GUN TESTS®

THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

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COMMANDERS

Tested: Iver Johnson Hawk, Taurus 1911 Commander, Kimber Pro Carry SLE, and Desert Eagle's 1911C. Three of the handguns were worth their price. One had defects that knocked it out. ● Page 6

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HOW TO

Shooting a pistol is simple, right? About as easy as hitting a golf ball square and far. But shooting a handgun well is a learnable skill, if you just know and perform the basics over and over. Here are some tips to consider. ● Page 27

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DOWNRANGE

A GOOD TIME TO BUY



Todd Woodard

It seems gun companies are suffering from a lack of "fear-based buying" because consumers aren't worried about stricter gun control while Donald Trump is in office. Also, ammo sales have been hit by consumers buying fewer bullets because they stockpiled during past scares, according to Markets Insider, a stock-tracking firm (Markets@BusinessInsider.com).

"Given the minimal risk of Democrats passing tighter gun laws while Republicans control the Senate and the White House, people haven't been panic-purchasing firearms out of paranoia they'll lose access to them," according to a recent Markets Insider article.

Evidence: "American Outdoor Brands, which owns Smith & Wesson, shipped around 820,000 fewer handguns and long guns in the year to April 2018. The company's handgun revenues plunged by more than $230 million or 41% in the year to April 2018…," Markets Insider reported. Net sales slumped 13% at Sturm, Ruger & Co. in the first quarter of 2019. Olin's Winchester ammo business also suffered a 4% drop in sales last year and an 8% drop in the first quarter of this year.

Result: For GUN TESTS readers, this is a good time to buy. I'm very pleased when I see prices on firearms going down — more test guns, less money. Maybe now is the time to have some fun, while we still can.

I'd like to welcome Joe Woolley to the masthead as a new contributing editor. He is the principal and primary instructor at Firearms Operations and Responsibility Training of Texas (F.O.R.T. Texas, FORTTexas.us). He has worked with several thousand students over the last ten years as a full-time instructor at American Shooting Centers and other locations in west Houston. Joe teaches a variety of classes about civilian usage of handguns and rifles for personal, competition, and defensive use. He began shooting action pistol sports in 1984. In 2016, he retired from USPSA after 32 years as a 3 Division Master Class Shooter. He has been competing in Precision Rifle matches since 2016 and is currently ranked in local expert class. He is an active Texas DPS certified License To Carry Instructor. He is an eight-discipline NRA Instructor, NRA Training Counselor, and an NRA Refuse to be a Victim Regional Counselor.

Joe has also worked for the magazine behind the scenes for years as an FFL, legally and perfectly transferring firearms we order from across the country to writers and photographers locally. He has also conducted testing for some of our Houston staff and has some product comparisons in the works beyond his article in this issue, "Shooting a Pistol Is Simple…" on page 27. **GT**

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Dry-Fire Laser Training Devices

Reader Walt wonders if laser trainers can be used for air rifle and smallbore programs. Great idea — perhaps one can. Reader Mark says that where he shops, tube-mag shotguns continue to rule.



Re "Dry-Fire Trainers: Save Money While You Gain Performance," October 2018

I'm a subscriber. Read the referenced article a while back and got a copy via email today. I'm a 4-H shooting-ed instructor, and I can see a tremendous benefit to my aspiring competitive shooters from one of these dry-fire tools. Problem is we shoot BB guns (.177 caliber) air guns (.177 caliber) and smallbore firearms (.22 caliber), and I don't see anything available for those smaller calibers. Any ideas, suggestions or references? **— Walt**

There are no laser trainers for rimfire calibers I am aware of, nor for air rifles. I think the MantisX product (shown above) would work with the air guns. It will definitely work with the rimfire rifles. The guns will need a Picatinny rail, or you can purchase an adaptor. Look for it at mantisx.com/collections/rail-adapters. — Robert Sadowski

Re "Home-Defense Shotguns: Are Magazine-Feds the New Thing?" October 2018

Last year's article regarding magazine-fed shotguns appeared in an email, so I revisited the article. The local gun store has had the Remington magazine-fed shotguns on sale since shortly after they arrived, and they're still not selling well. Those that have sold are generally to people who want an easy-to-load gun for coyote hunting where keeping a loaded shotgun in a motor vehicle is not lawful or in homes where they want their ammunition and guns separate until needed. I haven't heard any comments regarding the need to rapidly reload a home-defense shotgun and don't know when that would be necessary in the real world. The new Typhoon F12 is coming later this year, and that may sell better based on the appeal of the AR platform. In the meantime, it appears that folks are opting for the mobility and ease of use of the traditional pump.

— Mark



Mark, thank you for the heads-up. — Todd Woodard

Trap Shotgun Recommendation for Smaller Person

Dear Gun Tests: I love reading your publication. I'm wondering what you would advise. I'm 5 feet 3 inches tall, and I would like to play trap and enjoy it. The guns that I've been using are too long and too heavy. I'd like to be able to handle the gun without it hurting and not have too much recoil. What are your suggestions and how do you rate the guns that are on the

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.



market right now? Thank you for your assistance. **— Deborah N.**

Hey Deborah: Let me describe some general things to look for, and then we can get into specifics. You should look for a gas-operated semi-auto, which uses some of the gas from ignition to run the action. Also, a single-barrel shotgun will have less weight out front than an over/under. Get one with removable chokes, and make sure you get the Skeet or Cylinder choke tube.

Now to gauge. You can buy a 12, 20, or 28 gauge. Avoid the .410 bore. It has the least recoil, but it doesn't throw enough shot in the pattern to have a lot of "fun" shooting trap. The 12- and 20-gauge shotguns will offer a wider selection of loads, which means you'll be able to buy ammunition more affordably, which is a factor. You can also buy light shot charges and light powder charges in 12 and 20 gauge shotshells to mitigate recoil. Barrel length can be 26 or 28 inches. The 12-gauge receivers will be bigger, so a smaller-scale 20- or 28-gauge receiver will drop weight and improve handling for someone of your size. Ideally, you'll get one with an adjustable stock so you can have it fitted without having to go to a gunsmith to bend the stock.

So, by applying those filters, you can narrow the choices to a manageable number, then try to shoot them and see what you like.

We did evaluate beginner trap guns in the January 2010 issue, looking for a choice to get shooters into the action for less money. Not withstanding my suggestion above, in looking for a suitable trap gun, we found that pump-action models were the most economical. They were the Ithaca Model 37 Trap FL3712-30BTR, $995; and the Browning BPS Micro Trap 012241404, $759. Each of these guns were bottom-eject models, contributing to their appeal to both right- and left-handed shooters. In addition, we came across a single-barrel break-action model from Harrington & Richardson. This was the Topper Trap shotgun SB1-30T, $360.

Some other sub-gauge models include the Beretta A400 Xplore Action J40AA8828 Gauge, Benelli's Ultralight 28 Gauge, CZ-USA's Model 720 Reduced Length Stock 06039 20 Gauge, the Browning Silver Hunter Twenty 011350605 3-inch 20 Gauge, Mossberg's SA-20 No. 75771 20 Gauge, the Browning Silver Hunter Micro Midas 011389605 20 Gauge, the Benelli Montefeltro Combo 10832 20 Gauge, Remington's 11-87 Sportsman No. 29825 3-inch 20 Gauge, and the Remington Premier 1100 Sporting 82846 2.75-inch 20 Gauge. Hope this helps. — tw

Re "Compact 44 Rem. Mag. Rifles: Rossi and Ruger Shoot It Out," May 2019

Just had to write, folks, about your comments on the Rossi R92 in the May GUN TESTS, where on page 19 you say, not stellar accuracy, but the Rossi is quite capable of MOP (minute of pig). I got a great laugh out of that one. **— Kevin**

Full credit for that coinage goes to Contributing Editor Robert Sadowski. — tw



Re "Sub-Gauge Shockwaves Go Up Against Remington's TAC-14," March 2019

Below is my go-to gun when things go bump in the night. Mossberg Shockwave in 12 gauge, Op-Sol Mini-Clip to make shooting Aguila 1.75-inch shells reliable, and a Crimson Trace Lasersaddle (LS-250G) with green laser. I just put the laser on this morning; it was easy to do. The Shockwave is reliable with Op-Sol's new improved Mini-Clip and now holds 8 rounds. Thought you'd like to know. **— Mark**



Hey Mark: That sounds formidable, but easy to handle. I'm getting increasingly interested in the laser attachment. It allows so much flexibility with these short shotshell-firing guns. Thanks for sharing. — tw

Gun Safes

Gentlemen, as a subscriber since 1999, I thank you for your continued quality publication. I have always kept a handgun of some type within reach of my bed for home protection. But I now have grandchildren who visit often and are big enough to get into trouble, and I am very concerned about gun accessibility. Before any of the children arrive, I secure my handgun in my vault. Could you please review bedside gun storage options that would allow me to keep a single pistol or revolver readily accessible if needed, but safe from inquisitive children? I would trust your testing and reviews over the ads and opinions found online. Thank you. **— Joe**

Hey Joe: Yes, I have four such safes in house that have been

reviewed. Just need to get them photographed and paginated. It will be a couple of months before you see it. — tw

Re "Twenty 22 Rimfire Loads Go Head to Head at the Range," June 2019

Dear GUN TESTS: I really enjoyed your superb 22 rimfire article. I know that you cannot include every load, but next time please include the new CCI all-copper 22 rimfire load. As a "no lead load," it might be desirable for use in indoor ranges. I also enjoy Barnes's copper bullets for hunting, and I am looking forward to trying the CCI 22 copper rimfire if its accuracy is good. Thank you again for the wonderful magazine and terrific articles. **— Alan**

Your excellent publication provides very useful information on a variety of shooting topics. The June 2019 comparison of 20 22-caliber rimfire loads as fired from a 6-inch M17 S&W revolver provided a useful beginning to a probably two-part evaluation of this type of ammunition. The obvious second part will be a



comparison of these loads as fired from one or more bolt-action rifles. While different rifles are said to "prefer" different loads, selecting a representative sample of recognized once- and currently popular rifles such as Winchester M69, M52, CZ452, etc., could help to show both the performance of the various reasonably priced ammo loads and the individual preference of the various rifles.

For our annual 50-yard shooting contest at a private campground, all contestants use my Winchester M69 rifle with Redfield aperture rear sight and globe-type front sight with a post insert. A five-shot group into a standard 50-yard bullseye target is scored by group size. Shooters sit at a shooting bench and support the rifle with their elbow on the carpeted surface. I have settled on CCI SV 40-grain as the ammo type that suits this rifle, and that load has been very reliable as well as reasonably priced and readily available. Keep up the high-quality work. **— Jim**

I was very interested in the testing of the various rimfire loads. I was surprised a revolver was used for the test. Some loads may respond differently to the jump, gap, and forcing cone of the revolver that in not present semi-auto. If you do more testing, I would like see a comparison using an accurate bolt-action rifle.

Due to powder burn rates, performance in a short barrel can't be extrapolated to a long barrel. My Savage is quite accurate at 100 yards using Remington Truncated Cone Viper. That load hasn't been available for a while, but I see it's on the shelves again. I would like to know how it compares to other loads. **—Bill**

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We welcome mail from our readers. To send us comments or questions about previous articles in the magazine, email us at: **GunTestsEditor@icloud.com.** *If you'll 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 material in your letter.* **GT**

Inexpensive Commanders: DE, Iver Johnson, Taurus, Kimber

We tested a Desert Eagle and three other Commanders in the low-to-medium-price range, and found we would buy three of them. But one needed more tuning than first-time buyers may wish to attempt.

Among the most popular handguns of the previous 70 years is the Commander-type 1911 45 ACP. The Commander is a shortened version of the original 1911 and was introduced to compete for a military contract way back in the day. Like the modern Glock 19X and Beretta APX, the Colt Commander was not adopted by the U.S. Army, but it proved to be a commercial success, nonetheless. The Commander was a Government Model modified with a shorter slide and barrel and shorter dust cover on the frame. A rowel-type hammer and short grip safety completed the modifications. The original Commander retained the Government Model's barrel bushing, but the bushing was shortened. Today, there are numerous variations of these features, but the length of the slide and frame are used to identify the pistol as a Commander Model.

The 1911 Commander may be defined as a 1911 handgun with a full-size frame and a 4.25-inch barrel. The standard grip frame is retained, and the Commander uses the same magazine as the full-size 1911. The original Colt Commander used an aluminum frame to lighten the handgun for easier carrying. The barrel and slide, shortened .75 inch, made for easy carry. The steel-frame Commander came later. Today, most Commander-type 1911 handguns have steel frames. Another variant is the bull-barrel type. The development of the 3- and 3.5-inch-barrel Officer's Model 1911 handguns required the slide and barrel to be considerably modified. The barrel could not tilt sufficiently to feed properly with the original barrel bushing. A belled barrel was adopted for lockup. This design was also adopted for use in specific Commander-type pistols, and a new idiom, the 4-inch-barrel 1911. In this shoot out, we are testing two standard 1911 Commander-type handguns, the Taurus Commander and the Iver Johnson Hawk. These are steel-frame units with 4.25-inch barrels and the standard Commander barrel bushing. We also tested two handguns with the bushingless bull-barrel designs, the 4-inch barrel Kimber Pro Carry and the Desert Eagle 4.33-inch-barrel handgun. The Kimber is an aluminum-frame pistol. The Desert Eagle, with its slightly longer bull barrel, is unique in the 1911 world, as best we could tell with a few hours of research. We feel that one is a Best Buy, but we found two others with credible performance. Here's how they shot:

Taurus 1911 Commander 1-191101COM 45 ACP, $500

This was a recent price at BudsGunShop.com. We also tested this model in the October 2018 issue. That handgun scored an A-. We acquired another Taurus Commander of the same model and brought it forward as an example of the classic Commander



The four pistols tested are, top to bottom, the Iver Johnson Hawk, the Taurus 1911 Commander, Kimber Pro Carry, and Desert Eagle 1911C. Three of the handguns were worth their price, we felt. We discounted the Iver Johnson Hawk from consideration for personal defense due to its defects. The Taurus Commander handgun will put a reliable 1911 into the hands of shooters who might not be able to afford such as handgun otherwise, but it had a problem with the grip-safety engagement that required thoughtful and careful intervention. The Kimber is a nice handgun well worth its price. The Desert Eagle is narrowly more accurate and slightly better on the combat firing course than the Kimber, but the Desert Eagle 1911C is also a heavier steel-frame pistol. Some will prefer the Kimber Pro Carry for carry because it is a slightly shorter and lighter pistol.

45 ACP RANGE DATA

Black Hills Ammunition 185-grain TAC-XP +P	**Desert Eagle 1911C**	**Kimber Pro Carry SLE**	**Taurus 1911 Commander**	**Iver Johnson Hawk Commander**
Average Velocity	1030 fps	985 fps	1001 fps	990 fps
Muzzle Energy	436 ft.-lbs.	399 ft.-lbs.	412 ft.-lbs.	403 ft.-lbs.
Smallest Group	1.9 in.	2.2 in.	3.0 in.	3.5 in.
Average Group	2.2 in.	2.5 in.	3.5 in.	3.7 in.
Hornady Custom 200-grain XTP 9112	**Desert Eagle 1911C**	**Kimber Pro Carry SLE**	**Taurus 1911 Commander**	**Iver Johnson Hawk Commander**
Average Velocity	911 fps	895 fps	920 fps	888 fps
Muzzle Energy	369 ft.-lbs.	356 ft.-lbs.	376 ft.-lbs.	350 ft.-lbs.
Smallest Group	1.8 in.	2.0 in.	2.8 in.	3.8 in.
Average Group	2.2 in.	2.3 in.	3.4 in.	4.1 in.
SIG Sauer Elite 185-grain V-Crown JHP	**Desert Eagle 1911C**	**Kimber Pro Carry SLE**	**Taurus 1911 Commander**	**Iver Johnson Hawk Commander**
Average Velocity	999 fps	967 fps	988 fps	970 fps
Muzzle Energy	410 ft.-lbs.	384 ft.-lbs.	401 ft.-lbs.	386 ft.-lbs.
Smallest Group	2.5 in.	2.2 in.	3.1 in.	3.4 in.
Average Group	2.7 in.	2.8 in.	3.6 in.	4.2 in.

All groups were fired at 25 yards from a benchrest using a Bullshooters pistol rest. We used a Competition Electronics Pro Chrony to measure velocity. ***Ammo sources:*** *SIG Sauer Elite 185-grain V-Crown JHP ($21/20 rounds from LuckyGunner.com); Hornady 200-grain XTP ($17.50/20 LuckyGunner.com); Black Hills 185-grain TAC +P (TargetSportsUSA.com).*

type. However, this one didn't perform as well.

When you are working with a shortened 1911, the slide is lighter. This may result in higher slide velocity. This slap from the slide may increase recoil. The ability of the magazine to feed at this increased slide velocity may be compromised. The Commander demands a heavier recoil spring. The hammer spring may be heavier as well. When racking the slide, our shooters noted the Taurus Commander is more difficult to rack than a Government Model. All of the handguns tested are similar in this regard.

The Taurus is supplied with a lockable plastic box and a single 8-round magazine as well as a gun lock. Early-production Taurus 1911 handguns were supplied with a Taurus-manufactured magazine. The magazine supplied with this handgun is marked Mec-Gar as well as Taurus. The matte-black pistol is the least expensive pistol tested, and the finish reflects the economy market. The pistol magazine, however, is well finished with a suitable bumper pad. The Taurus features forward cocking serrations. The hammer is similar to the original Commander type. The beavertail is an elongated design. The slide-lock safety is extended. Thankfully, the slide lock isn't a gas-pedal type. Among the Taurus's best features are its Novak sights. It doesn't get any better in all-round fixed sights than these.

Many of the problems with Commander-type pistols are solved in the handguns tested. Hammer bite (sometimes caused by the sharp edges of the tang) is eliminated by the beavertail grip safety and rowel hammer. The Taurus trigger features grooves on the face. The grips are checkered plastic that, along with a checkered front strap, offered help in grasping the pistol properly during speed drills and also for accuracy testing. The checkered front strap is an option usually found only on much more expensive Commander handguns.

During the firing evaluation, we used a hardball load, a +P offering, and bullet weights of 185, 200, and 230 grains to check for feed and cycle reliability. For combat firing, we shot 100 cartridges in each handgun. These were primarily the Black Hills Ammunition 230-grain FMJ, a standard hardball-type loading. We fired 80 of these. We also planned on firing 20 rounds of the Black Hills Ammunition 185-grain TAC +P to confirm reliability with +P loads. We fired these 20 rounds with a Chip McCormick 10-round magazine ($40 from OpticsPlanet.com), but the Iver Johnson did not function with this combination. Firing for accuracy, we used three loads at a long 25 yards: the Black Hills Ammunition 185-grain TAC +P, the Hornady 200-grain XTP, and the SIG Sauer Elite 185-grain V-Crown JHP.

On the combat range, we fired the Taurus at torso-sized targets at 6, 7, and 10 yards. We fired while moving and drew from a Galco Summer Comfort concealed-carry holster. The Taurus pistol is fast

into action, and the sights are an advantage. Combat groups were well centered. However, we suffered two malfunctions during the first 20 cartridges. First was a failure of the slide to fully close. That was no surprise because the bullet nose was pointed straight up in the ejection port because it was caught before it fed into the chamber. Next came an odd malfunction we have occasionally seen before. The spent case did not quite make it from the ejection port and was caught in the port perpendicular to the magazine. There were no failures to feed, chamber, fire, or eject with the ball or JHP loads after these malfunctions.

We found the sights to be well regulated for 230-grain loads. Recoil isn't excessive. When fired off the benchrest, the Taurus was not hard to manage, but it was not a particularly accurate handgun, a contrast to the Taurus Commander we tested last year. Five-shot groups fired at 25 yards averaged 3 to 4 inches. Accurate enough for defense, but not ideal.

As noted, the pistol had two early failures to function, for which we didn't dock it for. However, there were other demerits. The trigger was heavy at 7.0 pounds even, and we rated the pistol down a half grade based on this trigger action. Another problem was the grip safety. A properly set grip safety, we feel, should release its hold on the trigger about halfway into compression. This grip safety demanded it be depressed practically flush with the grip frame and maintained in this position. This doesn't leave much margin of error for those who use the thumbs-forward

TAURUS 1911 COMMANDER 1-191101COM 45 ACP, $500

GUN TESTS GRADE: B-

We last tested this model in the October 2018 issue, where it earned an A- grade. As before, the Taurus was affordable, with acceptable fit and finish, and the sights are a good choice for self-defense. On this unit, however, we did not like the fit of the beavertail safety, and this handgun was less accurate than the previous model.



Action Type	Single action, short recoil-operated locked breech
Overall Length	7.9 in.
Overall Height	5.8 in.
Maximum Width	1.25 in.
Weight Unloaded	38.0 oz.
Weight Loaded	42.4 oz.
Slide Material	Carbon steel
Slide Retraction Effort	19.0 lbs.
Receiver Material	Matte-black carbon steel
Front Strap	2.6 in. tall, checkered
Back Strap	3.25 in. tall, checkered
Barrel Length	4.25 in.
Grip Thickness (Maximum)	1.25 in.
Grip Circumference	5.37 in.
Magazine	One 8-round steel, plastic base pad
Rear Sight	Novak white two dot steel, drift adjustable for windage
Front Sight	Dovetailed steel post w/Novak white dot
Sight Radius	5.75 in.
Trigger Pull Weight	7.0 lbs.
Trigger Span	2.8 in.
Safeties	Slide lock, grip
Warranty	Taurus Lifetime
Telephone	(800) 327-3776
Website	TaurusUSA.com
Made In	Brazil





The Taurus Commander features Novak sights. They offer a good sight picture and are easily acquired in speed shooting. Five-shot groups fired at 25 yards averaged 3 to 4 inches. Accurate enough for defense, but not ideal. Left, the front sight is dovetailed into the slide. Right, the two white dots offer contrast on black targets.

grip, which sometimes results in the palm rising off the grip safety. All of the other pistols functioned properly in this regard.

These problems could be corrected, but they likely would involve the services of a pistol smith. We'll go through the adjustment we made to the Taurus so you'll understand the job. First, we unloaded the Taurus and disassembled it. The sear spring controls the grip safety. The finger on the left is bent slightly to either strengthen return or make it lighter. We carefully bent the spring until the grip safety properly released about half way into its travel.

Our Team Said: This particular Taurus Commander had a heavy trigger, middling accuracy, and a grip-safety engagement we didn't like. Also, the variation between this handgun and the previous test gun has us concerned about overall QA in the line. Most likely, there are some good samples of the Taurus 1911 Commander out there; the trick will be making sure you get one of the good ones if you decide to go this route. Be sure you have a chance to shoot the one you might want to buy. We would also point out that the Metro Arms Co. MAC 1911 Bobcut M19BC45C 45 ACP, $746, was ranked higher than the Taurus Commander in the October 2018 issue, and the Desert Eagle beats it here. *Caveat emptor.*

Desert Eagle 1911C 45 ACP, $695

This was a recent price at BudsGunShop.com. This handgun features a unique barrel set up. Like the Taurus, the Desert Eagle 1911 uses a full-length guide rod. But the Desert Eagle features a bushingless



The Commanders all field-strip in a similar manner. With the full-length guide rod, the Taurus slide is removed in one piece.



This spent cartridge case in the ejection port malfunction occurred early in the Taurus Commander testing. It did not repeat, so it was marked down as a break-in malfunction.



The plastic grips are okay; in fact, they offered as good a grip as the others.



Some of the problems with Commander-type pistols are solved in the Taurus. Hammer bite is eliminated by the beavertail grip safety and rowel hammer.



On the Taurus, the checkered front strap is a good feature.



The Taurus grip safety had to be depressed practically flush with the grip frame for the pistol to fire. The sear spring, shown at right, controls the grip safety. The finger on the left (arrow) is bent slightly to either strengthen return or make it lighter. We carefully bent the spring as shown. This change allowed the grip safety to properly release about halfway in its engagement.

DESERT EAGLE 1911C 45 ACP, $695

GUN TESTS GRADE: A (BEST BUY)

Reliability was good and accuracy was the best of the test. We liked the sights and the checkered front strap. The Desert Eagle is affordable as quality 1911 handguns go.



Action Type	Single action, short recoil-operated locked breech
Overall Length	7.87 in.
Overall Height	5.5 in.
Maximum Width	1.25 in.
Weight Unloaded	35.0 oz.
Weight Loaded	39.4 oz.
Slide Material	Forged matte-black steel
Slide Retraction Effort	20.0 lbs.
Receiver Material	Cast matte-black steel
Front Strap Height	2.6 in.
Back Strap Height	3.2 in.
Barrel	4.25 in. long stainless steel, bushingless
Grips	Checkered G10
Grip Thickness (Maximum)	1.25 in.
Grip Circumference	5.37 in.
Magazines	Two 8-round
Rear Sight	Drift adjustable notch
Front Sight	Dovetailed post, pinned
Sight Radius	5.7 in.
Trigger Pull Weight	6.0 lbs.
Trigger Span	2.8 in.
Safeties	Slide lock; grip
Warranty	1 year
Telephone	(508) 635-4273
Website	MagnumResearch.com
Made In	Israel



While the Desert Eagle 1911C and other handguns tested are lighter than the 1911 Government Model, none were uncomfortable to fire. The pistol gave good, tight groups during double taps on the combat course.



The Magnum Research Desert Eagle is a nice-looking 1911. The pistol features good sights and an unusual barrel-to-slide fit. We have not tested the stainless-steel version, but it may be a good option for those who are concerned about corrosion resistance.

barrel. The barrel length is 4.33 inches. The result is the muzzle extending slightly from the slide compared to a standard Commander. The barrel is 0.08 inch longer than the Taurus and Iver Johnson Commander types and 0.33 inch longer than the Kimber Pro Carry's 4-inch barrel.

Outside, the Desert Eagle features a nicely done blued finish. There are no forward cocking serrations. The sights are high visibility types with a grooved rear face on the rear sight. The front sight is dovetailed in place. The skeletonized hammer is the modern type, and the trigger is also light weight. The grip safety is stainless steel, as is the barrel. Fitting of the grip safety is excellent, with the grip safety properly releasing its hold on the trigger about halfway into compression of the grip safety. The slide-lock safety functions crisply. The pistol is supplied in a locking case with two 8-round magazines with basepads. The trigger is smooth at 6.0 pounds even. The checkered front strap is well done and the sights are excellent.

During the firing test, the Desert Eagle 1911 performed well on torso-sized targets. We suffered a single malfunction in firing the first magazine of 200-grain XTPs off the bench. The slide closed on a round, and when we racked the slide to the rear, locked it, and removed the magazine, the cartridge was pointing upward in the magazine. Other than this, there were no failures to feed, chamber, fire,



Left: A dovetailed crisp front post and a bright white dot make for good sighting on various target colors.



Left: Note the small set screw (arrow) that may be loosened to adjust the rear sight to center shots in the 10-ring, below.





Above: A single malfunction occurred when the slide closed on a round, and when we racked the slide to the rear, locked it, and removed the magazine, the cartridge was pointing upward in the magazine. Below, the ejection port is properly scalloped to aid in clearing empty brass.





Left: The grips are G10 and feature a cutout (arrow) to allow easier access to the magazine release. The Desert Eagle features a quality blued finish and a finely checkered front strap, which helped us control the gun on the combat and accuracy ranges.

Right: Here's a closer look at the Desert Eagle's front end. It features a bushingless barrel that's 4.33 inches long and a full-length guide rod. The result is the muzzle extends slightly from the slide compared to a standard Commander. The Desert Eagle was the most accurate handgun tested, with some groups as small as 2.0 inches.



or eject, and groups were well centered at point of aim, the best of the test. As for accuracy, the Desert Eagle was the most accurate handgun tested. Some groups were as small as 2.0 inches.

A word on the longer barrel. Compared to the nearest competitor, velocity differences with the DE weren't that big when firing the Hornady 200-grain XTP. The Desert Eagle exhibited 911 fps, the Kimber, 895 fps. Moving to the Black Hills Ammunition 185 grain TAC +P, the difference was more noticeable, 1030 fps for the Desert Eagle versus 989 fps for the Kimber, we found.

Our Team Said: While more expensive than the Taurus Commander and the Iver Johnson Hawk, the Desert Eagle showed good to excellent fitting, a good trigger action, offered good sights, and delivered good performance. It shares positive attributes with the more-expensive Kimber Pro Carry, so on a value basis, it stands a head above the Kimber.

Kimber Pro Carry SLE 45 ACP, $750

We always encourage readers to keep their eyes peeled for low-mileage used guns, such as this one, with the SLE designation meaning Stainless Limited Edition. Our price for it was $20 less than a new Pro Carry II model at Bud's. So, why pay within $20 of the new price for a used Kimber? First, the pistol appeared unfired and may have been used, but lightly. This SLE version features an upgrade in

KIMBER PRO CARRY SLE 45 ACP, $750

GUN TESTS GRADE: A

The Pro Carry offers good reliability, excellent sights, the best trigger of the test, and more-than-acceptable accuracy. This is a good 1911 that is worth looking for.



Action Type	Single action, short recoil-operated, locked breech
Overall Length	7.7 in.
Overall Height	5.6 in.
Maximum Width	1.25 in.
Weight Unloaded	28.0 oz.
Weight Loaded	32.4 oz.
Slide Material	Stainless steel
Slide Retraction Effort	22.0 lbs.
Receiver Material	Aluminum
Front Strap Height	2.6 in.
Back Strap Height	3.3 in.
Barrel Length	4.0 in.
Grip Thickness (Maximum)	1.25 in.
Grip Circumference	5.36 in.
Magazine	One 8-round magazine
Rear Sight	Drift adjustable
Front Sight	Dovetail post
Sight Radius	5.5 in.
Trigger Pull Weight	5.0 lbs.
Trigger Span	2.8 in.
Safeties	Slide lock, grip
Warranty	NA
Telephone	(888) 243-4522
Website	KimberAmerica.com
Made In	USA



This SLE features an upgrade in grips and a special stainless magazine well. During the evaluation, we found the magazine well contributed to speed loads. It funnels the magazine into the grip. However, using magazines without a base pad, one of the raters pinched his palm (right) slapping a magazine home.





While the front strap did not feature a texture, the backstrap and grip checkering made for an overall good gripping surface.

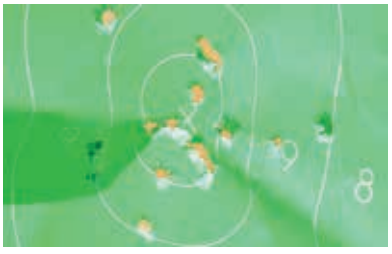


Fit and finish of the Kimber Pro Carry pistol were excellent. The grip safety isn't a memory-bump type, but it worked fine.





The Kimber sights offer a good sight picture. The low front post gave good results on the firing range. Below: The combat groups opened slightly with +P loads, but the Kimber Pro Carry SLE remained controllable.



grips and a special stainless magazine well. Also, this is a Series One model, a pistol made before Kimber incorporated a firing-pin block into the design. This isn't a drawback for most of us, as the pistol features a heavy-duty firing-pin spring that prevents the firing pin taking a run forward if the pistol is dropped on the muzzle. This is a sought-after pistol in some circles and a good find, we felt, well worth the time and effort to test. The performance is no different, we felt, than modern Kimbers we have tested, but this is an interesting variation.

This is a stainless-slide and aluminum-frame pistol with good features. There are no forward cocking serrations. The pistol features excellent sights that offer a good sight picture. Kimber sights are subtly different than Novak sights but work well. The trigger action is excellent at 5.0 pounds even, with no creep or backlash. The finish is good and there are no blemishes. The grips are well turned out. They are both attractive and practical, offering good adhesion and abrasion when firing. The magazine well is another matter that should be carefully considered, as we learned. Some love it and some do not like it at all.

The barrel is a 4-inch-barrel "bull" type with a bushingless lockup. Barrel-to-slide fit is good. During the evaluation, we found the magazine well contributed to speed loads. It funnels the magazine into the grip, and this is an advantage. When running this test, we used all magazines available in all handguns, or at least we tried. The basepad on the Desert Eagle magazines was not compatible with the Kimber magazine well; the magazines would not seat. Using magazines without a base pad, one of the raters pinched his palm slapping a magazine home. So, if you use the proper magazines dedicated to the handgun, then you will be fine. If you have a box of 40 or so 1911 magazines (as we do), then some will not fit the Kimber. Just the same, we did not rate the Kimber up or down on the magazine funnel.

During the firing test, the Pro Carry turned in good-to-excellent combat groups. While the Pro Carry is lighter than the Desert Eagle, results were practically the same. The Desert Eagle had the slightest edge, however, with more holes in the X of the torso-outline target. The Kimber's smooth trigger and good sights provided good results. While the Desert Eagle should be more secure, given its checkered front strap, the Pro Carry was sure on target. As for absolute accuracy fired from the Bullshooter's pistol rest, the Kimber turned in good results, with an odd quirk. Typically, the pistol delivered a good, tight four-shot group with the fifth hole in the group spaced away from the center. This is what hurt the Kimber's score compared to the Desert Eagle in absolute accuracy.

Our Team Said: The Desert Eagle pistol is more accurate, costs less and features a checkered front strap, which earned the Desert Eagle a Best Buy grade. Just the same, there is nothing wrong with the Kimber Pro Carry. If you can locate one in lightly-used condition, we would purchase this handgun and use it with confidence.

Iver Johnson Arms Polished Hawk Commander 45 ACP, $566

A matte-finish Hawk Commander 45 was recently listed for $519 at Bud's. The highly polished version tested here commands a slight premium. Function should not be any different. The Iver Johnson pistol is a Philippine import. It was not lost on the raters that only one of the pistols tested was American made, a reflection of the current market, especially in affordable 1911 handguns. Most Philippine 1911 handguns are Rock Island (Armscor) types; this one is manufactured by Shooters Arms Manufacturing (SAM). Apparently, Iver Johnson imports the slide and frame and fits the parts and finishes the handgun. The slide features angled cocking serrations both front and rear. It is interesting that the two least expensive handguns, the Taurus and the Iver Johnson, featured forward cocking serrations. Since the Commander has heavy magazine springs, this is a good touch, allowing shooters to rack the slide with greater leverage. Commander 45s generally demand 20 to 21 pounds of force to rack the slide.

The Hawk isn't as tight as the Desert Eagle, but there is surprisingly little lateral play in the slide-to-frame fit. The finish is nice throughout, with a dull matte finish on the stop of the slide and lower parts of the frame. The sights are high visibility types dovetailed into the slide. The sight picture is good with these sights. The rear sight features a Phillips-head screw that may be loosened for adjustment. We did not like the appearance compared to the other sight adjustments, usually a small Allen head screw in the rear sight. Witness marks for setting the sights are dimpled into the slide. One of our raters also works with *American Gunsmith* magazine, a sister publication to GUN TESTS. He rated the beavertail grip safety design and fitting to be excellent. The slide-lock





We fired several hundred cartridges during the tests of these Commanders, including jacketed hollowpoint selections from SIG Sauer, Hornady, and Black Hills. Results were fair to excellent. The primary load was the Black Hills Ammunition 230-grain FMJ, right.

IVER JOHNSON ARMS POLISHED HAWK COMMANDER 45 ACP, $570

GUN TESTS GRADE: C

The Hawk Commander is a nice-looking pistol, and for the modest price, fit and finish appeared satisfactory. However, attention to detail in important areas, such as feed-ramp finish, heavy trigger, and selection of the proper-size slide lock, left the pistol in last place.



Action Type	Single action, short recoil-operated locked breech
Overall Length	8.0 in.
Overall Height	5.5 in.
Maximum Width	1.25 in.
Weight Unloaded	36.0 oz.
Weight Loaded	40.4 oz.
Slide Material	Matte-blue forged steel
Slide Retraction Effort	20.0 lbs.
Receiver Material	Matte-blue cast steel
Finish	Blued steel
Front Strap Height	2.6 in.
Back Strap Height	3.2 in.
Barrel Length	4.25 in.
Grip Thickness (Maximum)	1.25 in.
Grip Circumference	5.37 in.
Magazine	One 8-round ACT Mag
Rear Sight	Dovetail, screw adjustable
Front Sight	Dovetail post
Sight Radius	5.6 in.
Trigger Pull Weight	8.2 lbs.
Trigger Span	2.8 in.
Safeties	Slide lock, grip
Warranty	1 year
Telephone	(321) 636-3377
Website	IverJohnsonArms.com
Made In	Philippines



The Iver Johnson Hawk is a nicely finished handgun. Fit and finish are good, surprisingly so for the price. However, the slide-lock safety shelf (arrows) was simply too large and caused a good many malfunctions when the support-hand thumb inadvertently engaged the big pad on the lever. We replaced the slide lock for $40 with the lever on the right (bottom image). Oddly, the new lever fit the other handguns without adjustment, but we had to shape the new lever to make it work in the Hawk.





The Iver Johnson Hawk was feed-reliable with 230-grain FMJ loads, but it stuttered with one of the JHP loads. The slide lock also gave trouble.

To solve the feeding issues, we carefully reshaped the feed ramp with a fine-grit sandpaper wrapped on a permanent marker.





safety is very well done. The trigger action, however, was far too heavy, breaking at 8.1 pounds. We had difficulty managing this trigger in firing for accuracy.

The grips are easily the nicest of the four pistols, even besting the Kimber. They appear to be cocobolo or the very similar rosewood. They are checkered in the double diamond pattern and feature the Iver Johnson owl symbol. The long trigger and flat mainspring housing are typical of modern 1911 handguns. This pistol uses a standard recoil spring and spring guide set-up.

We were impressed by the primary fit and finish of the handgun. The extended slide-lock safety lever of the Hawk was crisp and positive and did not present a difficulty. The beavertail worked properly. We even managed fair combat shooting with the heavy trigger. The combat groups were at the bottom of the list compared to the other handguns, but generally similar to other inexpensive 1911 45s we have tested.

However, during the firing tests, several problems cropped up. The extended slide lock was another thing. We have been of the opinion, tempered with experience, that extended slide locks are best reserved for competition handguns. During recoil, shooters tend to allow the thumb to drift onto an extended slide-lock lever and tie the gun up by pressing it into the locking slot in the slide. Two of the three raters experienced this problem, and it was difficult for them to adjust, even though they are long-time 1911 shooters. Such designs are far less suited to Commander-type 45s than the Government Model. You cannot use the thumbs-forward grip with this slide lock. This technique sends the thumb into the slide lock during recoil.

During the firing test with the Black Hills 185-grain JHP +P rounds, the Hawk tied up when using the Chip McCormick magazines. This occurred on tail end of the firing string, and it was the ninth cartridge that failed to feed properly. It was a typical short cycle. However, when we switched to the supplied ACT magazine, there were no short cycles. But the pistol failed to feed the all-brass hollow point (Black Hills TAC +P) twice in two magazines. In modern 1911s, feed reliability is often taken for granted because most modern pistols feed well. Not this one. Also, when using the Chip McCormick magazine, the pistol failed to feed 230-grain ball on two occasions.

Fired from a solid braced firing position, the pistol's accuracy was comparable to the Taurus 1911 Commander 45 with some groups, but overall, it was inferior, with groups in the 3.5- to 4-inch range. We were able to control the heavy trigger consistently from the bench rest only with effort. The pistol's accuracy potential was not realized in full due to the heavy trigger.

One of the raters felt he could "get the pistol up to speed easily." This would involve a feed-ramp polish and changing the slide lock. We decided to get the piece up to par and operating, if possible, and to determine what this would cost. We ordered a Wilson Combat BulletProof slide lock from Brownells.com ($32). The slide stop fit properly in the other 1911 handguns tested without any adjustment. In the Hawk, however, this slide stop didn't fit. The arm was too large to fit without careful polish and sanding. In retrospect, we should have measured the slide stop. It is probably a 9mm/38 Super type. Just the same, we were able to adjust the slide stop, and this made the difference.



The Iver Johnson Hawk, top, has a conventional front end with a barrel bushing and recoil spring cap. Bottom left: The Desert Eagle 1911C uses a bushingless lockup as a result of the belled barrel. Bottom right: The Taurus 1911 Commander uses a full-length guide rod and barrel bushing.

As for the feed problem, putting on a polish is the classic solution, but polishing properly is minimalist. Never polish a ramp unless the pistol simply will not feed. The process involves carefully removing tool marks or scratches from the feed ramp without removing metal. Don't change the angle of the feed ramp. There is a small stop of about 0.032 inch between the top of the ramp and the barrel throat that must not be changed. If that angle is changed, the piece will not feed. A permanent marker with a bit of fine-grip sandpaper glued in place is the right size to use on the ramp.

In both cases, we doubt that the average buyer purchasing an economy 1911 is going to be willing or able to work the trigger or change the slide stop.

Our Team Said: The performance exhibited by the Iver Johnson Hawk isn't acceptable to our shooters. If you were to factor out the problems with the 10-round McCormick magazine and the 185-grain TAC bullet, you still have the problem with the slide lock. The pistol was rated down a half grade based on short-cycle malfunctions, another half grade on a failure to feed the TAC-type JHP combat loads, and another half grade on the problematical slide lock. The heavy trigger was another half-grade markdown. We would not buy this pistol.

Written and photographed by GUN TESTS *Staff, using evaluations from* GUN TESTS *team testers.* GT

VALUE GUIDE: SHORTER 1911 PISTOLS

GUN NAME	ISSUE	GRADE	COMMENTS
Metro Arms Co. MAC 1911 Bobcut M19BC45C 45 ACP, $746	Oct. 2018	A	The Bobcut offers a crisp trigger pull and bobbed grip for better concealment.
American Classic Commander ACC45C 45 ACP, $568	Oct. 2018	A-	Our only ding is the lack of a serrated front grip strap.
Taurus 1911 Commander 1-191101COM 45 ACP, $459	Oct. 2018	A-	The trigger was a bit too heavy, but the sights are good. Great fit and finish.
Ruger SR1911 CMD-A Model 6711 45 ACP, $899	May 2015	A	Good looks, decent accuracy, a good trigger, and nothing that doesn't belong.
Colt Mfg. Co. Commander XSE O4012XSE 45 ACP, $940	April 2015	A	Consistently the more accurate handgun. Ambi safety, forward serrations, frame cut.
Remington R1 Commander 96336 45 ACP, $573	April 2015	B	This is a traditional 1911 Commander with no extraneous features.
Shooters Arms Mf'g Commodore CIA HG1009-N 45 ACP, $429	Nov. 2014	D	Not reliable with hollowpoints and showed annoying quirks with the original slide lock.
Kimber Tactical Pro II 45 ACP, $1317	Oct. 2014	A	Kimber's quality control and attention to detail really shine in this pistol.
SIG Sauer Carry Scorpion 45 ACP, $1213	Oct. 2014	B+	Quite accurate. Cerakote coating, frame rail, and G10 scaled grips were good features.
SIG Sauer 1911 C3 1911CO-45-T-C3 45 ACP, ~$650 (Used)	July 2014	A	The pistol is just the right size, with the Commander slide on an Officer's Model frame.
Rock Island Armory Tactical II Compact 51479 45 ACP, $591	July 2014	B	The RIA has features that allow this little pugnosed 45 to shoot like a big gun.
American Classic ACC45B 45 ACP, $506	July 2014	D	This Commander-length 1911 had promise. However, the pistol failed to feed reliably.
Para-USA Expert Commander No. 96748 45 ACP, $799	Jan. 2014	A	The Para is true to original Commander in that it has a lightweight frame.
Colt's Commander Series 80 No. 04091U 45 ACP, $974	Jan. 2014	A-	The Colt was not the most accurate pistol, but it was consistent with every load.
Kimber Pro Custom Defense Package (CDP) II 45 ACP, $1331	Nov. 2013	A	The lightest pistol and the only aluminum-frame pistol in this match up.
SIG Carry Stainless 1911CA-45-SSS 45 ACP, $1142	Nov. 2013	A-	A Best Buy. Excellent fit/finish, good reliability, great accuracy. Lacks an ambi safety.
Ruger SR1911CMD No. 6702 45 ACP, $829	Nov. 2013	B	The loosest tested, the least accurate, and had a faulty magazine.

Log on to **Gun-Tests.com** to read complete reviews of these products in the designated months. Highly-ranked products from older reviews are often available used at substantial discounts.

6mm Creedmoor Bolt-Actions: Barrett, Browning, and Howa

Barrett's Fieldcraft is great for backpacking, and the Browning Hell's Canyon can compete on Saturday and hunt on Sunday. Howa's H-S Precision is a fine all-purpose rifle in this trending long-range round.

In the January 2016 issue of GUN TESTS, we tested the Ruger Precision Rifle chambered for 6.5mm Creedmoor (6.5 CM). The RPR made long-distance shooting easy but was it the rifle or was it the caliber? Just about every 6.5 CM rifle we tested thereafter, no matter how traditional or space age the design, outshot what has long been the benchmark of accuracy — sub-minute-of-angle groups, or 1-inch-wide groups fired from the 100-yard line — with room to spare. In this evaluation we compared three bolt-action rifles chambered for the slightly smaller, slightly faster 6mm Creedmoor round, launching bullets measuring 0.243 inches in diameter versus 6.5mm bullets that are 0.264 inches in diameter. The rifles were the $1929 Barrett Fieldcraft, Browning's $2400 X-Bolt Hell's Canyon Long Range McMillan, and the $1220 Howa H-S Precision stocked rifle. We wondered how much difference 0.021mm in bullet diameter would make and why the sudden interest in 6mm Creedmoor.

The evolution of rifle cartridges often comes about behind the scenes, in the loading rooms of competitive shooters or in debriefs after a big match. As Dave Emary (retired chief ballistician for Hornady manufacturing) tells the story, what became the 6.5 Creedmoor began in a discussion after the 2006 CMP Service Rifle Championship with Joe Thielen (head engineer for cartridge case engineering at Hornady) and Dennis DeMille, a national-championship-level competitor. Envisioning a more competitive chambering, the wish list included moderate recoil with enough energy to make 1000-yard shots possible without using a high-pressure cartridge. Furthermore, the new round needed to fit into a short action and be easily mass-produced for commercial sale.

DeMille went on to champion the 6mm HAGAR, which was better suited for the AR-15 in High Power Rifle competition. The 6.5 Creedmoor became the most popular factory round used in long-range rifle competition, such as those sanctioned by the Precision Rifle Series (PRS) and the National Rifle League. Indeed, the Ruger Precision Rifle and the availability of economically priced 6.5 CM did much to bring attention to the sport and grow participation.

So, why the move to calibers such as 6mm Creedmoor and what does it have to do with the hunting rifles in this test? The answer is recoil. The less recoil, the more ability to stay on the scope after the shot, determine point of impact, and make corrections without the benefit of a spotter. What's more, competitors rely on heavily built rifles to protect their bodies over the course of a long season, including thousands of practice rounds. For example, GUN TESTS Contributor Joe Woolley's 6.5 CM Masterpiece Arms rifle with 26-inch barrel weighs about 16 pounds without a scope. Roger Eckstine's 6.5 CM Accuracy International build with Surgeon action and 26-inch barrel weighs about 18 pounds including a 5-27x56mm scope. These heavy rifles transmit less recoil to the shooter, but many top competitors have gone a step



Left to right, our 6mm Creedmoor test ammunition was Hornady's 87-grain V-Max Varmint Express, Hornady's 103-grain ELD-X Precision Hunter, and the Black Hills Ammunition loading of Hornady's 108-grain ELD-M bullet. At far right is a single round of 147-grain 6.5 Creedmoor ammunition for scale. Other than case-mouth diameter, the cases are identical. Precision Rifle Competition shooters have lead the way in developing loads for the smaller-diameter bullet so they can more easily trace their shots and reduce shooter fatigue.



We found Browning's $2400 X-Bolt Hell's Canyon Long Range McMillan suitable for both hunting and precision-rifle competition. Its 26-inch-long barrel took full advantage of the ballistics available from our 6mm Creedmoor test rounds, and the muzzle brake reduced recoil beyond expectation. The McMillan Game Scout stock was much like those used in competition except much better looking, especially when matched to its bronze Cerakote barreled action. The Browning offered a detachable rotary magazine and flush cups for modern quick release sling loops. The $899 Bushnell Forge 3-18x50mm riflescope featured a sophisticated reticle very much like the Horus H59 reticle developed for the military. A pair of Strong Suit Precision Shooting gloves, $17 from TopBrassMilitary.com, made shooting all the more pleasant.

further, choosing to shoot lower-recoil ammunition, including 6mm Creedmoor, to save wear and tear on their bodies. Given the rifles in this test are scaled back to the size and weight of hunting rifles, we wanted to see if what has been learned in the world of competitive precision rifle competition would also benefit the hunter.

One popular misconception as to the origin of the 6.5mm/6mm Creedmoor cartridges is that they were born of the 308 Winchester case. But if we were to start from scratch and make "wildcat" casings for either the 6.5 or 6mm Creedmoor rounds, we'd begin with a batch of 30 T/C (Thompson Center) brass. As stated in *The Shooter's Bible Guide to Cartridges* by GUN TESTS Editor Todd Woodard, the 30 T/C cartridge offers less case volume than the 308 Winchester but typically produces higher velocities than 308 Win., particularly when loaded with 150-grain bullets. In forming the Creedmoor rounds, the empty case length remains the same as 30 T/C, 1.920 inches in length,



Right: The Barrett Fieldcraft series of bolt-action rifles are the opposite of maker's huge 50-caliber sniper rifles. Furthermore, the $1929 "Threaded" is the smallest in the Fieldcraft line. With only 18.5 inches of threaded barrel, our test rifle weighed less than 5 pounds 5 ounces. If you are looking to get off-grid, the Fieldcraft is an ideal companion. The machine work on this ultralight rifle was stunningly clean and well thought out. The action was fully supported, operated via a Timney trigger, and the proprietary rings made by Talley Manufacturing were equally precise. Our Highland Tactical Task Extreme Tool Pack ($75 from HLTactical.com) was capable of carrying heavy gear comfortably thanks to its plastic base plate and ventilated padding between the shoulder straps.

but the angles at the shoulder (where the case mouth is "necked down" to hold the bullet) became critical. The object was to pack more powder behind smaller bullets that offered higher Ballistic Coefficients (BC), a rating of aerodynamics and inertia, allowing rounds to better fight off wind drift and resist the pull of gravity. Typical 6.5 Creedmoor ammunition features bullets ranging in weight from 120 grains to 147 grains. Our 6mm test rounds were Hornady's 87-grain V-Max Varmint Express and 103-grain ELD-X Precision Hunter ammunition. We also fired Black Hills Ammunition's loading of Hornady's 108-grain ELD-M bullet. The lighter-weight bullets common to 6mm Creedmoor generate less recoil, which is one reason why 6mm CM is more comfortable to shoot than its larger brother.

Like our choice of cartridge, our riflescope reflected what is being used in competition. The $899 Bushnell Forge 3-18x50mm first-focal-plane riflescope complete with locking turrets and zero stop offered a sophisticated Deploy MIL grid very similar to the Horus H59. The Forge scope was a bargain, in our view, not only for its visual clarity but also the fact that just a few short years ago an H59 reticle was a $500 upgrade on most optics. Another item that helped us with our testing was a pair of Strong Suit Precision gloves, $17 from TopBrassMilitary.com. The increase in grip provided by the gloves made by Intekmfg.com reduced our shooter's physical effort without limiting dexterity. The exposed thumb, index, and forefingers were fully tailored, allowing us to work normally without having to cut away the fingertips and leave frayed edges. We toted our gear to the range including ammo, tools, bags, bipods, etc. in a Highland Tactical "Task" Extreme Tool Backpack ($75 from HLTactical.com). We chose the Task because it was designed to comfortably carry heavy tools, and it had a molded plastic protective bottom that kept it upright, creating a workstation that behaved



First-focal-plane scopes are standard equipment for precision rifle shooters. These scopes often feature 56mm objective lenses, sophisticated complex reticles, and a hefty price tag. The $899 Bushnell Forge 3-18x50mm scope offered these features in a package that was more manageable for hunting applications. The Deploy reticle shown here was nearly identical to the Horus H59 reticle, which is a $500 upgrade in most high-end scopes.

We thought the Browning could double as both a hunting gun and a competition rifle, and the Barrett was an extraordinary pack rifle. But the $1220 Howa 1500 H-S Precision stocked rifle could be one of the best all-round bolt-action rifles we've encountered. It was not only affordable and good looking, it was in fact the most accurate rifle in our tests. Firing Black Hills Ammunition's 108-grain ELD-M load, we achieved groups smaller than 0.40 inches across. The 22-inch-long barrel delivered plenty of power backed by a proven action that featured a smooth 2-pound 13-ounce trigger, a 3-position safety, and a 5-round magazine, giving it the highest capacity of our trio. The Task Extreme Tool Pack ($75 from HLTactical.com) proved to be the ideal workstation for our test team.



more like a cabinet than a backpack. Accuracy data was collected by shooting multiple 5-shot groups from the 100-yard benches at Houston's American Shooting Centers (AMShootCenters.com). Would the enthusiasm shared by competitive rifle shooters carry over once 6mm Creedmoor was packaged in our three different hunting rifles? Let's find out.

Browning X-Bolt Hell's Canyon Long Range McMillan Burnt Bronze 035395291 6mm Creedmoor, $2400

Our Browning test rifle had a long name that did offer an accurate description. Hell's Canyon is a 10-mile-wide canyon located along the Eastern borders of Oregon and Washington and the western border of Idaho, signaling the Browning was designed to shoot over long distances. The McMillan Game Scout carbon-fiber stock featured a steep pistol grip with a mild palm swell on each side, toned down from the maker's Scout-sniper profile, which is popular with precision rifle competitors as well as with the military. McMillan of Phoenix, Arizona has been supplying stocks and complete rifles to military snipers since the 1970s. The exteriors of the action, fluted barrel, muzzle brake, floor plate, and removable flush fit four-round rotary magazine were each treated to a Cerakote finish of burnt bronze. The X-bolt face offers three equally spaced lugs. The action was seated via aluminum pillar bedding, and the buttstock was finished with a Pachmayr Decelerator buttpad. Length of pull measured about 13.75 inches.

Our X-Bolt Hell's Canyon was the longest rifle in the test, complete with a threaded 26-inch-long barrel that was extended about 1.6 inches thanks to a 2-inch-long muzzle brake. A muzzle cap was supplied. The sliding two-position safety switch was located on the tang directly behind the bolt, making it equally available to the right-handed and left-handed shooter. The bolt and the trigger were locked down with the safety switch rearward, which was the Safe setting. Weighing in at little more than 8 pounds unloaded (without scope), the rifle's point of

BROWNING X-BOLT HELL'S CANYON LONG RANGE MCMILLAN BURNT BRONZE 035395291 6MM CREEDMOOR, $2400

GUN TESTS GRADE: A

A little long for the deer blind, this is a superior varminter that could shoot in competition.



Action Type	Bolt, 3 lugs
Overall Length	47.5 in.
Barrel Length/Twist	26.0 in. ,1:7 in.
Overall Height w/o Scope Mount	6.3 in.
Weight Unloaded	8.06 lbs.
Weight Loaded (108 grain, 4+1 rounds)	8.31 lbs.
Sight Radius	NA
Action Finish	Cerakote
Barrel Finish	Cerakote
Magazine Capacity	4 rounds
Magazine Type	Detachable rotary box, flush fit
Stock	McMillan Game Scout carbon fiber
Drop at Comb	1.1 in.
Drop at Heel	1.2 in.
Bedding	Aluminum pillar
Buttplate	Pachmayr Decelerator, rubber
Length of Pull	13.75 in.
Receiver Scope-Base Pattern	20-moa Picatinny
Trigger Pull Weight	3.56 lbs.
Safety	2-position, tang mounted
Warranty	None written
Telephone	(800) 333-3288
Website	Browning.com
Made In	Japan/USA

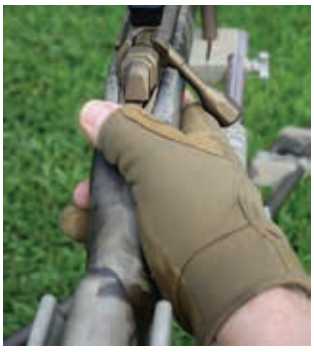


Left: If the goal was a reduction in felt recoil, Browning's muzzle brake was the icing on the cake, spoiling us when compared to the other two rifles. We also credited the geometry of the McMillan stock.

balance was located directly below the middle of the rifle chamber. We didn't feel the rifle was overbuilt, but the 6.1-inch-long 20-moa Picatinny scope mount was connected using a total of eight bolts, two groups of four forward and aft of the ejection port. We used a set of TPS brand TSR Super Low Picatinny style aluminum rings ($105, from MidwayUSA.com) to position the Bushnell Forge 3-18x50mm scope.

Aside from the McMillan stock, we took note of one additional feature that we think signaled that the Hell's Canyon Long Range begged to be shot from the prone position. The underside of the stock offered but one sling stud; also, it provided two "flush cups" designed to accept pushbutton-style quick-detachable sling loops. In fact, two such sling loops were supplied. The bare stud was in place ready for mounting a Harris-style bipod.

This supplants the common practice of mounting dual studs beneath the forend, one for the bipod and the other for the sling loop. The Hell's Canyon might be a tad long to maneuver into a deer blind, but overland carry was certainly a welcome option.





The Browning's bolt traveled a short arc beginning around 5 o'clock, finishing at about the 3 o'clock position. We wore a pair of Strong Suit Precision gloves ($17 from TopBrassWholesale.com) to reduce shooter fatigue.



The McMillan Game Scout stock featured a pistol grip. Note the tang-mounted safety (lower arrow) and bronze Cerakote finish. The 20-moa scope mount was secured with eight bolts (top arrow).

At the range we discovered the bolt action was as brief as it was efficient. Moving the bolt from approximately 5 o'clock to 3 o'clock and back, we saw the Browning feed flawlessly from the magazine or when individual rounds were hand-fed over the follower. As delivered, the trigger-pull weight averaged 3 pounds 9 ounces with an action that was clean, precise, and free of any pre-travel. Designed to function over a range of 3 to 5 pounds, pull weight was user adjustable. Access to the adjustment screw was by removing the trigger guard/bottom metal. The trigger itself sat well back inside the trigger guard, and its face was wide and slightly convex.

When firing the Browning, we experienced very little recoil. In removing the muzzle brake, we learned two things. First, the muzzle brake was not making the report inordinately loud. Second, recoil without the brake was still noticeably less than when firing the other rifles. In our opinion, this can be traced back to the geometry of the McMillan stock, including the additional mass ahead of the pistol grip to make room for the tang-mounted safety.

Naturally, the Browning's longer barrel helped it produce the most velocity and muzzle energy. What we thought was interesting was that its most accurate performance was achieved firing both the lightest-weight bullets and the heaviest bullets from our choice of test ammunition. While our five-shot groups firing the Hornady 103-grain ELD-X rounds averaged about 1 minute of angle, both our 87-grain Hornady and 108-grain Black Hills rounds produced groups measuring about 0.70 inch across at 100 yards.

Our Team Said: When we think of a competition bolt-action rifle adapted to hunting purposes, it might be difficult to come up with a better result than the Hell's Canyon Long Range. Whereas the contrast in recoil with the braked barrel was stark when compared to the other rifles, credit must also be given to the stock. The McMillan Game Scout made it easy to get the shooter's eye directly behind the scope, and its length took any cramp out of the position. Whereas its length (and price) may limit its appeal for some hunters, this is a super varmint rifle that could easily double as a part-time competition rifle.

Barrett Fieldcraft Lightweight Rifle Threaded 6mm Creedmoor, $1929

We think the Barrett Fieldcraft is so named because it was designed for the trekking outdoors person. The word bushcraft comes to mind. Bushcraft is a term synonymous with thriving in the natural environment using wilderness survival skills. Common tools include a small ax, knife, and saw. Adding a firearm would require that it was compact and lightweight, while being formidable enough to justify the extra baggage. The Fieldcraft Threaded is just such a rifle.

The Fieldcraft rifle series from Barrett of Murfreesboro, Tennessee is the antithesis of Ronnie Barrett's legendary 25-pound Model 82 50-caliber bolt-action rifle. Actually there are four different models in the Fieldcraft lineup available in 10 different chamberings. Each rifle features an AGI composite stock with blind magazine, offering top loading only. The actions and barrels are finished in satin stainless and the bolts are spiral fluted. The bolt handles are relieved to save weight, and even the Standard model with 21-inch-long barrel is listed as weighing less than 5.5 pounds unloaded. Our Fieldcraft Threaded Lightweight Rifle was the most compact of all currently available models featuring an 18.5-inch-long threaded barrel. Nevertheless, its full 14.0-inch length of pull meant it wasn't limited to shooters of smaller stature. Measuring less than 38 inches in overall length, our scales said it weighed 5 pounds 5 ounces.

If any first impression trumped our surprise of how light the Fieldcraft was, it would be the quality of machining, fit, and finish. The stock had a very solid "extruded" feel to it, with minimal fit gaps everywhere. The inletting at the trigger guard was remarkably even, as was the seating of the action inside the stock. Adding to the singular feel of the rifle was the fact that the action and barrel was fully bedded all the way to through to the tip of the forend. The barrel was threaded, and a rather hardy knurled cap was supplied. The barrel had a Sporter profile, but there was a flange machined as one with the barrel, so the cap (or muzzle brake or suppressor) offered a natural stop, adding support and preventing overtightening.

The Fieldcraft arrived with a set of scope rings made by Talley Manufacturing bolted directly to the receiver. These rings ($52) were made specifically for the Fieldcraft as the bolt pattern and the contour of the receiver was unique. The two-lug bolt rode smoothly and evenly, locking up with the handle positioned directly above the center of the trigger guard. The bolt release was a compression lever located just left of the rear of the bolt. The two-position safety located on the right side did not lock down the bolt, allowing the magazine to be unloaded by cycling the

BARRETT FIELDCRAFT LIGHTWEIGHT RIFLE THREADED 6MM CREEDMOOR, $1929

GUN TESTS GRADE: A-

This is a super-lightweight precision build you'll want to take everywhere.



Action Type	Bolt, 2 lugs
Overall Length	37.75 in.
Barrel Length/Twist	18.5 in., 1:7 in.
Overall Height w/o Scope Mount	6.0 in.
Weight Unloaded	5.31 lbs.
Weight Loaded (108 grain, 4 rounds)	5.5 lbs.
Sight Radius	NA
Action Finish	Satin Stainless
Barrel Finish	Satin Stainless
Magazine Capacity	4 rounds
Magazine Type	Blind
Stock	Composite
Drop at Comb	1.0 in.
Drop at Heel	0.75 in.
Bedding	Full length glass
Buttplate	Rubber
Length of Pull	14.0 in.
Receiver Scope-Base Pattern	Talley proprietary
Trigger Pull Weight	2.87 lbs.
Safety	2-position lever
Warranty	None written
Telephone	(615) 896-2938
Website	Barrett.net
Made In	USA



Left: The 18.5-inch-long barrel of the Barrett Fieldcraft left plenty of room for a suppressor. Note the quality of the barrel crown and the flange machined as one with the tapered barrel. The flange provided a built-in thread stop.

action. Overall, the Fieldcraft favored the right-handed shooter with additional features, such as a support contour on the left side of the buttstock.

The Fieldcraft operated using a Timney-brand trigger that was adjustable to as light as 2 pounds. This required removing the action from the stock. Instructions, including the proper torque ratings on the action screws, were provided inside the owner's manual. As delivered, the trigger offered 2 pounds 14 ounces of resistance on average. The face of the trigger was wide and flat with fine serrations. The trigger broke cleanly and predictably without take up. Firing the Fieldcraft immediately after shooting the Browning was quite a change in terms of recoil. Yet, overall, we would rate the felt recoil somewhere around that developed by a 30-30 Win. lever action.

Settling in to collect accuracy data, we did notice a shift in point of impact as the barrel heated up. Our best efforts were achieved firing the Hornady 87-grain V-Max Varmint Express ammunition with our first two shots from a cold bore producing one elongated hole. Thereafter, the point of impact shifted about 1.1 inches toward 7 o'clock. Our next five shots formed a group measuring about 0.5 inch across. Given the ambient temperature of about 90 degrees Fahrenheit, it was impossible to completely cool the barrel. Our next two shots were about 0.6 inch apart, followed by a five-shot group that migrated once again toward 7 o'clock. However, the shift was much less pronounced, leaving about a 0.75-inch-wide five-shot group about one-half inch from the first two. By managing barrel heat for consistency throughout the remainder of our tests, we were able to produce groups measuring between 0.8 inch and 1.3 inches across, on average.

Our Team Said: The Fieldcraft Lightweight Rifle fills a very specific niche. This is not a high-capacity rifle that's quickly reloaded, but we could carry it all day even if the heat-related shift in point of impact meant we couldn't shoot it all day. Pricey, but well made, its portability is inviting.

Howa 1500 H-S Precision HHS62203 6mm Creedmoor, $1220

First imported in 1979, the Howa 1500 series action



The Barrett rifle provided sheer pleasure thanks to the impeccable fit of the action to the stock, as well as the smooth travel of the spiral-fluted bolt. Note the size of the bolt lug and the machining of the feed ramp. Talley Manufacturing made the combination scope rings and base expressly for the Fieldcraft action.



The Fieldcraft action was fully supported by the AGI composite stock, meaning the action and barrel were bedded all the way through the tip of the forend, as shown by the snug fit (arrow).



The asymmetrical profile of the buttstock favored the right-handed shooter. A thick rubber buttpad further reduces the low recoil of the 6mm Creedmoor round. You could add a brake, too.

HOWA 1500 H-S PRECISION HHS62203 6MM CREEDMOOR, $1220

GUN TESTS GRADE: A

Matched with 6mm Creedmoor, the variety of game available to its level of power makes it extremely versatile. This is a great all-around rifle at a very reasonable price.



Action Type	Bolt, 2 lugs
Overall Length	41.6 in.
Barrel Length/Twist	22.0 in., 1:7 in.
Overall Height w/o Scope Mount	5.6 in.
Weight Unloaded	7.375 lbs.
Weight Loaded (108 grain, 4+1 rounds)	7.625 lbs.
Sight Radius	NA
Action Finish	Blued
Barrel Finish	Blued
Magazine Capacity	5 rounds
Magazine Type	Internal, hinged floorplate
Stock	H-S Precision composite
Drop at Comb	1.3 in.
Drop at Heel	1.2 in.
Bedding	Aluminum pillar
Buttplate	Rubber
Length of Pull	13.5 in.
Receiver Scope-Base Pattern	Howa
Trigger Pull Weight	2.81 lbs.
Safety	3-position lever
Warranty	None written
Telephone	(775) 828-0555
Website	LegacySports.com
Made In	Japan/USA





Left: The Howa stock offered a 3D spider-web pattern to add gripping surface as well as camouflage and style. While the overall profile was generic, the action was mounted deep into the stock, necessitating a small relief atop the comb to clear the bolt for removal. Right: The Howa 1500 action was mounted in an H-S Precision PS series stock that featured the H-S patent-pending barrel-channel centering screws. Barely noticeable from the sides, the small Allen screws allowed for centering the metalwork regardless of the tolerances of the action.



Left: The Howa rifle fed from a 5-round internal box magazine with hinged floorplate. The 3-position safety (arrow) is in the central position, which allows the bolt to be manipulated with the trigger seized.

6MM CREEDMOOR RANGE DATA

Black Hills 6mm Creedmoor 108-grain ELD-M	**Howa H-S Precision**	**Browning Hells's Canyon**	**Barrett Fieldcraft**
Average Velocity	2782 fps	2864 fps	2701 fps
Muzzle Energy	1857 ft.-lbs.	1968 ft.-lbs.	1750 ft.-lbs.
Average Group	0.60 in.	0.70 in.	0.95 in.
Hornady 6mm Creedmoor 103-grain ELD-X	**Howa H-S Precision**	**Browning Hells's Canyon**	**Barrett Fieldcraft**
Average Velocity	2934 fps	3028 fps	2873 fps
Muzzle Energy	1969 ft.-lbs.	2098 ft.-lbs.	1888 ft.-lbs.
Average Group	0.95 in.	1.0 in.	1.3 in.
Hornady 6mm Creedmoor 87-grain V-Max Varmint Express	**Howa H-S Precision**	**Browning Hells's Canyon**	**Barrett Fieldcraft**
Average Velocity	3124 fps	3222 fps	3022 fps
Muzzle Energy	1886 ft.-lbs.	2006 ft.-lbs.	1765 ft.-lbs.
Average Group	0.90 in.	0.70 in.	0.80 in.

To collect accuracy data, we fired five-shot groups from a benchrest support. Distance: 100 yards. We recorded velocities using a LabRadar Doppler chronograph.

has a long been a consistent performer thanks to its simplicity and versatility. Made in Japan, the Howa is brought to the American market by Legacy Sports International of Reno, Nevada in an impressive variety of calibers and configurations, including chassis systems as well as traditional design stocks. Our Howa benefitted from being mounted in an H-S Precision PSS139 rifle stock. H-S Precision of Rapid City, South Dakota is well known for its HTR (Heavy Tactical Rifle) developed for the FBI. The PS series stocks were designed as true drop-on components for barreled actions, featuring a full-length aluminum bedding block as well as the H-S patent-pending barrel-channel centering screws. Barely noticeable from the sides, the small Allen screws allow for centering regardless of the tolerances of the action. The body of the stock was hand laminated using Kevlar, fiberglass, and carbon fiber followed by an injection of dense polyurethane foam. The exterior finish was very distinctive, offering a decorative grip texture H-S refers to as "spider web." The official listing for this color combination is green/black.

Our 6mm Creedmoor Howa featured a 22-inch-long Sporter-profile barrel with recessed crown. The receiver offered a press-down release for the two-lug bolt on the left side and a three-position safety to the right of the bolt. The safety lever was shifted fully rearward to lock both the bolt and the action, forward to 12 o'clock for manipulation of the bolt with the trigger on Safe, then fully forward to Fire. The internal magazine with hinged floorplate held five rounds. The bolt action was smooth, but cycling required a definitive full-length stroke forward and back to ensure consistent feeding. The trigger broke cleanly after a short free swing of take up. We measured an average resistance of 2 pounds 13 ounces. We loved the texture of the stock and its solid feel. There was a very subtle relief atop the very front of the comb to make the bolt easier to remove. Otherwise, clearance would have been close but not actually impeded, in our view. There were standard sling studs front and rear and a small gap at the forend where the barrel floated freely above the stock. We used a pair of medium-height Nikko Stirling Integrated ring/base Zero-Lok mounts ($24) from LegacySports.com to mount our Bushnell Forge scope.

At the range the Howa delivered the best accuracy of our tests, shooting the 108-grain Black Hills ammunition into groups slightly smaller than 0.4 inch. The largest group measured about 0.90 inch after the heat finally took hold of the tapered barrel. The 87-grain and 103-grain rounds broke the 1-moa barrier with groups measuring 0.9 inch and 0.95 inch, respectively.

Our Team Said: If we had expected our rifles to be equal based on caliber and action, we learned that the Browning and the Barrett were better suited for specific purposes. But it's hard to imagine a rifle scenario outside of the competition world wherein the Howa wouldn't fit. It wasn't too long or too heavy to go just about anywhere. Matched with 6mm Creedmoor, the variety of game available to its level of power makes it extremely versatile. This is a great all-around rifle at a very reasonable price.

Written and photographed by Roger Eckstine and Joe Woolley. GT

VALUE GUIDE: BOLT-ACTION RIFLES (SHORT ACTIONS)

GUN NAME	ISSUE	GRADE	COMMENTS
Savage 110 Apex Storm XP 57344 6.5 Creedmoor, $605	June 2019	A-	Best Buy. The Savage Axis proved accurate, reliable, and fast handling. Adjustable LOP.
Mauser M18 M18065P 6.5 Precision Rifle Cartridge (PRC), $628	June 2019	A-	Accurate and reliable. Expensive compared to the others.
Savage Axis II XP Rifle w/Scope 57289 6.5 Creedmoor, $400	June 2019	B+	A credible and accurate rifle for hunting. Superior stock treatment.
Ruger 77/44 Model 7401 44 Remington Magnum, $754	May 2019	A-	The 77/44 offers accuracy and power in a lightweight rifle. We disliked the magazine.
Ruger American Rifle Standard 6903 308 Winchester, $382	Dec. 2018	A	Light enough, accurate enough, and inexpensive enough for us to want to keep it.
Savage Axis II XP 57095 308 Winchester, $411	Dec. 2018	A-	Best Buy. It works well, is accurate enough for hunting, and it is affordable.
Savage Model 12FV 18393 308 Winchester, $420	Dec. 2018	A-	Most accurate rifle tested. Modest recoil. The rifle never failed to impress us.
Mossberg Trophy Hunter 308 Winchester, $240	Dec. 2018	C	Overall, the rifle was worth the modest price, but there are better choices.
Uintah Precision UPR-10 Bolt AR-10 Upper 6.5 CM, $1295	June 2018	B+	Capable of very good accuracy, this was a dream upper in need of a little refinement.
Ruger American Rifle Ranch 06968 300 Blackout, $420	May 2018	A-	Shot well both suppressed and unsuppressed. Short length would make it handy.
Remington Model 700 SPS-T 84205 300 Blackout, $680	May 2018	A-	Shot well in 300 BLK supersonic and subsonic.
Savage Arms 10PT-SR 22356 308 Winchester, $550	May 2018	B+	Good build. It did shoot sub-MOA with one round. We loved the handle and AccuTrigger.
CZ-USA CZ 527 Youth Carbine 03050 7.62x39mm, $650	March 2018	A-/B+	Grade A- for adults; Grade B+ for youths. We would trust it to work for a lifetime.
Browning A-Bolt Micro Hunter 035020216 7mm-08 Rem., $578	March 2018	A-/C+	Grade A- for adults; Grade C+ for youths. Too much rifle and recoil for younger shooters.
Savage Axis II Compact Muddy Girl 22230 243 Winchester, $490	March 2018	B/A	Grade B for adults; Grade A for youths. Clear winner as a youth rifle.
Desert Tech SRS-A1 6.5 Creedmoor, $4495	Nov. 2017	A	Test results proved the SRS-A1 is at the top of the rifle-quality pyramid.
Ruger Hawkeye Mark IV VT 17980 6.5 Creedmoor, $1139	Nov. 2017	B+	Rough bolt action, but in terms of accuracy, the Hawkeye deserved an A.

Log on to **Gun-Tests.com** to read complete reviews of these products in the designated months. Highly-ranked products from older reviews are often available used at substantial discounts.

Shooting a Pistol Is Simple... Tips for Better Marksmanship

Understanding and rigorously implementing the basics of proper handgun shooting will improve your downrange performance.

How many times have you heard someone say, "Shooting a pistol is simple, it is just not easy?" Shooting a pistol should be easy — align the sights and press the trigger, right? Hitting a golf ball *should* be easy. You have a big stick and the ball is sitting still — should be easy. Doing either well, however, is not an easy thing to do. Let's talk about some things you should know to simplify the process of shooting a pistol well.

Get the Right Pistol for the job

How do you decide which is the right pistol?

Write up a job description. What do you need to pistol to do? Is it for handgun hunting in Africa or squirrels in East Texas? Do you need it for bear defense while you are fishing in Alaska or bad-guy defense in your neighborhood?

Can you carry it in an exposed chest rig or does it need to be small enough to hide in deep concealment? Will it be the pride and joy of your BBQ gun collection, or does it need to be the simple and functional 22 LR your granddaughter learns to shoot with?

Each of these situations, along with countless others, is going to create a specific set of requirements. You are going to have to decide what your needs are and what meets those needs.

Combine the tasks the pistol is needed to perform with the physical stature of the shooter, and you can get an idea what the size of pistol should be. Keep in mind that hands and fingers vary greatly in width, length, and strength. Whatever size your hands are, they are what they are and you have to find pistols that fit your hand. Subtle changes can make a huge difference. For example, try changing the grip insert on your SIG/Smith & Wesson/Glock/FN/XD/Ruger, etc. Frequently, the large insert will feel best, but many find that the medium or even small insert gives the best trigger control.

How much recoil can you handle? A little bit of realism is a good thing. We are stating the obvious but, the larger the caliber and the smaller the pistol, the greater the recoil will be. The shooter who purchases a pistol that generates recoil above their recoil threshold, whatever level that is, will seldom shoot the pistol and almost never practice with it.

Reading Gun Tests evaluations closely can give you some ideas about what guns you might like, but the only way you can find out for sure is to shoot the guns! Talk to your local instructors and shooting ranges. Find out who has a selection of pistols you can test drive. Actual experience with the firearms allows you to make more informed decisions about what can be very expensive and important purchases.

Factors to consider about the purchase are single action vs. DA/SA vs. Safe Action. Each has their advantages and disadvantages. Also, thumb safeties vs. trigger safeties vs. internal safeties only? Ammunition capacity? Single stack vs. double stack magazines? The best advice is to shoot various choices under the tutelage of a good instructor and decide which you like best.

Getting The Right Stance

Anyone who thinks shooting is not an athletic event hasn't done much shooting. Just like virtually every other athletic endeavor, your base is all important. Start with your stance. Are there multiple ways you can stand? Yes. Do several of those ways work? Yes. Try a variation on the following:

- Feet shoulder width apart.
- Strong-side foot not quite as far forward as the support-side foot. Not much less though. Try lining the toes of the strong-side foot up even with the middle of the arch of the support side — remember, still shoulder width apart.
- Flex the knees slightly. Just unlock them. That allows the shooter to turn and move much more easily. It also does wonders for circulation. Remember all those groomsmen that pass out on the Sunday night video show? They locked their knees and passed out. Don't do that.





Feet shoulder width apart. Strong-side foot slightly back. Knees flexed. Nose over toes.

- Get your nose out over your toes. If you get your center of gravity, i.e. your weight, forward, you will work from a much more stable shooting platform and recoil will affect you less. You want to lean just far enough forward where it feels like your heels want to come off the ground.

The Grip

The handgun must go in the hand. How you do that is even more important than the way you stand. Once again, there is more than one way to hold a pistol that will do the job you need done.

Some good guidelines are:

- Grip the pistol as high as you can. That is normally going to be determined by the 2nd knuckle on the middle finger running into the bottom of the trigger guard. Those who shoot a pistol very much will wind up with a nice callous right there. So don't worry if that happens. The high grip will help you control the pistol and bring it back down from recoil more quickly for follow-up shots. Understand that firing the pistol will generate the same amount of recoil energy no matter where you grab it, but securing that high hold will lessen how much recoil it feels like it is generating.
- Upon grabbing the pistol, try to line it up in your hand where it just continues as a straight line pointing down along the axis of your arm. This helps with a natural alignment of the pistol and can really be helpful if any type of point shooting is required. Proper fit of the handgun to your hand is very important here. If the handgun is too large for your hand, you will not be able to put the pistol in your hand correctly and, simultaneously, activate the trigger correctly. The pistol must then be rotated in the hand until the finger can be placed on the trigger in such a way as to allow the trigger to be pressed straight to the rear.
- Grip the pistol — hard!
- If you are holding the pistol with one hand, the thumb should wrap around the grip and end up somewhere near the tip of the middle finger.
- If you are holding the pistol with two hands — infinitely preferable to one hand — get as much contact on the grip of the pistol as possible with both hands. The ball of the thumb on the support hand should contact the grip directly. That requires you get the strong-side thumb out of the way. Grasp the pistol first with the strong hand then "flag" the thumb. Point it up toward the sky and out of the way. Now the way is open for your support hand to grab the pistol and contact the grip as well. At this point lay the strong-side thumb down on the ball of the support-side thumb and ease the strong-side thumb "outboard" — slightly away from the pistol's slide.
- Grip the pistol — hard!
- Hold the pistol hard with your strong hand. Hold it even tighter with the support hand. Done properly, you now have both thumbs pointing toward the target, allowing you to index your sights on the target naturally.
- Next, cam/bend the support hand down from the wrist at about a 30-degree angle. At this point, the shooter should have both arms and the strong hand pointed directly at the target. Angling the support hand properly puts downward pressure on the bottom fingers of the strong hand and further aids in recoil control.
- Arms should be fully or almost fully extended.
- Elbows should be rotated where the inner arms are facing toward each other instead of toward the sky.
- Grip the pistol — hard!



Grip the pistol as high as you can. 1: Line it up in your hand pointing in a straight line pointing down along the axis of your arm. 2: Grasp the pistol first with the strong hand then "flag" the thumb. 3: Lay the strong-side thumb down on the ball of the support-side thumb and ease the strong-side thumb away from the pistol's slide. 4: Done properly, you now have both thumbs pointing toward the target. 5: Grip the pistol — hard!

Align the Sights with the Target

Most pistols have some variation of a post in a notch. That means that you have three different things you are trying to look at while you shoot — the rear sight, the front sight, and the target. The problem is, a human eye can only focus on one thing at a time. So choose to focus on the front sight if you can. The rear should be fuzzy. The target should be fuzzy. The front sight should be crystal clear.

Bring the pistol up to your eye and look through the rear-sight notch. Don't take your head down to the gun.

As you look through the rear-sight notch, move the muzzle around until you can see the front sight through the notch.

Line the front sight up where the top of the front sight is even with the top of the rear sight and an equal amount of light shows around the edges of the front sight. In other words, center the front-sight post in the rear-sight notch.

In most cases, you want to center the front sight



Most pistols have some variation of a post in a notch. Focus on the front sight if you can. The rear should be fuzzy. The target should be fuzzy. The front sight should be crystal clear.

in the rear sight, with the top of the front sight even with the top of the rear sight and align the top of the front sight on the exact point on the target you want to shoot.

Trigger Activation the Right Way

Anybody can align the sights. Anybody can activate the trigger. Can you activate the trigger in such a way that the alignment of the sights is not disturbed until the bullet leaves the muzzle? Therein lays the problem with a rifle or a pistol, but especially a pistol. You don't have four to six points of contact with the firearm when you are shooting a pistol as you do with a rifle. You don't have 6 to 16 pounds of weight extending 3 or 4 feet in front of you to help soak up any mistakes you make. You *have* to activate the trigger smoothly — without disturbing the alignment of the sights. How to do that?

There are multiple theories about finger placement on the trigger of a handgun and what is required for smooth activation of that trigger. Ignore them and concentrate on you. Required finger placement on the trigger varies from person to person and gun to gun. Hand size and shape, finger length and strength, grip dimensions and reach to the face of the trigger, trigger weight, smoothness and length of pull can all change where your finger needs to go on a particular trigger.

Your finger's job is to press the trigger straight and smoothly to the rear — period. As long as your finger accomplishes that, where it is placed on the trigger is irrelevant. Are there limits to where you can place a trigger finger and still have it do its job? Of course. But as long as your sights are aligned correctly, you press the trigger smoothly to the rear in a way that the sights stay lined up and everything else is set up correctly, the odds are really good things are going to go well.

- If you put too little finger on the trigger, you will normally push the shot toward your support side on the target.
- If you have too much finger, the shot is normally hooked toward your strong side.
- Experiment. Find where *your* finger needs to go on each gun that allows you to press the trigger straight to the rear.

How you press the trigger is irrelevant — as long as you don't disturb the alignment of the sights. For example, slapping the trigger is generally a bad idea. But there are some absolutely incredible pistol shooters out there, such as Rob Leatham (one of the best pistol shooters ever), who really look like they slap the trigger, and it works for them. Remember, if it is stupid but it works, it ain't stupid.

There are several good concepts that will help you activate the trigger correctly:

- 1911-style handguns have triggers that run in a track straight to the rear, thereby aiding your efforts to press them straight to the rear.
- Try putting your finger on the trigger where about one-quarter inch protrudes past the trigger. Take up what little slack (movement of the trigger that doesn't actually do anything) there is and press through.
- Your finger stays in contact with the trigger and allows it to almost immediately return all the way forward.
- Repeat as necessary.
- Safe-action (Glock) and similar triggers are hinged and travel an arc as they are pressed. Most will allow considerable movement before the sear is released. The shooter can frequently take the slack up (move the trigger) until increased resistance is met (you reach the "pressure wall"). You can pause there and then complete the trigger press. Or not. That might be a good technique for a precise, slow shot but not one that you would be able to complete in a hurry.
- If at all possible, learn to place the finger on the trigger in a manner that allows the trigger to be pressed directly to the rear and then activate that trigger in a smooth, continuous stroke. The finger stays in contact with the trigger after the shot is fired and allows the trigger to return all the way forward. Once again, repeat as necessary.

Can you activate the trigger in such a way that the alignment of the sights is not disturbed until the bullet leaves the muzzle? Required finger placement on the trigger varies from person to person and gun to gun. Hand size and shape, finger length and strength, grip dimensions and reach to the face of the trigger, trigger weight, smoothness and length of pull can all change where your finger needs to go on a particular trigger.






Understand that the sights are not going to stay aligned on one particular spot on the target. The sights will wobble around. The amount of movement you have is called your "wobble zone." Superman has a wobble zone, so don't think you will be any different. The better your technique and the more you practice, the smaller your wobble zone will be. Accept it. Learn to align your sights somewhere near your point of aim on the target and then press the trigger smoothly. Jerking or slapping the trigger the precise and fleeting moment the sights are lined up perfectly will almost guarantee you will miss. Press the trigger smoothly, straight to the rear.

The only part of your body that gets to move while you are activating the trigger is the trigger finger. The shooting-hand grip must remain rock solid during trigger press. If you tighten the hand at the same time you press the trigger, your shots will most likely string vertically up and down the target, especially below your point of aim.

Fine Point of Sighting

For years instructors and competitors have been teaching neophyte shooters "Front Sight, Front Sight, Front Sight" as the absolute answer to all challenges in shooting a pistol. While this article, based on decades of my experience and a lot of training from some truly gifted instructors, opines that your trigger control is more important than what you do with the front sight, it does not suggest that your front sight is not important.

Unless you employ some other type of sighting system (red dot, scope, etc.) on your pistol, you are going to rely on those sights to tell you where your pistol is pointed and to help you point the pistol in the right place.

The sights must be calibrated for that gun, that ammo and that distance. Any change to one of those variables will likely change point of impact and require that the sights be recalibrated.

You focus on the front sight with the goal being to see where the front sight is in relation to the target the nanosecond the pistol fires.

That means you have to keep your eye/eyes open to see where the sights are when the pistol goes bang.

If possible, keep both eyes open. Like most good fundamentals, this skill can take some time to develop.

Every article like this needs to have a little bit of "Zen" included, so here goes — look at the front sight, focus on the front sight, watch the front sight as it moves in recoil, but concentrate on the trigger and the way you are pressing it straight to the rear. Other than to aim the pistol, the ultimate purpose of the front sight is to provide feedback on whether or not you are activating the trigger correctly. If you are watching the front sight as the pistol fires and you anticipate the recoil or slap the trigger, you will see the front sight move before the gun actually fires. If you are watching the front sight and tighten your grip as your press the trigger, you will see the front sight dip. Your front sight will tell you what you are doing with the trigger, right or wrong, if you will just watch it.

Watching your front sight as the pistol fires can/will also tell you if you hit the target and, probably, where you hit the target, without, necessarily, having to look at the target.

There are several exercises to help develop this skill. One is to fire the shot making sure that you see where the front sight is as the gun fires. Then close your eyes immediately. You should still have a visual image of what your sight picture looked like as the pistol fired. Based on that, call your shot. Out loud or quietly to yourself only doesn't matter, but call where you think the shot will be. High, left, good shot, etc. Then open your eyes and compare what you saw in your mind's eye with where the bullet actually hit the target. It takes lots of practice, but this can be an incredible skill to develop as your shooting improves.

Controlling Recoil

You align the sights perfectly and press the trigger smoothly, straight to the rear. The pistol fires and your

bullet center punches the bullseye. Outstanding! Great job! Now get back to work — your job is not done yet. You need to deal with the recoil.

It doesn't matter who you are, your pistol is going to recoil when it fires. Your size, muscle mass, and technique along with the weight of the pistol, the cartridge and how hot that cartridge is loaded are all going to be contributing or mitigating factors of the recoil, but the pistol is going to move.

Remember the previous comment about watching the front sight the nanosecond the gun goes bang? Watch the front sight after the gun goes bang as well. Watch that sight lift in recoil and keep watching it as you bring the pistol back down out of recoil and intentionally, consciously place the front sight back on the target for the next shot.

Even if the situation only calls for firing a single shot, follow through and bring the pistol back down for another shot. The human brain, programmed in that instant for a single shot, tends to relax as the shot is fired. That means the muscles relax, potentially before the bullet leaves the muzzle. That can cause minor and even major variations in where the bullet strikes the target.

Fire the shot, watch the sight lift in recoil and follow through to place that sight back on the target as expeditiously as possible. Now, after you make the conscious decision that no more shots are needed, dismount the firearm. Put the pistol back on the bench, take it back to a ready position or put it carefully back in the holster, but only after you are sure you don't need it anymore.

Practice Makes Permanent

You don't have to practice — unless you want to improve. Actually, you have to practice just to maintain whatever skill level you currently have. Remember that practice does not make perfect. Practice makes permanent. So, unless you practice the right skills correctly, all you do is ingrain bad habits that take even longer to unlearn.

The amount of practice required is relative to the skills desired. The average shooter will benefit greatly expending 50 rounds of ammunition, twice a month in a properly designed practice. High-level competitive pistol shooters average more than 1000 rounds per week in practice. What are your goals? What do you need to do to reach them?

You don't have to practice exclusively with your fire-breathing hand cannons unless you are going to Africa next week. Full-metal-jacket practice ammo or properly loaded reloads will suffice quite nicely.

Try practicing with a 22 LR that is similar to your carry/match/whatever pistol. The 22 will not be a perfect substitute for the larger-caliber pistol, but it will require that you employ the same fundamental skills to shoot it.

Reloading your ammunition will probably not save you money, but it will let you shoot a lot more for the same budget.

Dry fire (work carefully with an unloaded firearm) more than you live fire. This is where you learn and test new skills. Get a good book, a good friend who knows what they are doing or a good instructor and learn how to do this correctly.

Start off practicing, dry fire and especially live fire, slowly and smoothly. These are conscious actions where you need to be aware of everything you are doing. Analyze the results of what you see and feel. The next current "in" method you try may fail miserably for you, and it might elevate your entire game. Don't be afraid to experiment — slowly and smoothly.

The goal of practice is to be able to execute required/desired skills on demand and without conscious thought. Progressing from slowly and smoothly to subconscious competence takes time and, frequently, thousands of repetitions executed carefully.

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— "Shooting a Pistol Is Simple..." continued from page 31

But it all boils down to the same fundamental skills. Remember that expertise is merely basics done well.

Free weights, even light ones, can be a very helpful part of your training routine. Arms extended straight forward while holding light weights, forearm and reverse forearm curls, and biceps curls can all help with many parts of your shooting game.

Some Additional Thoughts and Hints

When shooting a pistol, the secret to breathing is, yes, to breathe. Try inhaling slowly as you prepare to fire.

With all the talk earlier about "gorilla gripping" the pistol, don't let your muscles tighten up past the elbows. Your shoulders neck and back should be loose and fluid.

Shoot with somebody better than you. Losing provides marvelous incentive to improve.

If you really want to learn to shoot, compete. There are several disciplines available for competing with a pistol — USPSA, IDPA, NRA Bullseye, SASS, 3 Gun and more. You don't have to be an expert to compete. But you do have to be safe.

People in the shooting sports tend to be very accepting of new shooters and are very helpful. I have literally walked up to a world champion after he finished a stage and asked him why he ran the stage that particular way. He stopped and explained it to me.

There is a lot of information on the internet that can help. There is a lot more that can hurt.

Get good information, good gear and get started. We're on your side.

Written by Joe Woolley. Photographed by Roger Eckstine. **GT**

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- 12-Gauge Shotguns: Mossberg 500 Retrograde, the Iver Johnson PSA 12 Copperhead, and the Rock Island Armory M5 shotgun.

- 357 Magnum Revolvers: The N-frame Smith & Wesson Classic Model 27 six-shooter, the K-frame Taurus 66, a seven-shooter, and the Taurus big-frame stainless 608, an eight-shooter.

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