The conundrum is that almost every reputable manufacturer and even non-reputable manufacturers are producing "Optics Ready" models of their pistols. The "Optics Ready" label may lead a significant portion of consumers to believe that the gun they are purchasing is ready for an optic, requiring them only to buy the red dot, screw it on, and venture out into the world. If they face a use-of-force situation, they can simply point and click, and the problem will go away. It is not that simple.

Let's begin with what I term the "Optic Ready Fallacy." I use the term "fallacy" as it is defined: a mistaken belief. This is precisely how I view optic-ready pistols—a mistaken belief that the pistol an individual is buying is "ready" for an optic. In theory, this is correct; the slide is milled from the factory to accept an

optic designed for pistol use. However, we need to examine what "accept" means in this context. In almost every case of factory optic-ready pistols, "accept" means that it will accept most red dot sights with the use of an adapter plate supplied either by the manufacturer, such as Glock MOS Plates, or a mounting plate purchased from the aftermarket.

A weakness of optic-ready slides is the need to use plates, and users should be very wary of stacking plates. The process works as follows: the individual purchases their optic-ready model, buys their chosen optic, selects the correct adapter plate from the options provided with the pistol, or buys an aftermarket plate designed to mount their optic to the gun. Once that's sorted out, they screw the mounting plate into the milled area of the slide and finally screw the optic into the mounting plate. This results in a minimum of four screws, or as many calls it, two extra points of failure. There are exceptions to the process, which are noted in the paragraph below.

Optics with fully enclosed emitters, or "mailbox" style optics such as the Holosun 509T or Aimpoint ACRO, are mounted differently but still require a mounting plate for the optic-ready gun. While these models do not rely on screws to mount them to the slide, they will need an adapter plate that will if the slide is not directly milled to accept their footprint. Another exception to the “Optics Ready Fallacy” is the Holosun SCS series, which is an optic developed by Holosun to fit optic ready slides without the need for an adapter plate. The Holosun SCS has a footprint that matches the factory cut. As of this writing, the SCS is available for certain optic ready models such as the Glock MOS, Smith and Wesson M&P 2.0 Optic Ready Models, HK VP9 Optic Ready, Sig P320, and Walther PDP 2.0 Optic Ready slides. The SCS comes with limitations, such as reticle color and size (green only) and lack of a replaceable battery.

Some factory mounting solutions are better than others. For example, the Glock MOS system is universally considered a poor option, primarily due to the mounting plates Glock provides. For a

casual shooter, the Glock plates may last the lifetime of the gun, which is excellent. However, for those who rely on the gun to potentially save their lives and actually shoot the gun, there is a significant risk in using those mounting plates. It is common for the MOS plates to break, bend, or shear screws. In simple terms, one cannot rely on that system in a life-or-death situation. Those determined to use the MOS system would be much better served using a plate from a reputable company like Forward Controls Design. Other options from the factory, such as the FN mounting system, are solid. FN has been in the factory mounting game for a long time and has perfected it as much as possible. Essentially, FN has figured out how to direct-mount most optics to their platforms without stacking plates.

Is there a better solution than the factory "Optics Ready" option? The answer has been, and I believe always will be, direct mounting. Direct mounting involves milling the slide for a specific optic's footprint, usually done by an aftermarket company for private citizens. A drawback to direct milling a slide, is locking the gun into one single footprint. Each optic has its own "footprint," indicating how the optic is designed to be mounted to the gun, usually via screws. While some optics share the same footprint, it is not universal.

Trijicon, a leader in optics, developed the RMR Type 1 decades ago, and when someone had the idea to mount the original RMR to a pistol, we instantly had the "RMR Footprint." Trijicon later developed the RMR Type 2, designed to withstand pistol use. Holosun entered the game and wisely adopted the RMR footprint. Using a direct milled approach eliminates the plate stacking problem and allows the user to use just two screws to mount the optic. Additionally, it generally allows the optic to sit lower on the slide, thereby bringing the sighting systems closer to the bore line. This also provides more options for co-witnessing the optic.

Once the optic is mounted, whether plate-mounted or directly milled, the process is not complete. As mentioned earlier,

co-witnessing the optic is necessary. Co-witnessing means having backup sighting systems in the event the optic is broken or otherwise unusable. For this purpose, suppressor-height iron sights are used. Depending on the mounting system and optic chosen, different height sights may be required for proper co-witnessing. The level of co-witness is subjective to the user. Personally, I prefer a very low co-witness, allowing me to barely see the top edge of my front and rear sights over the optic housing. It's a usable co-witness, but it demands a considerable amount of training, both in dry fire and live fire. Others prefer a higher co-witness, while some prefer a true co-witness, providing full visibility of the backup iron sights through the optic housing. Regardless of the chosen level of co-witness, it's essential to have a co-witness on a defensive gun. Training to use the co-witness in case the optic fails is a must. Multiple fantastic drills for practicing co-witnessing are available, though they are beyond the scope of this essay.

Now that the optic is mounted and properly co-witnessed, it's still not time to shoot. Before ever firing the gun, mark the screws with what is commonly called "witness marks." Use a pen designed to work on metal and put marks on the screws that align with marks on the optic itself. Even screws properly torqued can and will back out. If this happens and there are no witness marks, it's very hard to tell when they back out. However, if there are witness marks, it's easy to notice if the screws start to back themselves out. When, notice I said "when" and not "if," the screws start backing out, the witness marks make it very easy to torque the screws back to the proper position, remark them, and carry on. So, are we ready to shoot yet? Not quite.

Your optic came with a battery. That battery probably isn't the best quality. Even if it is, it may have been stored in a warehouse or on a FedEx truck in extreme heat or cold. Either way, that battery isn't your best option. Assume the battery that came with the optic is no good and replace it. You might be wondering, "Why didn't you mention this when discussing mounting the optic?"

That's because most people take the optic out of the box, attach it without concern for Loctite or the battery, head to the range, and start shooting. So, yes, we are intentionally revisiting the mounting process.

Mounting the optic is crucial. There will be a specific inch-pound measurement the optic should be torqued to when mounted. Follow the manufacturer's instructions closely. The inch-poundage can vary depending on how it's mounted. If it's a factory system like the Glock MOS, it will use the screws provided by Glock with the inch-pounds Glock recommends. If it's directly milled, it will almost always come with screws and a prescribed inch-pound torque. Then there's Loctite. Be sure to use the right kind and avoid using red Loctite. Research the appropriate Loctite to use; you'll be glad you did. I don't want to simply tell you which one to use because I believe that by researching it yourself, you'll gain valuable knowledge.

So, can we shoot now? Not yet. Because even though the optic is mounted, co-witnessed, screws are marked, and the battery is replaced, we need to zero the optic. Before rushing to the range, we need to delve into the zeroing process and understand its importance. To oversimplify zeroing, it means properly adjusting the optic so that it hits where you are aiming. Each optic comes with two adjustment dials, one for windage and the other for elevation. These dials are usually positioned on the top rear and one of the sides of the optic housing. Clicks on the windage dial will adjust windage left or right and clicks on the elevation dial will adjust elevation up or down. Each click is usually in 1 MOA increments. If you're not familiar with MOA, you have another assignment. At this point, the theory of enthusiasts and optics should become clearer.

We need to choose a zero distance that works for us as the shooter. The most common zero distances for pistol-mounted optics are 10 yards, 15 yards, and 25 yards. In my opinion as a trainer, they are all viable options. However, it's crucial to zero the gun at a distance where you can shoot accurately. In other words,

if you can't hold a 2-inch group at 15 yards, you should not consider a 15-yard zero. Yes, that is a big ask, but please consider what you are asking this gun to do for you. It is a defensive handgun that may be used in the real world where every shot matters and Rule 4 is paramount. Sure, you could bench the gun, but as soon as you lift the gun and hold it with your hands, factoring in your natural arc of movement, that zero achieved on the bench will change. To eliminate this, we need to have a good zero distance.

To achieve a precise zero, we need to understand how our gun performs. There's an industry term called "Offset." In simple terms, it refers to the height of the red dot above the bore line. This red dot is not actually a "dot." It's a reticle. This reticle, when zeroed, will be used to represent the point of impact of the bullet. However, when shooting the gun at distances closer or farther away from the distance the optic was zeroed, there will be variation in point of impact. The good news is that with the distances we commonly shoot pistols, think 3 yards to 25 yards, the effect is not that dramatic, but it matters. For example, I zero my pistol mounted optics at 12.5 yards. This results in a very small “holdover” at closer distances such as 3 yards. You will need to put the time in with your gun when it is zeroed to learn how this effects your point of aim and point of impact at various distances.

Zeroing is not a one-time process. With use, the zero may change. Factors such as temperature, vibration, bumping the optic, battery changes, abuse, or mechanical failure can cause the zero to shift over time. Due to this, it's vital to check the zero regularly. How often should we check the zero? I recommend checking the zero before each practice session. That again, is an enthusiast level process. Before shooting any rounds, dry fire a few times, and observe the reticle intently. Does it appear different than the last time you presented the pistol? If you notice anything weird, that could represent an issue. Dry fire is good for more than checking your optic, it’s also good for the shooter’s

soul. A vast amount of a shooter's training should be in dry fire. Live fire should not represent all your training. While it's crucial to shoot live, dry fire will tell you everything you need to know about your training.

So, you've mounted the optic properly, installed suppressor-height iron sights to co-witness, replaced the optic's battery, witness-marked the screws, torqued the screws to the proper inch-pounds, and obtained a proper zero. Now, you're ready to start training. It is crucial to obtain high quality formal training. Seek out subject matter experts and attend their classes. Put the time and effort in to learn how to use your weapon proficiently. If your fundamentals are not up to snuff it will show with the dot. A bad presentation will leave you chasing the dot, a solid presentation will save a great deal of time and aggravation. Avoid short cuts and parlor tricks to acquire the dot. Those may work on the range but train yourself in fundamentals that work under any circumstance, not just artificially created scenarios with paper targets that do not talk, move, or shoot at you. Do not neglect shooting with your dominant and non-dominant hand only and target transitions.

Finally, you may need a new holster. All quality holster makers are making holsters that fit pistol mounted optics and have a channel for the suppressor height sights. As always, do not neglect holster selection. Purchase a holster from a reputable company.

To sum up: If you want to switch or start with a pistol-mounted optic on your defensive handgun, you need to take on a significant commitment. Some reasons pistol-mounted optics are best suited for enthusiasts include:

1. The complexity of choosing, mounting, and maintaining the optic.
2. Challenges with plate stacking in optic-ready systems.
3. The importance of co-witnessing backup iron sights.
4. The need for proper torque and Loctite when mounting.
5. The importance of zeroing the optic properly.

6. Regularly checking and maintaining the optic's zero.
7. The necessity of extensive training, including dry fire training for proficiency.

In conclusion, while pistol-mounted optics offer advantages, their adoption requires more time, effort, and commitment than many gun owners are willing to invest. Transitioning to a pistol-mounted optic should not be taken lightly, and individuals should be prepared to undergo extensive training and maintenance to ensure the system's reliability. Enthusiasts who are dedicated to mastering the platform will find the investment worthwhile, but for the average gun owner, iron sights may remain the more practical choice.

So, what happened in Gabe's class? When Gabe said standby and pressed the button on that shot timer, I drew my gun. As expected, I had three dots in my optic window. This was due to the position of the sun, which was shining directly down on the optic emitter creating "phantom dots." Because I had intentionally trained at this time of day and pre-produced this situation with my dot I was not shaken. I was able to separate the real dot from the "phantom" dots and I shot the drill clean, twice. I won my turbo pin. The thing is that was just a pin I won in a class. It is completely irrelevant to the real world. What is not irrelevant is the fact I learned how to deal with that situation beforehand, without the pressure. What I confirmed under the pressure of Gabe timing and scoring me and with my peers watching, was my training worked. Because my training worked, I am confident that if I must present my pistol in the real world and there is an issue with my dot, instead of panicking and trying to figure out what to do, I will trust my training and I will focus on getting the job done. Enthusiasm pays off, especially when your life depends on it.

UPCOMING TRAINING OPPORTUNITIES

Jan 12-14, Shotgun Instructor Shreveport, LA

https://www.eventbrite.com/e/rangemaster-defensive-shotgun-instructor-course-tickets-688848714047?aff=oddtdtcreator

Jan 26-28 Pistol Instructor Lakeland, FL

https://www.eventbrite.com/e/firearms-instructor-development-course-tickets-646548783817?aff=oddtdtcreator

Feb 17-18 Advanced Instructor Royal Range, Nashville

https://www.eventbrite.com/e/advanced-firearms-instructor-development-course-tickets-688808955127?aff=oddtdtcreator

Feb 17-18 Combative Pistol (Aqil) Charlotte, NC

https://www.eventbrite.com/e/rangemaster-combative-pistol-course-tickets-688845624807?aff=oddtdtcreator

March 9-10 Combative Pistol (Aqil) Memphis, TN

https://www.eventbrite.com/e/rangemaster-combative-pistol-tickets-709621636417?aff=oddtdtcreator

Mar 15-17 Master Instructor Royal Range, Nashville

https://www.eventbrite.com/e/master-firearms-instructor-development-course-tickets-688809456627?aff=oddtdtcreator

Mar 15-17 Firearms Instructor (John Hearne) Concord, CA

https://www.eventbrite.com/e/rangemaster-firearms-instructor-development-course-tickets-749507576337?aff=oddtdtcreator

Mar 30-31 Advanced Instructor Lakeland, FL

https://www.eventbrite.com/e/advanced-firearms-instructor-development-course-tickets-646560468767?aff=oddtdtcreator

April 12-14 Pistol Instructor Springfield, MO

https://www.eventbrite.com/e/rangemaster-firearms-instructor-development-course-tickets-688810299147?aff=oddtdtcreator

April 26-28 Pistol Instructor Red Hill Range, Commerce, GA

https://www.eventbrite.com/e/rangemaster-firearms-instructor-development-course-tickets-688812114577?aff=oddtdtcreator