

GUN[®] TESTS

THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

\$5.95

June 2023/Volume XXXV, No. 6



LIGHTWEIGHT 6.5 PRC BOLT-ACTION RIFLES

Tested: A Christensen Arms MPR, an adjustable Springfield Armory Waypoint 2020, and a brand-new Bergara MgLite Rifle. All were great shooters, but at a price.

● **Page 5**



9MM COMPACT PISTOLS

We test Walther's PDP F-Series, the Canik TP 9 SC, and the Shadow Systems MR920 optics-ready model. Two competed for top honors, but the third lagged in important areas, in our estimation. ● Page 12



DRY-FIRE LASER TRAINING

Tested: Units from LaserHIT, Strikeman, and Mantis X. ● Page 19

COLOR ME SKEPTICAL

A press release on the PR Newswire said, breathlessly, “Biofire Announces World’s First Smart Gun® Secured by Fingerprint and Facial Recognition.” Will this smartphone that goes bang ever see widespread production and acceptance by gun owners? I know a lot of shooters happy with their “dumb guns.”

The press release further asserts, “The 9mm handgun fires only for authorized users, ensuring it can’t be used by children or criminals.” Further, “Today [April 13] Biofire Technologies unveiled the Biofire Smart Gun®, a 9mm handgun that uses fingerprint and facial recognition biometrics to ensure only authorized users can fire it. Designed for home defense, the Biofire Smart Gun enables firearm owners to defend themselves against external threats while preventing unauthorized access and misuse. The shooting experience is seamless: authorized users can simply pick the gun up and fire it. The Biofire Smart Gun is the first and only biometric firearm on the market.”

Well, yes, because gun owners are leery of their “smart guns” turning into “bricks” without warning and without recourse, so market support for such a radical idea gets stuck in our barrels like a lead slug pushed only by a primer charge. One of the primary tests we conduct every month concerns reliability, and guns that fail to go boom fail to get a passing grade



in these pages. “D” grades and “F” grades are what unreliable guns get here, and we will be trying this gun out when it goes to full production. No easy lift there, either, because the handgun [pictured at left] has a total price of \$1499, with a refundable \$149 deposit charged up front. Biofire says it will begin fulfilling customer orders in

early 2024. Biofire Technologies is based in Broomfield, Colorado.

The company’s goals are laudatory: Keep active firearms out of the hands of children and criminals. According to the release, “Biofire’s approach is totally novel: we’ve applied high-precision engineering principles to make a meaningful impact on preventable firearm deaths among children. No one had tried that before. As a result, Biofire is now offering the most technologically advanced consumer firearm the industry’s ever seen,” said Kai Kloepfer, CEO and Founder of Biofire. “The Biofire Smart Gun shoots like any [other] high-quality firearm, but it also feels like you’re holding the future in your hand. This is a new era in firearm safety driven by ambition and optimism, motivated by the idea that we can in fact help save people’s lives.”

We have tested a handful of fingerprint-ID safes in these pages, but we never looked at the safes as something that needed to ride along on our hips or operate in rain, snow, and cold, so we didn’t test those aspects of them. Will the Biofire gun succeed where others have failed?

Time will tell. Color me skeptical.

GT



Todd Woodard

GUN TESTS®
THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

Editor W. Todd Woodard

Managing Editor Tracey Taylor

Contributing Editors ... R. K. Campbell

Robert Sadowski

Joe Woolley

Sr. Tech Coordinator..... John Taylor

Social Media Manager..... Cara Blake

GUN TESTS CREDO

REMEMBER: FIREARMS SAFETY AND SECURITY BEGINS WITH YOU

TO CONTACT THE STAFF:

GunTestsEditor@icloud.com

GUN TESTS ACCEPTS NO COMMERCIAL ADVERTISING

GUN TESTS® (ISSN No. 1042-6450) is published monthly by AG Media, Inc.; 111 Corporate Drive, Big Sandy, TX 75755-2446. Periodicals Postage Paid at Big Sandy, TX, and at additional mailing offices.

Copyright © 2023, AG Media. All rights reserved. Reproduction in whole or part is strictly prohibited. Printed in U.S.A. Revenue Canada GST Account #128044658.

Subscriptions: \$49 (U.S.) annually. Outside the U.S. and Canada \$72 (U.S.) for one year, \$144 (U.S.) for two years. Single copies \$7.50 (U.S.). Bulk-rate subscriptions for organizations and educational institutions are available.

Postmaster: Please send address changes to: **GUN TESTS**, P.O. Box 8535, Big Sandy, TX 75755-8535. **Canada Publishing Agreement** #40016479.

ONLINE SUBSCRIPTION SERVICE:

www.Gun-Tests.com

Click “Customer Service”

Or go to

www.gun-tests.com/customer-service

Or call toll free (800) 829-9084

How About Three 380 Pistols?

Reader Abraham wants us to look at some 380 handguns. Always glad to oblige. Reader Cal would like us to look at some 17 HMR rifles. Also, we liked two aftermarket Glock triggers for carry.

380 Lineup, Thank You

I just received the May 2023 issue. Nice as usual. I would very much like to see the new Ruger Security-380 Lite Rack together with the Ruger 380 Max and S&W 380 Bodyguard, all compared to each other. — **Abraham**

Hey Abraham: I've forwarded your note to the staff for development. Thanks for the lineup. — Todd Woodard

Re "Downrange," May 2023

Hooray, I managed to set up my online access. I would love to see review article(s) on some 17 HMR rifles. Want to consider some choices for prairie dogs. — **Cal**

Hey Cal: You got it. Ping me back if you have some specific models in mind. Of course, anyone else can weigh in. — tw

Re "Drop-In Glock Triggers: Apex, OverWatch, Timney Compared," January 2023

Todd, hello. If you don't recommend any of the tested Glock drop in triggers for EDC, then why don't you test some triggers that would be acceptable? The test could include EDC replacement barrels and EDC replacement sights for a Glock. Thank you and have a great day. — **EDK**

Hey EDK: We did recommend two of the Glock triggers in the January 2023 issue. Of the Apex Enhancement Trigger & Trigger Bar, we said, "The Apex trigger performed well, and at less than \$100, we feel this is a Best Buy. If you want to get into a flat-face trigger but not spend a lot of money, we recommend

you try the Apex Enhancement trigger." We also recommended the OverWatch Precision TAC Trigger, \$135, saying of it, "Our Team Said: We liked this trigger and feel it is a good investment. We fired our best averages and time with this trigger, compared to the Apex trigger." We graded the Timney Alpha Competition Series Alpha Glock 3-4, \$150, as an A product, but we just thought it was too light for EDC. — tw

I found the article on the Timney trigger upgrade to be timely because I had recently purchased a Glock 19 Gen 5 9mm. I like everything about the Glock pistols except the triggers. I immediately ordered the replacement assembly and had it installed. What an amazing difference it made. I never carry with a chambered cartridge, so I'm not concerned with the light trigger pull. Next order will be a similar assembly for my Glock 21SF 45 cal. I wouldn't be without it. — **J.S.**

Hey J.S.: Good solution to a troublesome problem. As we figured, some readers would want to try the Timney in their Glocks. — tw

Re "22 LR Rifles: We Evaluate Four Good Shooters Head to Head," April 2023

In your April 2023 issue you tested a CZ 457 Varmint MTR, a Ruger American Rimfire Long Range Target, a Savage B22 Precision Rifle, and a sporter version of the Browning T-Bolt. You awarded the Browning a B for being slightly less accurate with SK Match ammo. You noted



that, "whereas our other three samples ... sport heavier barrels ... the T-Bolt is long, slim, and designed to be carried afield." You then note Browning offers several versions of the T-Bolt. Therein lies the apples vs. oranges fallacy. Browning offers a heavy barrel T-Bolt Target model plus at least one labeled Varmint/Target. It's reasonable to predict that a target gun will be more accurate

We welcome mail from our readers. To send us comments or questions about previous articles in the magazine, e-mail us:

GunTestsEditor@icloud.com

If you include the month and year of the article you're writing about, it's a big help.

*Also, please include your name, address, and phone number. We won't publish your personal information other than your first name, but we may need to contact you about your letter. We appreciate the quality and depth of thought our readers generate. **GT***

than a lighter-barreled sporter. Why didn't you use their Target model for comparison against the others? You recently tested some 9mm handguns along with a 380 ACP, then downgraded the 380 for being less potent. You should re-examine the fundamentals of comparative testing before pitting one gun against others when you can reasonably predict the outcome before firing the first round. — **David**

David, on the contrary. We often test firearms that vary in some way from others in a test — lighter, cheaper, less cosmetically pleasing, etc. — as you note. We've learned over time that oranges will occasionally beat out apples, with valuable insights for buyers. The T-Bolt review was valuable to several other readers because they didn't want a target gun, but the T-Bolt was in the ballpark as far as accuracy as the others, but at a big weight premium (1.7 pounds lighter). On the 380 vs.

9mm handguns, there was also a new round, the 30 Super Carry. We preferred the power range of the 9mm Luger over the others. Still do. — tw

Reader Results with SIG Sauer P322

Hi Todd, I'm a long-time subscriber, and I really enjoy your magazine. I don't know if you plan on testing the recently introduced SIG Sauer P322 chambered in 22 LR, but I'll share my experience with the pistol.

In early January 2023, I read some YouTube reviews of the pistol, which were all positive. The SIG P322 is hammer fired, and the reviews indicated that it was fun to shoot, had a good trigger pull, was well made, came with a small red-dot sight installed, included two 20-round magazines, and was easy to field-strip for cleaning.

I bought a P322 on January 12, 2023, at a local gun store. I then went to my local gun club indoor range to test-fire the gun. I tried 10

rounds of CCI Mini-Mag 40-grain CPRN ammo. Five rounds did not fire due to light primer strikes — the firing-pin impressions on the base of the cases were barely visible. I called SIG Sauer customer service and asked to return the gun for service. Their advice was to clean and lubricate the pistol because it had preservative grease on the internal parts that could inhibit proper function. I cleaned and lubricated the pistol per their instructions and returned to the range with a variety of ammo, including Aguila, CCI, Federal, PMC, Remington, and Winchester. Of 81 rounds tested, there were 18 no fires due to light strikes, and again the firing-pin impressions were barely visible. SIG customer service furnished a return shipping label, and I sent the pistol to the New Hampshire factory for service. I received the gun back 10 days later.

The service order showed they replaced the mainspring and barrel, adjusted the hammer strut seat, and lubricated the pistol. After the service, they tested the pistol with Aguila 40-grain and CCI Clean 40-grain ammo, and it fired without malfunction.

I then took the pistol to my gun-club range and tested it with 20 rounds of CCI Mini-Mag 40-grain RNCP, 10 rounds of Federal GM Hi Velocity Match 40-grain lead, 20 rounds of Remington Thunderbolt 40-grain lead, and 10 rounds of Remington SV 40-grain lead with good results. One round of the Remington SV did not fire the first time, but that was ammo related. All the other ammo in the pistol functioned flawlessly. I was disappointed that I initially had function issues with a factory-new pistol, but SIG Sauer really stepped up here and repaired the pistol very quickly at no cost to me. — **Paul**

Hey Paul: Thanks for giving us an early insight into the P322. We'll be on the lookout for those problems. — tw

GT

GUN TESTS REPORT CARD GRADING

Gun Tests Grade: A

A gun with this rating functions perfectly, shoots accurately, and exhibits comfortable, easy use for its owner. We may prefer one gun over others based on its unusual accuracy, superior performance, unusual features, or nice cosmetics. We recognize such a gun for these traits without regard to its cost.

Gun Tests Grade: B

We give this ranking to a gun that functions appropriately for its category, but which might not do as well in major areas as an **A**-ranked gun.

Gun Tests Grade: C

We may have reservations about some aspect of a gun's performance or pricing. We express those reservations so the reader can balance our concerns with his or her needs.

Gun Tests Grade: D

Some aspect of a gun's performance — in particular, safety, function, or accuracy — doesn't meet our standards and isn't easily resolved.

Gun Tests Grade: F

Some aspect of a gun's performance is dangerous, inappropriate for the category, or is likely to fail.

Lightweight 6.5 PRCs: Bergara Notches a Well-Contested Victory

Tested: A Christensen Arms MPR (Modern Precision Rifle), a fully adjustable Springfield Armory Waypoint 2020, and a brand-new Bergara MgLite Rifle. All were great shooters, but at a price.

The 6.5 PRC (Precision Rifle Cartridge) was designed by George Gardner of GA Precision and finalized and formalized by Hornady and then introduced at the 2018 SHOT Show. It is essentially a “magnumized” 6.5 Creedmoor (CM), using heavy-for-caliber, high-ballistic-coefficient bullets that require fast-twist barrels. Also like the 6.5 CM, the 6.5 PRC mandates short, fat cartridge cases along with very tight tolerances throughout the chamber. The result, like with the Creedmoor, is an accurate long-range-capable cartridge without a ton of recoil. Industry reports tell us that the 6.5 PRC is one of the fastest-growing cartridges in the long-range and hunting segments of the rifle world. Also, this is one of the cartridges you have searched for most frequently in our archives, so we thought this report was an absolute must.

Rifles capable of long-range shooting can quickly find themselves too heavy to carry in the field. We have also discovered that, as we age, we increasingly dislike weight and recoil in our rifles, so we set out to find up-to-date rifles chambered in 6.5 PRC that won't tweak our backs or dislocate our shoulders. Our pocketbooks might be strained, however, because light and powerful can also be expensive, and because of the carbon-fiber-wrapped barrels on these rifles, the price tags are up there.

The first sample we chose was a *Christensen Arms MPR (Modern Precision Rifle)* \$2400. As mentioned, the MPR sports a carbon-fiber-wrapped barrel designed to keep the tube as light weight, stiff, and cool as possible. The fore end and cheek piece are also carbon fiber and are mounted to a sculpted aluminum chassis.

Our first look at a Christensen Arms MPR came in the April 2021 issue where we examined it against long-range PRS-style rifles. And it almost won. The rifles in that comparison were chambered in 6mm Creedmoor. Here, we went to a heavier chambering and a lighter rifle. The 6.5 PRC is all about ballistics and down range energy. Where our 6 CM reloads pushed 2975 fps with a 109-grain bullet, and 6.5 Creed rounds are more in the 2700 fps range with 140-grain bullets, our 6.5 PRC loads were in the 2875 fps range with a 156-grain bullet. That launches a bullet with almost 2900 foot-pounds of energy at the



These are three awfully good bolt-action rifles, starting with the brand-new Bergara MgLite rifle, top. A chassis system, the Bergara brings a minimalist design to the game. Middle is the Christensen Arms Modern Precision Rifle, which has a sculpted aluminum chassis and a carbon-fiber fore end and cheek piece. Bottom is a fully adjustable Springfield Armory Waypoint 2020, which is dressed up with a carbon-fiber stock from AG Composites in Evergreen camo.



Far left is a 6.5 Creedmoor bullet and cartridge. Near left, the 6.5 PRC is essentially a “magnumized” 6.5 Creedmoor, with a greater case capacity to push heavier bullets at higher speeds.

muzzle and supersonic flight to about 1650 yards. That gives the hunter elk-worthy energy (at least 1500 foot-pounds) beyond 1600 yards. Please remember that just because you *can* shoot at extended ranges

RIFLE COMPARISON

BERGARA PREMIER MGLITE

6.5 PRC, \$3000

GUN TESTS GRADE: A (OUR PICK)

The magnesium chassis and minimalist design combined to provide the lightest package with the best overall accuracy.



ACTION TYPE	BOLT
OVERALL LENGTH	43.0 IN.
BARREL LENGTH/TWIST	24.0 IN., 1:8
OVERALL HEIGHT W/O SCOPE MOUNT	6.9 IN.
WEIGHT UNLOADED	6.7 LBS.
WEIGHT LOADED	7.2 LBS.
SIGHT RADIUS	NA
ACTION FINISH	BLACK CERAKOTE
BARREL FINISH	BLACK CERAKOTE
MAGAZINE CAPACITY	3
MAGAZINE TYPE	DETACHABLE BOX, AICS COMPATIBLE
STOCK	MAGNESIUM CHASSIS, AR-STYLE BUTTSTOCK
DROP AT COMB	0.5 IN., ADJUSTABLE
DROP AT HEEL	0.6 IN.
BEDDING	ACTION SCREWS THROUGH METAL CHASSIS
BUTTPLATE	0.5 IN., RUBBER
LENGTH OF PULL	13.75 IN.
RECEIVER SCOPE-BASE PATTERN	REMINGTON 700
TRIGGER PULL WEIGHT	1.4 LBS.
SAFETY	TWO-POSITION ROCKER
WARRANTY	NONE SPECIFIED
TELEPHONE	(877) 892-7544
WEBSITE	BERGARA.ONLINE/US
MADE IN	U.S.

CHRISTENSEN ARMS MPR

6.5 PRC, \$2400

GUN TESTS GRADE: A

Well designed for positional shooting and easily folded for carry. Slightly heavier. Great for shooting from support, it might be a bit harder to carry.



ACTION TYPE	BOLT
OVERALL LENGTH	ADJUSTABLE, 44.5 IN.+
BARREL LENGTH/TWIST	24 IN., 1:8
OVERALL HEIGHT W/O SCOPE MOUNT	6.75 IN.
WEIGHT UNLOADED	7.9 LBS.
WEIGHT LOADED	8.4 LBS.
SIGHT RADIUS	NA
ACTION FINISH	BROWN CERAKOTE
BARREL FINISH	BLACK NITRIDE
MAGAZINE CAPACITY	3
MAGAZINE TYPE	DETACHABLE BOX, AICS PATTERN
STOCK	ALUMINUM CHASSIS
DROP AT COMB	ADJUSTABLE
DROP AT HEEL	0.25
BEDDING	V-BLOCK
BUTTPLATE	LIMBSAVER, SOFT RUBBER
LENGTH OF PULL	12.5 TO 14.5 IN.
RECEIVER SCOPE-BASE PATTERN	REMINGTON 700
TRIGGER PULL WEIGHT	1.5 LBS.
SAFETY	2-POSITION ROCKER
WARRANTY	LIMITED, W/ACCURACY GUARANTEE
TELEPHONE	(435) 528-7999
WEBSITE	CHRISTENSENARMS.COM
MADE IN	U.S.

does not mean you *should* at extended ranges.

The second test rifle was a fully adjustable *Springfield Armory Waypoint 2020*, \$2400. Using a carbon-fiber stock from AG Composites in the Evergreen camo pattern, the Waypoint offers a more conventional camo pattern for the stock, which some shooters will prefer.

Next came the brand-new *Bergara MgLite rifle*, \$3000. Also a chassis-mounted system, the Bergara brings a minimalist design to the game.

We were expecting a great deal from these rifles, and to get the most from them, we needed a top-shelf optic. So we secured a Leupold Mark 5HD 3.6-18x44, a first-focal-plane scope equipped with the TMR reticle. At 26 ounces, the Mark 5HD is not super light, nor is it a monster to hump up a hill. The 3.6- to 18-power magnification gives us plenty of coverage for the field, and the 44mm objective is one of our favorite diameters — not so large that it has to be mounted with extra-tall rings, while still wide enough to get sufficient light to our eyes. At less

than 12 inches in length, this Leupold packs a lot of features into a short tube that looks and works right on short or long rifles. We used Leupold 35mm rings to attach the glass to Picatinny rails on the rifles.

All three barrels have 1:8-inch twists, suitable for longer projectiles. Most of the factory ammunition we've seen has been in the 130- to 147-grain weight range. Velocities more than 3000 fps are possible, but we felt this cartridge could do better. We started experimenting with Berger 153- and 156-grain bullets more than two years ago and have been very pleased with the results on multiple 6.5 PRC platforms. We thought that would be the thing to do here as well. The Berger 153.5-grain Long Range Hybrid Target and 156-grain EOL Elite Hunter both did very well when pushed by near-maximum charges of VihtaVuori N565, N560, and Hodgdon H1000 powders. We lit the charges with CCI BR2 Large Rifle Benchrest primers. We assembled loads on Redding match dies. We finally admitted that we were tired of doing tons of case trimming with arthritic

**SPRINGFIELD ARMORY WAYPOINT 2020
6.5 PRC, \$2400
GUN TESTS GRADE: A**

Great conventional stock with vertical pistol grips. Smooth bolt operation. We liked the little touches like the QD mounts making the rifle easy to sling.



ACTION TYPE	BOLT
OVERALL LENGTH	45 IN.
BARREL LENGTH/TWIST	24 IN., 1:8
OVERALL HEIGHT W/O SCOPE MOUNT	5.8 IN.
WEIGHT UNLOADED	7.7 LBS.
WEIGHT LOADED	8.2 LBS.
SIGHT RADIUS	NA
ACTION FINISH	GREEN CERAKOTE
BARREL FINISH	CARBON FIBER, GREEN CERAKOTE
MAGAZINE CAPACITY	3 ROUNDS
MAGAZINE TYPE	DETACHABLE BOX, AICS PATTERN
STOCK	CARBON FIBER FROM AG COMPOSITES
DROP AT COMB	ADJUSTABLE
DROP AT HEEL	0.0 IN.
BEDDING	PILLAR
BUTTPATE	PACHMAYR DECELERATOR
LENGTH OF PULL	13.75 IN.
RECEIVER SCOPE-BASE PATTERN	REMINGTON 700
TRIGGER PULL WEIGHT	2.2 LBS.
SAFETY	2-POSITION ROCKER
WARRANTY	LIMITED LIFETIME FOR ORIGINAL OWNER
TELEPHONE	(800) 680-6866
WEBSITE	SPRINGFIELD-ARMORY.COM
MADE IN	U.S.

hands and bought a Henderson Precision power case trimmer (HendersonPrecision.com). The trimmer and a few extras cost us about \$900, including the motor, but then allowed us to do in minutes what used to take us days. Very easy to use, and we don't think that we have ever seen a smoother or more precise chamfer on our trimmed cases.

Here's how these bolt actions performed:

Bergara Premier MgLite 6.5 PRC, \$3000

We first examined some 6.5 PRC rifles in the November 2020 issue. We were very impressed with the Bergara Premier Mountain 2.0 rifle at that time and found nothing in the new MgLite that changed our mind. The "Mg" represents magnesium that is the primary component in the chassis instead of the more common aluminum.

When you add in the sleek design of the chassis, the carbon-fiber-wrapped barrel along with more carbon fiber in the cheek piece, and the very cool-looking pistol grip, you wind up with an unscoped

From top to bottom are actions by Bergara, Christensen Arms, and Springfield. The 6.5 PRC loaded cartridge is a bit longer than normally found in short actions. To solve this, all dish out the openings of their ejection ports (arrows) to make sure the shooter can easily eject a loaded round.



Our Leupold M5HD scope provided crystal clear details and a magnification range we think is perfect for long-range shooting or hunting.



rifle that weighed in empty at a mere 6.7 pounds.

The use of magnesium was not the only thing that made the chassis different. First the bad — the magazine release was a small lever that protruded below the front edge of the trigger guard. We don't want mag releases to be easy to activate unintentionally, but we really don't like to have to shift our grip to release the mag. The spring was stiff enough and the lever small enough that we had to use a thumb from one of our hands to drop the mag. OK, that's all for our gripes. We wish all our lists were that short.

The remainder of the stock had a number of the features we thought notable. In what must be a cost-saving move for Bergara, the sides of the receiver are both inlet to allow the closing of a bolt handle. Ours being right-handed, the left side was plugged. Being on the very popular Remington 700 footprint, we wonder if these stocks might be available at some future date as an aftermarket part. As it is, they are virtually ready to go for a right- or left-handed action.

RIFLE COMPARISON

The fore end is very rigid and allows substantial room to free-float the barrel, even if someone decides to install a slightly larger tube. M-Lok grooves have been cut at the 3, 6, and 9 o'clock positions, very useful for the addition of a Picatinny rail. Then Bergara machined an ARCA Swiss rail into the bottom of the fore end. This would be perfect for the use of

specific bipods, tripods, or saddle-type attachment mounted on tripods for hunting afield.

We're not done with the chassis yet. It ends with an attachment that allows the use of an AR-15-style buttstock. Any of them. Just loosen the castle nut and pop on whatever your heart desires. We don't think we would change the supplied XLR



From left, we tested Norma 143-grain match rounds, Berger 156-grain EOL reloads, as well as Hornady 143-grain ELD-X ammunition.

We have had outstanding results for the last three years with 6.5 PRC handloads using VihtaVuori N565 and Hodgdon H1000 powder



behind Berger 153.5-grain Hybrid Target bullets as well as their 156-grain EOL bullets, all lit off by CCI BR2 match grade large rifle primers. The Henderson trimmer is a real hand-saver.

6.5 PRC RANGE DATA

Norma Golden Target 143-grain Match

Average Velocity
Muzzle Energy
Best Group
Average Group

Bergara MgLite

2822 fps
2527 ft.-lbs.
0.610 in.
0.679 in.

Christensen MPR

2892 fps
2656 ft.-lbs.
0.518 in.
0.580 in.

Springfield Waypoint

2844 fps
2569 ft.-lbs.
0.620 in.
0.743 in.

Hornady Precision Hunter 143-grain ELD-X

Average Velocity
Muzzle Energy
Best Group
Average Group

Bergara MgLite

2908 fps
2686 ft.-lbs.
0.509 in.
0.568 in.

Christensen MPR

3032 fps
2919 ft.-lbs.
0.836 in.
1.080 in.

Springfield Waypoint

2925 fps
2717 ft.-lbs.
0.356 in.
0.574 in.

Berger Handloads 156-grain EOL

Average Velocity
Muzzle Energy
Best Group
Average Group

Bergara MgLite

2752 fps
2625 ft.-lbs.
0.631 in.
0.770 in.

Christensen MPR

2865 fps
2845 ft.-lbs.
0.336 in.
0.480 in.

Springfield Waypoint

2804 fps
2724 ft.-lbs.
0.691 in.
0.766 in.

How We Tested: We fired the rifles side by side at American Shooting Centers in Houston, putting multiple three-shot groups downrange at 100 yards. While the ammo drought is not quite as severe as it once was, 6.5 PRC ammo is harder to find than 6.5 Creedmoor. That led us to checking out some different brands just to see how they would do. Sources were located through Ammosseek.com. First was Norma 143-grain Golden Target Match ammo from Mutiny Machine (MutinyMachine.com). Including shipping and handling, 20-rounds cost us \$34.56 per box delivered. We got Hornady 143-grain ELD-X hunting ammo from Miwall Corp. (MiwallCorp.com, \$51.70/20). To test heavier bullets, we ordered reloading components as follows: CCI BR2 Benchrest Large Rifle Primers, Hornady 147-grain ELD-M bullets as well as 156-grain Berger EOL hunting bullets, variously loaded with Hodgdon H1000, VihtaVuori N560, and N565 powders. Best results were obtained using the Berger bullets and VihtaVuori N565 powder, as shown in the accompanying tables. All rifles were well-sandbagged in a Caldwell TackDriver Pro (Brownells 100-027-023, \$49), further supported by a large rear bag, heavy from Tab Gear (tabgear.com, \$34). Velocities were measured by LabRadar (mylabradar.com, \$559).

stock for our purpose. Not only is the buffer tube and the bracing made of carbon fiber, but so is the adjustable cheek piece. Before you ever get to that castle nut is a sturdy hinge that, when the right button is pushed, allows the stock to be folded to the left. There is even a bubble level visible just in front of the hinge. The AR-style pistol grip is also made from carbon fiber. An AISC-style three-round magazine from Accurate Mag is provided and fits in a nicely beveled magwell.

The rifle comes with a Trigger Tech trigger. Required trigger compression on our sample, after adjustment, averaged a mere 1.39 pounds. The slim bolt handle ends with a hollowed-out bolt knob that was easy to find and operate. The fluted bolt has dual lugs, dual plunger-style ejectors, and a sliding extractor. The tip of the striker protrudes, thus doing double duty as a cocking indicator. The two-position thumb safety was exactly what we would expect on a Remington-footprint rifle. Don't forget the properly enlarged ejection port and a 20-minute-of-angle Picatinny rail. The carbon-fiber-wrapped barrel has a slightly thinner profile than on our other two rifles. It is capped with $\frac{5}{8}$ x24 threads and a radial muzzle brake.

All told, this should be a very nice rifle to fold up, place in the right backpack, and head for the hills.

Our Team Said: Function and feeding were perfect. While the Bergara didn't post the best group with any of the ammo, it shot all the ammo well. The Hornady 143-grain ELD-X hunting ammo averaged 0.568-inch groups, and the Norma came in with the 143-grain match ammo at a 0.679-inch group. The Berger 156 EOL (Extreme Outer Limits) handloads averaged 0.77-inch groups. Overall, the Bergara notched a first-place win with its aggregate of 0.671-inch average groups. The Springfield was incredibly close behind at 0.694 inch, and the Christensen Arms MPR exactly two hundredths of an inch behind the Springfield at 0.714 inch. All three rifles shot extremely well, but because we were searching for the most portable accuracy, we give the win to the Bergara. We tip our hats to all three.

Christensen Arms MPR 6.5 PRC, \$2400

Christensen Arms produces a match-grade hand-lapped stainless-steel barrel and then wraps it in carbon fiber. On the MPR, the result is a stiff, lightweight, accurate tube. The finished product was about 0.920 inch just before the $\frac{5}{8}$ x24 threads and

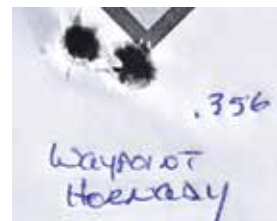
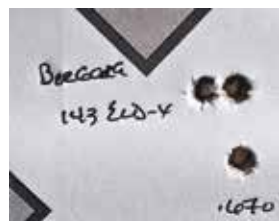
attached muzzle brake. In our tests, as verified with an infrared thermometer, the carbon-fiber-wrapped barrels on these rifles consistently heated up more slowly and cooled down more quickly than their all-steel brethren.

Weight for the shorter-barreled versions of this model can start as light as 6.9 pounds. Our MPR, with the 24-inch 6.5 PRC barrel, came to us weighing in at 7.9 pounds. Not exactly in the New Ultra-Light Arms class of rifles, the MPR brings enough weight to keep a high-energy bullet from being uncomfortable to shoot for an extended session — the muzzle brake also helps. The MPR utilizes a proprietary brake that sports four bilateral ports. Recoil (maybe more noise) was noticeable, but certainly not unpleasant. Subjectively, we graded it in the 243 Winchester range. The brake also has four ports on the top that arrived plugged with Allen screws.

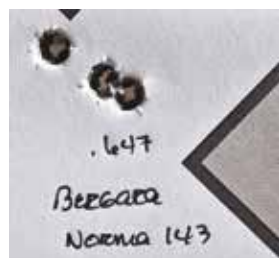
Moving from the rear forward, we removed each screw and then shot a few rounds. We didn't think the rearward recoil lessened as we did so, but muzzle flip became much more subdued. So, with a 12-port



Left to right are groups shot with the Berger handload in the Bergara MgLite, Christensen Arms MPR, and Springfield Waypoint. The MPR and the Bergers shot the smallest group of the test.



Left: This is the Bergara's largest group shot with the Hornady Precision Hunter 143-grain ELD-X load, compared to, center, the MPR's best group with Hornady load. Right: This is the Springfield Waypoint's best group shot with the Hornady hunting ammo.



Left to right are groups shot with the Norma load in the Bergara MgLite, Christensen Arms MPR, and Springfield Waypoint.

RIFLE COMPARISON

brake on the rifle, we continued our shooting tests.

The chassis is made from 7075 aluminum billet and then hardcoat-anodized to a desert brown color. Black and tungsten colorings are also available. The action mates to the chassis using Christensen's V-Block bedding. The action stayed tight and shot consistently good groups with most loads. The shooter gets six QD mounts at various locations on the rear of the chassis. When we wanted to put one up front, we found we needed to buy a QD port suitable for M-Lok rails and attach it to the 17-inch-long handguard. We would prefer to see a couple designed into the fore end on future models.

The fore end is solidly attached to the chassis and brings some new technology to the current version. Christensen Arms recently introduced the FFT or Flash Forged Technology. Stronger and lighter than the carbon fiber previously used, the FFT material is sufficient for use as a monocoque shell for many of Christensen's new traditional stocks. Cheaper than titanium, it is also very enviro-friendly. If a mistake is made in the molding of these new FFT parts, the blemished part can be chopped up and dumped back into the solution for a second try. Note that the adjustable cheek piece is made from the same material. A portion of Picatinny rail is included on



Above: The MPR's folding stock is held securely folded with the help of a strong magnet. Right: The Christensen Arms MPR chassis is easily customized for your cheek height and length of pull. The stock abounds with QD slots.

Top: With four ports on each side, the Christensen Arms muzzle brake works well, but we really noticed a difference in muzzle flip when we took the plugs out of the top four holes. Bottom: The Waypoint uses a very effective radial-type muzzle brake.



the 6 o'clock portion of the fore end and more slots are molded into the 3 and 9 o'clock positions. The bottom is flat, which makes it great for resting on bags. While wide enough to sit well, it is narrow enough to carry well by hand. A good lock, a strong magnetic latch, and a tight hinge allow the chassis to be shot while extended or folded to the right, making the MPR short enough to be carried in a proper backpack.

Other provided features include an adjustable length of pull, a standard AR-style grip and AICS compatible mags. Our three-round mag was made by Accurate Mags (AccurateMag.com) and marked "300 WSM" — a cartridge that has the same base dimensions as the 6.5 PRC. Additional three- and seven-round mags are available from Accurate Mags as well as MDT (MDTTac.com/magazines/). The mag has a large-lever tactical release that is easily found and operated.

The rear base of the chassis is set up for the addition of a monopod, if so desired. The action is designed with a Remington 700 pattern so scope mounts and many other aftermarket parts will fit. The rifle is topped by a 20-minute-of-angle rail. The bolt body, bolt handle, and bolt knob have been skeletonized or fluted to save weight, then finished with a black-nitride process.

Our Team Said: A bit rough in the beginning, the bolt throw smoothed out nicely. Function was perfect whether we were going from the magazine or single feeding. Overall average group size was just over 0.71 inch — and that is with this rifle not liking the Hornady 143 ELD-X at all. But the Norma 143s averaged less than 0.6 inch per three-shot group, and the Berger handloads using 156-grain hunting bullets shot sub-half-inch average groups. They also posted the best group of the tests at 0.336 inch. Add in a Trigger Tech flat-faced trigger that activated consistently with 1.5 pounds of pressure and a short and crisp break, and we loved this rifle.



The Bergara MgLite uses a Remington 700 short-action footprint. Made of magnesium, every ounce of spare weight is removed from the chassis, action, and bolt.



Left: The Bergara's lightweight AR-style buttstock also folds. Below left: It includes a carbon-fiber pistol grip (arrow) and a bubble level (arrow). Below right: The Bergara buttstock is a minimalist style.

Bergara machines the very popular Arca Swiss rail directly into the MgLite's fore end. We attached a versatile Atlas bipod to ours.



Springfield Armory Waypoint 2020 BAW92465PRCCFGA 6.5 PRC, \$2400

Springfield got into the precision-rifle world with their Waypoint 2020 a couple of years ago. They started with their own action and then attached quite the list of existing parts. Their action uses a dual-lugged bolt that glides down EDM-cut raceways. We were impressed by how smoothly we could cycle that action. More of that smoothness comes from dual cocking cams, making the bolt just a bit easier to cycle. The bolt is fluted and uses a single, plunger-style ejector along with a sliding plate extractor. Bolt throw is 90 degrees, and the somewhat oversized bolt handle is removable, allowing you to replace it with anything that melts your butter.

The thumb safety is a two-position rocker style that would be expected on actions using a Remington 700 footprint. It is designed as a short-action length, perfect for the 6mm Creedmoor, 6.5 Creedmoor, and 308 Winchester chamberings available in the Waypoint. The 6.5 PRC is a slightly longer cartridge (maximum overall length of about 2.95 inches versus 2.82 inches for the others) and could be a very tight fit when trying to eject a loaded round. Springfield Armory slightly lengthens the ejection port, solving the problem for us. The top of the action is drilled and tapped for scope mounts, also using the Remington 700 pattern. Bottom metal really is metal. There is a small American flag lasered into the bottom of the trigger guard reminding where this rifle was made. The mag release appears in the forward end of the trigger guard and is big enough to locate easily. We did not have any problems activating it accidentally. The magazine was, once again, by Accurate Mag. It was the three-round all-metal version, and it worked perfectly for us.

We think Springfield did a good job with the action, and then they started adding proven parts from other manufacturers. First was the trigger from Trigger Tech. Our sample adjusted down to just over two pounds. Activation required virtually no take-up and break was very crisp. Next was the barrel made by BSF, which uses a different process in a carbon-fiber barrel build than we usually see. A stainless-steel tube is fluted longitudinally before the carbon fiber



The Waypoint's AG Composite stock is strong and well designed for riding on bags or in your hand. Note that the adjustable cheek piece, left, can be raised or removed to take out the bolt. There are index marks on the riser to help you return the cheekpiece to the proper height.

The Springfield Armory Waypoint's mag release is well protected inside the magwell (arrow).

Just like the other two rifles in our test, the

Waypoint uses the very good Trigger Tech trigger.



wrap is applied. Instead of a direct wrap, the fiber is installed where contact is only made with about 5% of the barrel. This provides a cooling channel that, while still rigid, aids in consistency while transitioning from cold to warm bore shots. The barrel was threaded 5/8x24, had a thread protector provided and came with a radial muzzle brake that worked very well. The action bottom metal and exposed metal parts of the barrel were green Cerakote.

The stock was made by AG Composites. CAD designed and CNC machined from a proprietary (of course) material, the stock was light and stiff. Inletting was precise, with no burrs or gaps to find. Ours was painted with the grey, green, and tan of the Springfield's Evergreen camo pattern. The action screws attach to the receiver through metal pillars. The bottom of the butt stock and the fore end just in front of the magwell were flat and rode well on bags. The rest of the fore end was narrower and rounded off a bit. Our stock had three M-Lok slots machined in the fore end for the addition of a Picatinny rail or a sling swivel stud. The stock also displays five QD sockets on the sides and the bottom rear. We liked the vertical pistol grip and its good palm swell. It made the rifle very comfortable to shoot from a variety of positions. The cheek piece is attached to two vertical studs that can be raised or lowered inside the butt stock. Just find your spot and tighten the Allen screw on the right side. The cheek piece was long enough and smooth enough to work well, but it prevented the removal of the bolt where we had it set. No problem, loosen the Allen screw and raise the cheek piece up high or remove it. Clean your rifle and slide the studs back into the stock. Springfield provides index marks on the studs to help you return to the correct position. Everything was capped by a Pachmayr Decelerator recoil pad that further mitigates the already reasonable recoil impulse of a 6.5 PRC.

Our Team Said: Springfield Armory guarantees 0.75-minute-of-angle accuracy. The least accurate of the three ammo types tested provided a 0.76-inch three-shot groups on average — that being with the 156-grain Berger reloads we developed. The Normas came in with a 0.743-inch average and a best group of 0.62 inch. The Hornady 143-grain ELD-X rounds averaged 0.574-inch groups with a best group of 0.356 inch. Not too shabby.

*Written and photographed
by Joe Woolley, using evaluations
from GUN TESTS Team members. GT*

9mm Compacts from Walther, Canik, and Shadow Systems

We test Walther's PDP F-Series, the Canik TP 9 SC, and the Shadow Systems MR920 optics-ready model. Two competed for top honors, but the third lagged in important areas, in our estimation.

Despite there being a bad shortage of 9mm handguns a couple of years ago, in 2023 many well-known brands are reasonably available and are facing challenges from all quarters of the market, lower priced, par priced, and higher priced. We recently took a look at three lesser-known nameplates to see how they shaped up against household handgun marques, and we found a lot of quality.

Our first test gun was the *Canik TP9 Elite SC HG5610T 9mm Luger*, \$419. Readers have asked us to test the TP9 SC, in part because of the Canik's affordable price. A word of caution: The price spread on this pistol was more extreme than the other two handguns tested. While we found an example new in a shop for less than \$400, some online sites were asking \$599, and the optics-mounted pistol was as high as \$699. Beware scalper prices. We found three identical Canik 9mm pistols within a 50-mile radius at fair prices, like our test gun. Caniks are manufactured in Turkey and have earned a favorable reputation. The early pistols were more utilitarian, and some had add-on safety levers we did not like. The present Elite type seems well developed and looks well finished. As a parenthetical, we don't feel that the "SC" nomination (Sub-Compact) is accurate. This isn't a sub-compact pistol, in our view. It is a compact, save for the short grip.

Our second handgun was a *Shadow Systems MR920 Combat 9mm Luger*, \$830. We have previously tested the MR920; this was a new optics-ready pistol,



The Shadow Systems MR920, left, and the Walther PDP F-Series handgun, right, were the best in this test. For self-defense, we would be happy with either one, but we prefer the PDP F-Series.

which we found for sale just shy of \$800 in a well-stocked shop. We found these handguns offered online for as much as \$989. We don't mind paying a little extra to a stocking dealer, but \$170 extra doesn't sound right. This 9mm compact handgun is in most ways an elevated Glock 19, but you could not purchase a Glock 19 and add the slide, barrel, and sights to the pistol and spend this amount of money. To be clear, Shadow Systems doesn't modify a Glock pistol; they simply manufacture their own receivers. The pistol has been available when Glocks were not in the past two years, with the situation now somewhat reversed.



Left: Fired off hand, the Canik's sights and trigger gave a good measure of control, but we didn't like it as much as the other pistols. Center: The Shadow Systems MR920 fits most hands well. Fired off hand, the Shadow Systems pistol is tractable and fast on target. The Shadow Systems MR920 fits most hands well. Right: The Walther comes on target quickly. The raters feel the pistol has a good natural point. The Walther PDP F gets an "A" for attention to detail. Handfit is best of the test. The trigger is superb.

9MM LUGER RANGE DATA

Remington UMC 115-grain FMJ	Canik TP9 Elite SC	Shadow Systems MR920 OR	Walther PDP F-Series
Average Velocity	1120 fps	1145 fps	1166 fps
Energy	320 ft.-lbs.	335 ft.-lbs.	347 ft.-lbs.
Small Group	3.0 in.	2.5 in.	1.75 in.
Average Group	3.5 in.	2.9 in.	2.4 in.
Hornady American Gunner 115-grain XTP 90244	Canik TP9 Elite SC	Shadow Systems MR920 OR	Walther PDP F-Series
Average Velocity	1099 fps	1123 fps	1154 fps
Energy	308 ft.-lbs.	322 ft.-lbs.	340 ft.-lbs.
Small Group	2.9 in.	2.6 in.	1.8 in.
Average Group	3.5 in.	3.1 in.	2.2 in.
Federal Premium 124-grain HST JHP	Canik TP9 Elite SC	Shadow Systems MR920 OR	Walther PDP F-Series
Average Velocity	1149 fps	1168 fps	1180 fps
Energy	363 ft.-lbs.	376 ft.-lbs.	383 ft.-lbs.
Small Group	2.4 in.	2.2 in.	2.0 in.
Average Group	2.95 in.	2.8 in.	2.4 in.

We fired all groups from an MTM K Zone rest at 25 yards, shooting strings of three five-shot groups for each load in each handgun. We used an RCBS Ammomaster Chronograph to measure velocities at 10 yards.

A Walther PDP F-Series 4-Inch 2842734, \$599, was our third gun. It, too, was a pistol some readers have asked that we review. The Walther was more consistent in price. Most examples were priced from \$589 to \$639. Walther's Performance Duty Pistol F-Series has an upgraded and reconfigured grip that was designed with female shooters in mind. The polymer-frame handle is designed to accommodate not simply smaller hands, but the female hand structure — a certain size hand, with long fingers. The sole female rater on this team really liked the hand fit. But all the male raters also liked the hand fit of the Walther.

Here's more about the pistols individually:

Canik TP9 Elite SC HG5610T
9mm Luger, \$419

The pistol is supplied with a hard-plastic case. Two backstraps, a standard and extended magazine, mounting plate for a red dot, Allen wrench, a manual, and a credible plastic holster are included. The holster is a good fit and may be configured for inside-the-waistband (IWB) carry or on the waistband. Unlike some terrible cheap and thin holsters supplied in a package, the Canik holster is durable and versatile. It is more comfortable as an OWB than an IWB, as expected. Simple reverse the belt clips, and you have an IWB holster. You don't have to chase down a spare magazine or holster because they are supplied. The pistol's two-tone finish, tungsten over black polymer,



Our ammo selections for this test included, from top, Hornady American Gunner 115-grain XTP jacketed hollow points, Federal Premium 124-grain HST hollow points, and the Remington UMC 115-grain FMJs.

is attractive. The grey tungsten slide features forward cocking serrations. We found no fault in the finish, and there were no visible tool marks when the pistol was disassembled.

The sights include a drift-adjustable U-notch rear. The front sight is a highly visible white dot. The sights are better than the PDP's factory sights and are equal to the Shadow Systems in daylight sight picture. The ambidextrous slide stop is large and easily manipulated. Speed loads are quick. The slide lock never contacted the hand during recoil and locked the slide back, as we have sometimes experienced with other types. The grips are slightly raised in places, making for a good surface for the firing grip. The side straps are pebbled.

Take down is similar to a Glock's. You clear the pistol by removing the magazine and checking that the chamber is empty. Then, the trigger must be pulled and the striker released. You press two tabs down to field-strip the pistol. The recoil-spring

PISTOL COMPARISON

CANIK TP9 ELITE SC HG5610T 9MM LUGER, \$419 GUN TESTS GRADE: B-

The Canik TP9 Elite Sub Compact is a reliable handgun, and it is accurate enough, but it is the least-accurate pistol tested. We did not like the too blocky grip design. The extended magazine was not a favorite of ours.



ACTION TYPE	SEMI-AUTO, SINGLE ACTION
OVERALL LENGTH	6.7 IN.
OVERALL HEIGHT	4.6 IN. TO 5.0 IN.
MAXIMUM WIDTH	1.45 IN.
WEIGHT UNLOADED	26.0 OZ.
WEIGHT LOADED	31.0 OZ.
SLIDE.....	TUNGSTEN-FINISH STEEL
SLIDE RETRACTION EFFORT	15.0 LBS.
RECEIVER MATERIAL.....	POLYMER
FINISH	BLACK
FRONT STRAP HEIGHT	1.5 IN.
REAR STRAP HEIGHT.....	2.5 IN.
BARREL LENGTH	3.6 IN.
GRIP	REPLACEABLE BACK STRAP
GRIP THICKNESS.....	1.25 IN.
GRIP CIRCUMFERENCE	5.6 IN.
MAGAZINES.....	(1) 12 ROUND, (1) 15 ROUND
REAR SIGHT	SERRATED, WEDGE TYPE
FRONT SIGHT.....	WHITE DOT, DOVETAILED
TRIGGER PULL WEIGHT	4.5 LBS.
TRIGGER SPAN	2.75 IN.
SIGHT RADIUS	5.4 IN.
SAFETY	TRIGGER LEVER
WARRANTY.....	LIMITED LIFETIME
TELEPHONE	(800) 527-1252
WEBSITE	CANIKUSA.COM
MADE IN	TURKEY

assembly pulls off the barrel, and the barrel slides out. The Canik is a simple handgun to maintain. All three pistols take down in the same manner.

The action of the pistol is different from the other 9mm handguns tested. This is a single-action pistol. When the slide is racked, the striker is fully cocked.

SHADOW SYSTEMS MR920 COMBAT 9MM LUGER, \$830 GUN TESTS GRADE: A

The Shadow Systems 9mm is based on a Glock, one of the most reliable firearms ever designed. However, the pistol goes above and beyond a Glock, sporting improvements that make the MR920 a very ergonomic and fast-handling pistol. We liked the sights and the trigger action as well as its practical accuracy. Some will prefer it to the Walther, as a number of our raters did.



ACTION TYPE	SEMI-AUTO, DOUBLE ACTION
OVERALL LENGTH	7.4 IN.
OVERALL HEIGHT	5.04 IN.
MAXIMUM WIDTH	1.3 IN.
WEIGHT UNLOADED	24.0 OZ.
WEIGHT LOADED	29.0 OZ.
SLIDE.....	BLACK PHOSPHATE-FINISHED STEEL
SLIDE RETRACTION EFFORT	16.0 LBS.
RECEIVER	BLACK POLYMER
FRONT STRAP HEIGHT	2.0 IN.
REAR STRAP HEIGHT.....	3.6 IN.
BARREL LENGTH	4.0 IN.
GRIP	REPLACEABLE BACK STRAP
GRIP THICKNESS.....	1.3 IN.
GRIP CIRCUMFERENCE	6.0 IN.
MAGAZINES.....	(2) 15 ROUND
REAR SIGHT	FIXED
FRONT SIGHT.....	FIXED, TRITIUM DOT
TRIGGER PULL WEIGHT	5.5 LBS.
TRIGGER SPAN	2.45 IN.
SIGHT RADIUS	7.0 IN.
SAFETY	TRIGGER LEVER
WARRANTY.....	5-YEAR LIMITED
TELEPHONE	(469) 458-6808
WEBSITE	SHADOWSYSTEMS.COM
MADE IN	U.S.

The striker protrudes from the rear of the slide, making an enameled red dot visible. The only manual safety is a finger lever set in the trigger face. There is

WALTHER PDP F-SERIES 4-INCH 2842734 9MM LUGER, \$599

GUN TESTS GRADE: A (BEST BUY)

The Walther PDP F may be designed for the female hand shape, but our male raters liked the gun as well. Our female raters do not like larger grips and found the PDP F to be an excellent fit. It is also a great shooter, well worth the extra tariff over the Canik. While it is less expensive than the Shadow Systems MR920, it is a better shooter.



ACTION TYPE	SEMI-AUTO, DOUBLE ACTION
OVERALL LENGTH	7.25 IN.
OVERALL HEIGHT	5.4 IN.
MAXIMUM WIDTH	1.35 IN.
WEIGHT UNLOADED	26.0 OZ.
WEIGHT LOADED	31.0 OZ.
SLIDE	BLACK-PHOSPHATE-FINISH STEEL
SLIDE RETRACTION EFFORT	14.0 LBS.
RECEIVER MATERIAL	POLYMER
FINISH	BLACK
FRONT STRAP HEIGHT	2.4 IN.
REAR STRAP HEIGHT	3.2 IN.
BARREL LENGTH	4.0 IN.
GRIP	REPLACEABLE BACK STRAP
GRIP THICKNESS	1.3 IN.
GRIP CIRCUMFERENCE	5.5 IN.
MAGAZINE	(2) 15 ROUND
REAR SIGHT	FIXED
FRONT SIGHT	FIXED (GLOCK COMPATIBLE)
TRIGGER PULL WEIGHT	4.9 LBS.
TRIGGER SPAN	2.6 IN.
SIGHT RADIUS	6.4 IN.
SAFETY	TRIGGER LEVER
WARRANTY	LIFETIME
TELEPHONE	(479) 242-8500
WEBSITE	WALTHERARMS.COM
MADE IN	GERMANY

also a firing pin block. Some will not be comfortable with this set up, similar to the Springfield XD full-size pistol. However, the XD adds a grip safety.



The Canik grip isn't our favorite, despite well-designed checkering. This is the flush-fit magazine with a finger rest (arrow).



The Shadow's grip treatment is excellent, with a nice mix of adhesion and abrasion. The grip tang is extended (arrow) and feels good in the hand. Grip inserts are supplied.



The Walther's grip treatment is called Performance Duty checkering. Like the Shadow Systems pistol, the F's grip flares slightly at the front of the grip strap (arrow).

The pistol is supplied with two magazines. One is a flush-fit-with-finger-rest 12-round magazine and the other an extended 15 rounder with a sleeve attached to allow a full firing grip and convert the grip. While this works okay for short-range shooting, we found it isn't ideal. With the short magazine in place, most shooters have a finger trailing off the butt. The extended magazine did not feel solid. When firing, the sleeve moved and even rattled. After all, you cannot have a jamming tight fit of a magazine to a magazine well and expect rapid speed loads. After some firing, the raters agreed that the pistol did not allow full palm contact while the back of the hand and fingers were in register. Trigger reach is good, however. The trigger is the lightest of the three handguns tested at 4.5 pounds. It is controllable, not particularly crisp, but will respond well to a trained shooter. Reset is fairly sharp.

For draw-and-fire engagements, we shot at human silhouette-sized targets at 5, 7, and 10 yards. Most of the ammunition used for combat shooting was Remington UMC 115-grain full-metal-jacket cartridges. We fired 50 rounds in each pistol. We also added 10 rounds of Hornady 115-grain XTP fired at the 15-yard line offhand. The Canik grouped well at 7 yards, but at 10 yards, the looseness of the extended magazine made quickly adjusting the hand harder. Next, 15-yard groups were the poorest of the test, but still in the 7 ring. Half of the raters actually did better shooting with the 12-round magazine in place.

PISTOL COMPARISON



The Canik white-dot front sight is easy to pick up for speed shooting.



Forward cocking serrations and a tritium front sight are good features on the Shadow. The pistol features finger-positioning pads (arrow) ahead of the trigger guard.



Left: The Walther's white-dot sights are good combat sights, but they suffered compared to the other pistols. They are Glock compatible and easily replaced. Right is an XS tritium front-sight dot one of our testers added to the PDP.

Top: The Canik slide is optics ready. The Canik's rear sight, with its deep U notch, is well suited to combat shooting. Center: The Shadow System's optics plate is a good addition to the older MR920



we've originally tested. Bottom: The PDP-F also has an optics cut. The way things are trending, not having the ability to mount a red dot is a disqualifying feature on a handgun.

fired the Canik with the Remington FMJ load, the Hornady 115-grain XTP, and we added the Federal 124-grain HST. Five-shot groups averaged 3.0 to 3.5 inches.

Our Team Said: While the pistol is accurate enough for personal defense in most situations, the Canik is the least accurate pistol tested. We'd spend the extra money to get the Walther.

Shadow Systems MR920 Combat 9mm Luger, \$830

The pistol was supplied in a cardboard box with a gun rug, cleaning rod, backstraps, two magazines, and owner's manual. The pistol is the same in outline and dimensions to the Glock 19 and fits all Glock holsters. The Shadow Systems pistol, unlike many Glock handguns rebuilt with aftermarket parts, is reliable, as reliable as the Glock 9mm, judging by our previous testing. Reliability is the bottom line in a personal-defense pistol. Just the same, all three guns tested were reliable and have a good reputation in that regard. We are testing against other two other pistols at different price points, not custom Glocks with aftermarket parts, but we believe a pistol comparable to the MR920 cannot be built for less than \$1000.

Unlike previously tested Shadow Systems pistols, the slide here features a cut out for optics. Otherwise, the pistol is similar to the other Shadow handgun tested in the past, with forward cocking serrations, black finish, and bronze-colored barrel. The pistol features a Glock trigger action with a special connector, according to our inspection. The previously tested Shadow Systems MR920 trigger action broke at a clean 4.5 pounds. This pistol's trigger is also very clean, with a sharp reset, but trigger compression weighed in at 5.5 pounds, the same as most Glock 19 handguns of the current generation.

The grip treatment is excellent, with a nice mix of adhesion and abrasion. The grip tang is extended and feels good in the hand. Grip inserts are supplied; we changed them out and liked them. The original Shadow Systems test did not include using the supplied magazine well. In this case, we added the magazine well with good results. Note: The Shadow Systems pistol is not compatible with Glock magazine wells because the Shadow frame is different. The trigger guard undercut is also different from, and is superior to, the Glock 9mm pistol. The two 15-round Magpul magazines worked fine, and the pistol accepts Glock magazines. Because the pistol fits Glock 19 holsters and accepts Glock magazines and parts, resupply is simple enough.

Elsewhere, we found the Shadow's sights were superior to the other two pistols. While the Canik has good sights, the Walther's sights ride a little too low for fastest sight acquisition. The Shadow

The pistol turned in a good showing in fast shooting, but it was not as accurate overall as the other pistols. Off the bench at 25 yards, our team



Top to bottom are the Canik, Shadow, and Walther pistols. All three supplied front and rear cocking serrations. The Walther's cocking serrations are called Super Terrain. They allow good

leverage to be applied to the slide, part of the reason the PDP-F's slide is easier to rack.

Systems pistol features wedge-type rear sights and a tritium-dot front sight.

While we are not testing a Glock in this report, it is inevitable that comparisons be made against the Glock due to the similarity of the Shadow Systems pistol. The pistol is well worth its tariff over the Glock. The Glock is a double-action pistol. The action of the Shadow Systems handgun works in the same manner as the Walther. The slide is racked, partially cocking the striker. To fire the pistol, trigger pressure results in the striker being forced to the rear and then the striker breaks against sear pressure and flies forward, firing the pistol. A safety lever set in the trigger face prevents lateral discharge and acts as an additional drop safety to prevent the pistol from firing. Previously, the Shadow Systems handgun tested began out of the box with a 4.9-pound trigger but became smoother and lighter after the test fire, breaking at about 4.5 pounds. The pistol tested in this report is smooth enough, but its compression remained at 5.5 pounds.

To take the pistol down for cleaning, move the unloaded pistol slightly out of battery and press the takedown levers. The levers seem easier to manipulate than a Glock pistol's, we thought. The trigger action must be de-cocked. The pistol seems tighter than the Glock 19 but does not require a break-in period. The test team believes the Shadow's NPOA (natural point of aim) grip system was one of the Shadow's best advantages. The backstraps are marked H, N, and L. Our shooters preferred the L-marked insert, with the "L" standing for Low. To change the grip inserts, the shooter drives out a pin, removes the insert, and then replaces the insert with another from the package. The pistol features a light rail for mounting combat lights, the same as the other two handguns.

We found the MR920 to be a good combat gun. Combat firing was noticeably superior to the Canik, but at the price it should be. The pistol comes on target quickly. The grip fit the hand much better than

the Canik, but not quite as nicely as the Walther PDP F. The Shadow pistol was sure and fast at closer range. At 10 yards off hand, the Shadow Systems demonstrated good combat ability. At the 15- and 25-yard marks, it was just behind the Walther in combat firing. The trigger action is usable, and the bright front sight is also an advantage. Fired for absolute accuracy at 25 yards, the pistol was accurate enough for personal defense, with most groups at the 2.5-inch mark.

Our Team Said: We like the Shadow Systems pistol. This is a credible, reliable handgun that some of our shooters preferred over the Walther.

Walther PDP F-Series 4-Inch 2842734 9mm Luger, \$599

The grip is the story with the F-Series pistol, and we found the grip is nicely textured and offers an ideal balance of abrasion and adhesion. The Walther's grip



Unlike the Glock, the Shadow Systems MR920 uses conventional rifling.



The F pistol is supplied with the usual accessories.



The holster supplied with the Canik TP9 pistol is actually useful. The other pistols didn't supply this helpful item.



The Canik extended 15-round magazine isn't as secure as we would like. It was loose in the gun, which affected our grip during firing.

PISTOL COMPARISON



Left: The Canik TP9 Elite field-strips easily. Disassembly is simple. The Canik is an attractive pistol, in particular the tungsten-color-finished slide. Center: The Shadow Systems MR920 Combat pistol is pure Glock Safe Action internally. All components are well turned out, without burrs or tool marks. Right: The Walther F-Series pistol field-strips easily. There were no surprises internally with any of the guns.

treatment is called Performance Duty checkering. Like the Shadow Systems pistol, the F grip flares slightly at the front of the grip strap. The result is a grip that is very stable during firing. While there is nothing wrong with the Shadow Systems MR920 grip, the Walther PDP F grip is superior, we thought.

Another Walther feature is forward cocking serrations on the slide called Super Terrain. They are secure, but not abrasive, and certainly allow good leverage to be applied to the slide, part of the reason the slide is easier to rack. And the slide is easier to rack than the other two pistols. It doesn't register much lighter by poundage, but it feels lighter.

The pistol's sights are OK. They are low-riding three-white-dot-insert types. While they did not materially affect accuracy in a negative way — this is the most accurate pistol in the test — the sights were the least popular of the test. The Walther PDP F has well-designed ambidextrous slide locks, a feature the Canik also has, but the Shadow Systems lacks. This is the only pistol that uses polygonal rifling. This is a deterrent to using inexpensive lead-bullet handloads, but it's likely the majority of shooters will use jacketed ammunition in their 9mm firearms. Just the same, this is a consideration if you make your own bullets or shoot lead-bullet handloads. Polygonal rifling often produces greater velocity than conventional rifling, and that proved true here. Polygonal rifling may produce less bullet deformation and can be a factor in accuracy, although we feel a good sight set and trigger are at least as important. Take down is Glock simple, but on the PDP F, it works out easier due to the increased size of the take down levers.

We discovered that 18-round Canik magazines, readily available, also fit the Walther PDP. Function was excellent. The PDP is Glock compatible as

far as sights go, a wise choice. Still, the only real shortcoming of the PDP F is the sights. They are not bad, they are only okay and suffered in comparison to the other pistols. One of our team members who bought PDP F after the test bought a set of XS Sights F8 Sights (\$106) and easily placed them on the gun. This brought the sights up to a higher standard and still cost less than the Shadow Systems pistol.

Elsewhere, Walther's Performance Duty Trigger lived up to its reputation and proved to be among the best triggers we have tested. Movement is smooth, and the trigger breaks cleanly at 4.75 pounds. The trigger became smoother as time and dry firing progressed. The PDP trigger is the smoothest tested and has the sharpest reset. Our shooters said the PDP recoils the least of the three pistols tested, a function of weight, balance, grip design, and other factors. We feel the F's balance is best, although the Shadow Systems is a well-balanced pistol.

The Walther 9mm is a well-mannered handgun. Combat-type firing was much better than with the Canik and incrementally better than the Shadow Systems. In firing off the bench, the Walther gave what was easily the best accuracy. The pistol fired groups as small as 1.75 inches at 25 yards. This is an exceptionally accurate striker-fired pistol.

Our Team Said: Reliability was faultless. The Walther PDP F-Series provided a good hand fit for all shooters. As a result, the F-Series should prove popular with shooters who have problems with larger pistols. The PDP F-Series is also engineered to reduce racking force, which proved out to be true, while controlling recoil with an efficient recoil-spring system. This was accomplished — a neat trick.

*Written and photographed
by Gun Tests Staff, using evaluations
from GUN TESTS Team members. GT*

Dry-Fire Laser Training at Home: We Test Three Useful Systems

Tested: LaserHIT Dry Fire Training Kit Wireless-X Plus, \$199; Strikeman Laser Firearm Training System, \$100; and the Mantis X Mantis Laser Academy, \$150. One is a strong Our Pick.

Going to a range costs money, and it takes time. The next best training exercise is dry-fire training, and while it is all well and good you snap the trigger a few hundred times, how do you know if you are creating good muscle memory or creating a bad habit? You can buy a laser cartridge and snap at a target in the privacy of your home, but that does not provide feedback on whether you hit the target or not. Laser training systems are not a substitute for hands-on instruction, but it is a step up from traditional dry-firing exercises. All the systems help you to see your hits, and some keep track of your training data.

We looked at three dry-fire laser training systems from Strikeman, LaserHIT, and Mantis. Nearly all of us carry a smart phone, and

that makes training convenient because all three of these laser-training systems require an app to be downloaded to your phone. Your phone then becomes an integral part to your training. You need an iPhone 6 or newer or a device with iOS 9.0 or newer to use the systems. All of these systems can be purchased online.

How We Tested

We tested using a number of criteria, including how easy the laser-training systems are to setup; what type of training scenarios do they offer; can they be used with pistols, rifles and shotguns; what is the cost and value of the system; and how do they track training progress.

We used a Canik Mete SFT striker-fire pistol with a double-action only trigger, a Beretta 92X Performance with a double-action-to-single-action trigger, and a Springfield Armory 1911 DS Prodigy with a single-action-only trigger. These pistols all are chambered in 9mm. The systems

were set up both in a garage with a lot of natural light and in a more dimly lit interior room.

There are two characteristics with these trainers that do not replicate live fire. The first is the lack of recoil, and the second is you need to break your grip to rack the slide and reset the weapon's trigger, unless you are using a DA/SA trigger, which you can continuously press in DA mode. Definitely not deal breakers, but quite different from training on the square range with live ammo. On the plus side, you can practice in the privacy of your home at any time, and no hearing or eye protection is required.

We used the systems from a low ready position — both hands on the gun and pointing down. Other shooting techniques were also employed, such as one-hand shooting and weak-hand shooting. We simulated shooting from a sitting position, as if we were just shoved to ground. Some systems



The LaserHIT comes with multiple targets, a laser cartridge, wood dowel, tall tripod, and two zippered carrying cases, one to carry all the equipment and a smaller one to store multiple laser cartridges for different guns.



The Strikeman system comes with one bullseye target, a plastic target stand, a small tripod and laser cartridge.



The Mantis Laser Academy comes packed with everything you need to train except for the gun and a cell phone — there's a laser cartridge, target stands, a variety of targets, and two tripods for use downrange.

ACCESSORIES COMPARISON

have practice modes that allow drawing from concealment, which most public ranges forbid.

Remember, when dry-fire training in your home, be sure your weapon is unloaded and keep ammunition in another room and away from your training area. Also, never point a laser at someone because training lasers can damage the human eye.

The bottom line is we found all of these system helpful. System costs ranged from \$100 to \$200, and some systems, like the Mantis and LaserHIT, require even more investment for advanced training modes and specialty targets. The Strikeman is the low-cost option with limited training modes, but good data tracking. The LaserHIT offers more training mode options, but advanced training modes need to be purchased separately and there is no data tracking. The Mantis system offers plenty of bang for your buck. It has plenty of training modes to choose from and stores your data to chart your progress. Here are the details.

LaserHIT Dry Fire Training Kit Wireless-X Plus, \$199

LaserHIT (LaserHIT.com/) offers a number of systems. The Dry Fire Training Kit Wireless-X Plus is the top-of-the-line system. When ordering online, you choose

the caliber of the laser insert, whether you want a generic laser or high-definition laser, and the type of targets, either premium paper or heavy duty. We opted for the 9mm HD laser cartridge and heavy-duty targets. The HD laser has a smaller laser dot than generic laser cartridges, plus the HD model has a longer battery life; up to 100,000 hits, or three years. The heavy-duty targets are laminated, so they stand up well when repeatedly taping them to the wall. We used blue painter's tape to attach targets to the wall.

In the nice LaserHIT zippered case is another zippered case that can hold multiple laser cartridges, the HD 9mm cartridge, a 58-inch-tall tripod with a free-rotation head that holds the smart phone, a wood dowel to tap out the laser cartridge, the Wireless-X adapter that allows you to use a TV to watch your results on a big screen, and eight two-sided targets with different target shapes, such as traditional bullseye and silhouette, and sizes.

You need to download the LaserHIT app to your phone to get started. The app provides step-by-step instructions, which were easy to follow. The system includes the Wireless-X adapter, which is plugged into your TV.

First step is to tape a target up and Reload Mark target. The Reload Mark target allows you to reset the session by hitting the Reload Mark with the laser, without having to walk back and forth to the phone. Next step is

to attach the phone to the tripod and position the phone's camera toward the target. The app accesses the camera, so make sure you give the app permission to access your phone's camera. We found we could also use our own targets, like a full-size IDPA silhouette, as long as the target is not pure white. The target must be darker than the background. The app uses the phone's camera to recognize the target and the Reload Mark. You can then choose between two practice modes, a basic Free Target Practice or Black Steel Practice, which come when you download the app.

There is also a Top Score Practice and Quick Hit Practice. The Top Score mode allows you to practice up to 100 yards with sub-quarter MOA precision, making it useful for those wanting to practice with a rifle. The Quick Hit mode provides a random time delay so you can practice your draw. We thought that these two additional practice modes were well suited for the advanced shooter; however, you need to pay another \$10 each for the modes. That did not make us happy because of the initial cost.

The Free Target Practice is for basic training for sight alignment, breath control, trigger press, and follow through. You can also use smaller targets to simulate longer firing distances. There is a feature that enables the app to zero hits when using a rifle with a red dot or scope. The app compensates for the scope's mechanical offset



All the systems used a laser cartridge that is inserted into the chamber. You need a pencil, screwdriver or dowel to tap it out of the chamber.

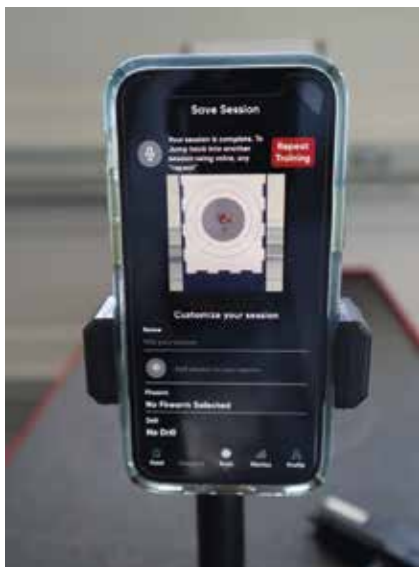
This is how LaserHit displays shot data. It does not store the data but allows you to save it in your camera's library. We

would have preferred data collect so we could chart progress in the app. The LaserHIT system is easy to set up and allows the user to place targets at a height similar to target on live fire ranges.



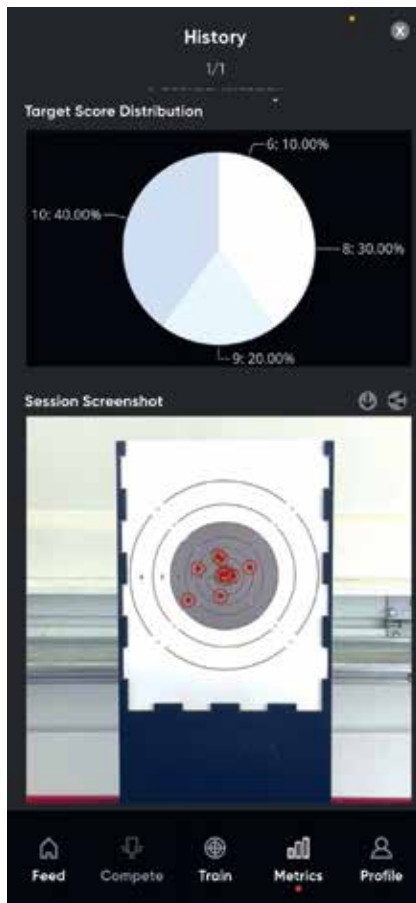


The Strikeman needs to be set up on a tabletop to be used, or some flat surface at the height you want your target. We thought this limited the system.



The Strikeman's voice-activated Repeat Session function is useful because you don't need to walk back and forth to the phone to reset a session.

so your hits are true. You do not need to adjust the scope in any way, the app does it all. You can also use scaled targets and the app to simulate longer aiming distances. The app records shots and, with capture, total time, hits, overlapped hits, and group measurement. After the string, the app audibly reports the data. You can change the robotic voices as well as created specific messages when you reach a set goal, so if your group is under 0.5 inches, you can customize the app to say:



The Strikeman's Metrics tab provides feedback on all sessions, with the shots appearing on the target and a pie chart that breaks down shot distribution.

"You crushed it" or "John Wick better be careful." There is an advanced feature with the Free Target practice that allows you to set up long-range conditions for you can practice with a firing distance up to 1 mile. The app can also work as a spotter and spot hit placements.

The Black Steel Practice provides audible hit feedback, with sounds like a bullet hitting steel. You can practice hitting targets of different sizes. The app will show the total number of targets, the number of target hits, and the number of total hits.

When you start, the app will beep and a countdown begins, then it flashes Commence Firing. Depending on the practice mode you are using, you have so many

shots to shoot or a time limit. When you have fired the set number of shots or the set elapsed time has passed, the app announces cease fire and provides visual and audible feedback. You can then save an image of your targets to your camera's library.

What we like about LaserHIT is that any rifle, shotgun, or handgun can be used as long as you have the correct-caliber laser cartridge inserted into the gun. The smaller-scale targets are a nice feature because they allow you to shoot an array of targets near and far.

In use, the app provides instant feed back, with realistic-looking bullet holes on the target via the phone or TV screen. Hits are also audible with different sounds for a hit or a miss.

Our Team Said: We liked that the LaserHIT system can be used with multiple guns just by purchasing the correct laser cartridge. We felt the feed back was good since the app tracked our data, similar to looking at your target on a live-fire range. We would have liked the app to store the tabulated data so the next time we practiced, we could compare results and see progress. What annoyed us was needing to purchase the additional practice modes. We feel the initial cost was high enough that those additional practice modes should have been included.

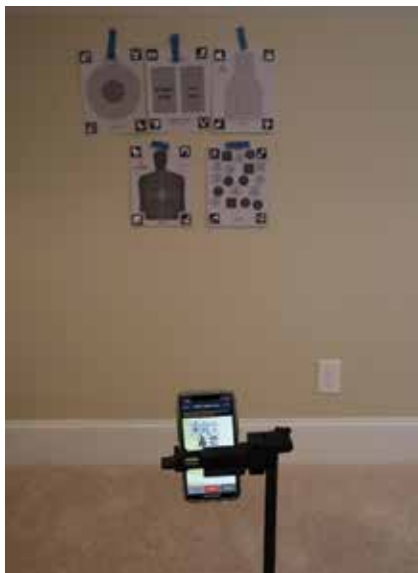
GUN TEST GRADE: B+

Strikeman Laser Firearm Training System, \$100

The Strikeman (Strikeman.io) comes in a cardboard box along with a short tripod to hold your smart phone, a bullseye target in a plastic stand, and suction cups to mount to a smooth flat surface, and a laser cartridge with three batteries. You can train with rifles, handguns and shotguns if you have the correct-caliber laser cartridge.

The first step is to download the free app to your phone and give the app permission to use your phone's camera. Assemble the target stand and place the target on a table with your smart phone attached to the tripod in front of

ACCESSORIES COMPARISON

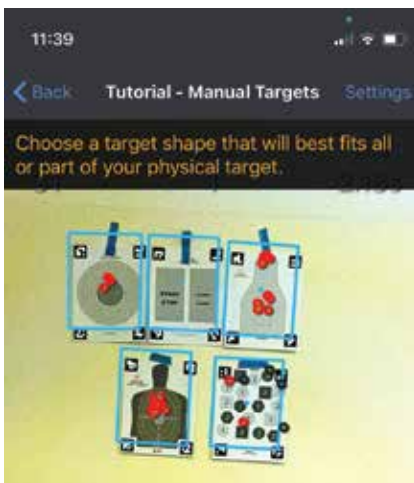


This how the Mantis looks set up with the tall tripod. We liked that we could use multiple targets at the same time.



the target between 2 to 5 feet. You can set it up on the floor, but your target will be low. We'd prefer the bottom edge of the target be at least 3 feet off the floor.

Open the app and tap the Train icon at the bottom to the screen. This is the screen where you type in the shooter distance from the



A screen shot from the smart phone shows blue outlines on the targets, indicating the Mantis Laser Academy is calibrating the app to the targets.

On the Mantis, you can review your score by tapping the History tab. This is an example of the data results on the Compressed Surprise Break drill using the Beretta 92. The top portion shows shots fired, total score, and total time. The center shows the target and the shots. Below the target is the individual shots with score and time. The 9 indicates a hit to center of mass, and time is from low-ready, finger off the trigger. You can also practice this drill with your finger on the trigger and aiming at the target. This shows reaction time from the buzzer. The fireball icon indicates the fastest reaction time. You can also tap individual shots and they will appear on the target.

target, day or night conditions, select a session type either by number of shots or time, enable or disable multiple sessions by telling the app the number of sessions and the time between sessions. The next step in the process is to calibrate the app to the target by using your fingers to pinch or expand the red circle on the phone screen to match the outer circle of the bullseye target in the stand.

The system uses your smart phone's camera to view a target and captures the laser hits on the target. Hits are captured on the target with a gunshot sound on the phone screen. You can use a voice active feature that allows you to repeat a session by simply speaking "Repeat." The microphone in the phone picks up your voice and starts the countdown for the next session. You can also walk back to the phone and tap the Repeat Session button. The app gives you 20 seconds to get ready. All the data is saved to the Cloud from your phone. The Metrics tab shows practice history with your shot-accuracy improvements over time, your average shot-score distribution, and other metrics.

As the laser hits the target, a gunshot sound is made, a hole appears on the phone screen, and the audio indicates if it is a hit. If you hit outside of the 10 ring, the audio indicates what ring you hit. It will also capture misses on the target. You can track your progress by saving the target image to your phone, or you can share it. The app also saves your data and helps you chart your progress.

We discovered that due to the height of the target stand and tripod, the Strikeman is best suited for use on a table or counter top. We used a mechanic's tool chest when testing in the garage and a table inside an interior room.

Our Team Said: We liked that this system saves shot data and helps you chart your progress. The simple bullseye target can become repetitive. We would have liked more variety in targets. The voiced-activated session-repeat function works well and does not require you to walk up to the phone between each session. The need for a table or counter to place the system on limits the way you can use the Strikeman.

GUN TEST GRADE: B+

MantisX Mantis Laser Academy, \$150

The Mantis Laser Academy (MantisX.com) comes in a cardboard box holding 12 different



The Hunt drill requires the shooter to listen to the audio prompts. The prompts tell the shooter what shape, color, or number to hit. Note the shots are red circles, and the miss is a black circle.

targets, a laser cartridge, large tripod, wood dowel to remove the laser cartridge from the pistol barrel, five target stands, sticky tacks to temporarily stick the targets to a wall, and a small zipper case that holds multiple laser cartridges, the dowel, and an additional small tripod. The small tripod is used when setting up the system on a table top.

The set up requires you to download the Mantis Laser Academy app to start. We preferred the taller tripod because it allows you to place the target chest high on a wall or door. You can set up multiple targets at once and a Start/Stop target, which you hit with a laser shot to start a session or end a session. Next step is to open the app on your phone and tap the Training tab at the bottom of the screen. A list of drills will appear. You find

some drills are marked PRO, and some of these require a specific target, which must be purchased separately. We found that the drills we could access provided enough variety so we didn't get bored with the same target and same drill.

Once you choose the drill, the app accesses the camera to recognize multiple targets at once. The app outlines the target in blue to indicate the app is calibrated to the target.

Mantis provides the standard bullseye-type drills, plus others like Shot From Guard/Low Ready — Multi-Shot, which has the shooter start from a prompt. This drill measures your reaction time and tracks the accuracy of shots. Another is Compressed Surprise Break drill, which helps develop a fast shot in response to the start signal. There are holster drills and duel drills where you can compete against an opponent. We liked how the benefits of the drill was explained by just tapping an info icon. The wide variety of different drills is the real value with the Mantis.

In addition to drills there are courses. The Pistol Marksman Course is designed to help shooters develop pistol shooting skills. Different targets are used, number of shots vary and there is a minimum score. Even a seasoned shooter will find some of these drills challenging.

Our Team Said: The Mantis Laser Academy offers good data collection and a large selection of drills and courses at a reasonable price. We liked the assortment of targets, the target stand, and the tripods, which in our opinion makes the Mantis versatile and easy to use in most environments. This is the system we would purchase due to the variety of drills and data collection.

GUN TEST GRADE: A (OUR PICK)

Written and photographed by Robert Sadowski, using evaluations from GUN TESTS Team members. GT

GUN TESTS

**THE CONSUMER RESOURCE
FOR THE SERIOUS SHOOTER**

1. To Change Your Address

If you are moving, please attach your present mailing label to this form, and enter your new address here:

Name

Company

Street

City

State Zip

2. To Order/Renew

To order, or extend your current subscription, enter your name and address above, and check the subscription term you prefer:

- ☐ One year: \$49
- ☐ Two years: \$98
- ☐ New subscriber
- ☐ Renewal

These rates are good in U.S. and Canada only. For all other countries: 1 year \$72 (air), 2 years \$144 (air).

3. To Give a Gift Subscription

Enter your name and address above and your giftee's name and address below. The subscription rates stated above apply to gifts.

- ☐ Send a One-Year Gift
- ☐ Send a Two-Year Gift

Name

Street

City

State Zip

Return this coupon (or a photocopy) to:

GUN TESTS

P.O. Box 8535
Big Sandy, TX 75755-8535

MORE AT GUN TESTS+

- Special Report: Chiappa LA322 Follow Up. Find out what was wrong with this rifle even after it was repaired.
 - Best 380 ACP Pistols for Carry.
 - Thor's Sidearm? What About Mjöltnir?
 - Winchester Introduces New 400 Legend Straight-Walled Cartridge.
- Viridian's RFX11 Green Dot Reflex Sight Now Shipping.
- XS Sights Introduces Standard Dot Night Sights for Taurus 856 and 605 Revolvers.
- Remington Announces New Core-Lokt Copper.
- SIG Sauer Expands Legion Series with P320-AXG Legion.
- FN America Introduces FN Reflex Micro Compact 9mms.

To set up your on-line GUN TESTS and GUN TESTS+ accounts, please type the line below into a browser and follow the instructions on the page:

Gun-Tests.com/online-account-activation/

COMING UP IN GUN TESTS

- Precision 6.5 Creedmoors: Savage 110 Elite Precision Impulse with a straight-pull action, a Tikka T3X CTR, and a SIG Cross with 18-inch barrel. Three different ways of packaging the same cartridge in a bolt-action rifle. How did they do?
- Small-Frame Revolvers: We pit a trio of wheelguns chambered in 38 Special/357 Magnum to find out if money buys happiness. Tested: Charter Arms Boxer, Smith & Wesson 640 Pro, and the Taurus 605 Defender.
- GI 1911s From Springfield Armory, SDS Imports, Rock Island Armory, and Taylor's & Co.

Customer Service Contacts

If you have a problem with your magazine subscription, damaged or missing issues, need to change your mailing or email address, or renew your subscription, visit Online Customer Service at:

Gun-Tests.com

Click "Customer Service"

CALL TOLL FREE: 800-829-9084

SUBSCRIPTION DEPARTMENT

GUN TESTS

P.O. Box 8535

Big Sandy, TX 75755-8535

QUANTITY REPRINTS

Reprints of **GUN TESTS** articles are available.

Minimum Order: 1,000.

Contact:

GunTestsEditor@icloud.com

EDITORIAL OFFICES

GUN TESTS welcomes letters or email concerning our articles. Please include your name, telephone number, and hometown.

We will respect your request not to publish personal information.

Email comments to

GunTestsEditor@icloud.com.

Because of daytime testing requirements, the writers and editorial staff can't answer phone inquiries. But the staff responds to email. If you have a question or comment about GUN TESTS evaluations, please email individual writers at: GunTestsEditor@icloud.com. Thanks for your understanding.