GUN TESTS®

THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

$5.95

March 2019/Vol. XXXI, No. 3



PERFECT 10S?

These 10mm Autos from Springfield Armory and Glock offer great accuracy, good triggers, and manageable recoil. If you're looking for a way to play big affordably, then check them out.

● Page 6

New Pistols for 2019 — Page 14



SUB-GAUGE PUMPGUNS

We test two Mossberg Shockwaves in 410 bore and 20 gauge against Remington's TAC-14 in 20 gauge. Which is the best choice for home defense?

● Page 17

Shotgun Value Guide — Pages 24-25



357 MAG REVOLVERS

Pitted are single-actions in the popular Sheriff's Model, Gunfighter's Model and Artillery Model configurations. Which delivers the most fun for the buck? Take a look on...

● Page 26

DOWNRANGE: 2 ● FIRING LINE: 3 ● CUSTOMER SERVICE: 31 ● COMING UP: 32

DOWNRANGE

I'M NOT IN A NEW YORK STATE OF MIND



Todd Woodard

A long time ago, when dinosaurs roamed the earth, I worked at *Field & Stream* magazine in Manhattan, at 1515 Broadway, or 7th Avenue and 44th. At the time, New York City's gun rules were just as crazy and un-Constitutional as today, maybe worse, and were difficult to accept when the articles I edited nearly every day concerned firearms that couldn't be possessed in the city. But I shot in NRA smallbore matches on Long Island and upstate in a Friday-night quarter-course league at West Point (which was awesome), so the strongest anti-gun sentiment didn't extend very far into the 'burbs. But that seems to be changing for the worse again.

New anti-gun laws from Albany have recently passed, and I'd expect Gov. Andrew M. Cuomo to sign them. The measures further erode — negate, really — gunowners' rights in the Empire State. It seems the hoplophobic disease that afflicted NYC so many years ago continues to spread upstate, and GUN TESTS readers across New York State will be negatively affected.

In January, Democrats who control both houses of the state Legislature passed a big gun-control package that Tom King, executive director of the New York State Rifle and Pistol Association and a board member of the National Rifle Association called "very egregious" moves against gun rights or "just plain stupid." He is right on the money.

The bills included: A ban on bump-stock devices; a law to create a uniform, statewide gun buyback program; a bill letting the state check the mental-health backgrounds of people who move to New York and want to purchase a gun; a ban on teachers' gun possession at schools; and a bill that allows issue of "extreme risk protection orders."

I won't go into excruciating detail about each of these items; I will simply note how collectively wrong-headed they are. In particular, however, the bump-stock ban is stupid because the devices don't improve a firearm's ability to increase accurate aimed fire. Bump stocks only help increase the volume of fire, and certain trigger techniques and fabric loops can do the same thing. Allowing "extreme risk protection orders" without due process is a 4th Amendment violation, but such niceties don't seem to matter any longer. If a state is willing to infringe on your 2nd Amendment rights, then taking your guns on the word of your anti-gun brother-in-law is easy-peasy.

And it's only going to get worse. I truly feel for GUN TESTS readers in New York State. **GT**

GUN TESTS CREDO
REMEMBER: BE SAFE, BE SECURE, BE AWARE

GUN TESTS®
THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

Editor.....W. Todd Woodard
Managing Editor..... Tracey Taylor
Contributing Editors.....R.K. Campbell
Roger Eckstine
Robert Sadowski
David Tannahill
Ralph Winingham
Sr. Tech Coordinator ..... John Taylor
Preproduction..... Cara Blake

TO CONTACT THE STAFF:
GunTestsEditor@icloud.com

GUN TESTS ACCEPTS NO COMMERCIAL ADVERTISING

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

Copyright © 2019, AG Media. All rights reserved. Reproduction in whole or part is strictly prohibited. Printed in U.S.A.

Revenue Canada GST Account #128044658.

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

Postmaster: Please send address changes to: ***GUN TESTS***, P.O. Box 8535, Big Sandy, TX 75755-8535, or ***GUN TESTS***, P.O. Box 39, Norwich ON, N0J 1P0. **Canada Publishing Agreement** #40016479.

ONLINE SUBSCRIPTION SERVICE:
www.Gun-Tests.com
Click "Contact Us"
Or call toll free (800) 829-9084

BACK ISSUES:
Call (800) 571-1555

R1 Enhanced, Old and New

Reader Scotty believes the circa-2012 Remington R1 Enhanced pistols are different than the current models. Maybe so. Reader Paul advocates successfully for a match-up of 45-70 lever rifles.

Re "Threaded-Barrel 1911 Pistols: Some Choices Come Up Short," February 2019

I think the Remington R1 Enhanced Threaded Barrel featured in this article may not actually be the same model you tested and referenced in the past. Remington bought up the out-of-business carcass of Para, aka Para Ordnance, and is now selling 1911 versions of that company's models with the same name as the (very good, actually) R1 1911s it has been selling for the last 10 years or so with its own designs. **— Scotty**





Hey Scotty: Perhaps you're right, and I can't be sure since our previous R1 test guns are long gone now. But a close external comparison of the full-size images then (top) and now (bottom) are remarkably similar. Those can't look inside the gun, of course.
— Todd Woodard

Re "Downrange, Cool New Guns And Ammo," January 2019

I just saw a blip somewhere online that Winchester has introduced a new straight-wall hunting cartridge, which is required where I deer hunt. Do you know anything about it? Thanks.
— Willie T.

The Sporting Arms and Ammunition Manufacturers' Institute (SAAMI), the firearms and ammunition industry's technical standards-setting organization, has accepted a new cartridge and chamber standard, the 350 Legend (350 LGND), introduced by Winchester Ammunition. Winchester Ammunition is addressing a rapidly growing market segment, "straight-wall-cartridge-compliant" deer-hunting states. A growing number of states that previously restricted deer hunting to limited-range slug guns or muzzle-loading firearms are now allowing rifles chambered in straight-walled centerfire cartridges, many of which originated as handgun-cartridge designs. It's shown above at actual size, with a minimum OAL measurement of 2.125 inches. — tw



Re "We Test Inside-The-Waistband Holsters for $50 and More," February 2019

I would like to request a comparison test between leather and Kydex handgun holsters as to which is harder on the finish. I

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.

know there are a lot of variations of finish, quality of leather, etc., but I would like to know if a typical Kydex (Galco King Tuck, Alien Gear Cloak Tuck) or leather holster for my SIG, Glock, Springfield XDM, or Ruger Black Hawk in the factory standard blued (non-stainless) finish is going to show more or less wear and tear over time. While I understand appearances aren't everything, when I invest hundreds of dollars on something, I like to try to minimize unnecessary degradation of the item. **— Jon**

This is a question that has come up from time to time. I think Kydex does wear more on the high-bearing surfaces, and, of course, most old cop revolvers have muzzle wear from leather. I will do this on a long-term-test basis, and I think it will be immensely interesting to many people. I'll include before-and-after photos of the handguns initially and then after 1,000 draws over time. Will use Kydex, leather, and lined-leather holsters. When I am done, I will be pretty sharp on the draw! — Bob Campbell

Re "Firing Line," February 2019

Greetings, GUN TESTS Editor: Thanks for your independence, without favoritism to make/model/brand. In this issue (page 5), you responded to a subscriber (Greg) noting that you'd consider writing a piece on 45-70 rifles. I particularly like the 45-70, especially in lever guns. Although there are fine modern single-shot 45-70 rifles by Ruger and Uberti, I think your article would be of interest to most people if you focused on lever guns capable of firing modern factory ammo. If you do, please know that I consider the Browning Centennial 1886 to be the finest 45-70 lever gun made (I have one), as it was a direct copy of John Browning's original 1886 design. However, any real lever gun article of worth must include a candidate from Henry; Henrys are fine rifles (I have one of those, too). Additionally, you will need to include Marlins, and again to be an article of worth, you will need to address the great JM Marlins (I have much experience with these) as well as the current production (lower grade, in my opinion). I suppose you could include some of the Italian 1886 copies, but, instead, and to help trim your rifle evaluation to 1 fewer rifle, you could call your article "A Tribute to American-Made Lever-Action 45-70 Rifles," or something like that. As you already know, the 45-70 is a versatile, powerful cartridge that is easily reloadable by virtue of its straight-wall design. Not many cartridges can say that, especially with well over 100 years of storied experience. Now, I will look forward to your article.

Let me say a bit more. You recently published a nice article on Italian lever guns for cowboy shooting, but, gee, those guns use such tiny bullets. I was surely disappointed that your article did not include a Henry; I have one of those too in 357 Magnum, an octagonal-barrel 10-shot version. But now to my point, which is that I believe that modern 45-70 lever guns are the ideal American deer rifle. They are quite accurate to 200 yards, which is further than most deer are taken. They carry tremendous power, sufficient for any North American game. And, lever guns are an American invention, with a Wild West mystique that has inspired gun enthusiasts for well over 100 years. I could go on. I hope I've convinced you that there is a real need for you to write this article. Yours in 45-70s. **— Paul**

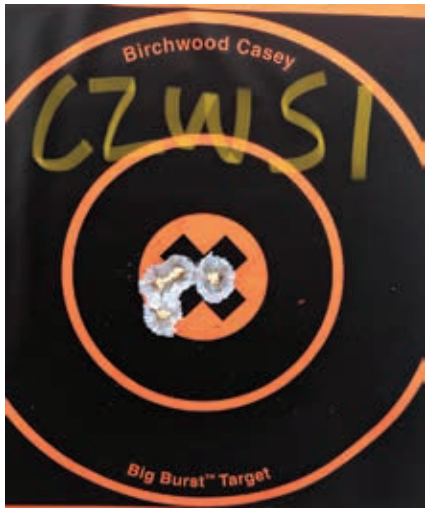
Hey Paul: You've made a compelling case. We'll factor in your ideas as we go further. Thank you for taking the time to write me. We have tested lever-action 45-70s in the past. In the September 2014 issue, we looked at the Marlin Model 1895GS 45-70 Government, saying, "We liked this little rifle quite a bit. The action was slick, and it fed and ejected positively



every time. But the trigger was too heavy, and we'd prefer a better rear sight." Of the Henry Repeating Arms Lever Action Rifle H010, we reported, "Once again, we found ourselves liking this rifle a whole lot. We suspect we'd take a file to the tall front blade if we owned this and had found that our chosen ammo printed too low. But we'd have to proceed with caution because the front-sight blade and base are integral with the front barrel band. The trigger pull was very much okay, and the action, feeding and ejection were all smooth and positive. Unloading this rifle was easier than most tubular-magazine rifles, and a bonus was that the bolt could be easily taken out to clean the rifle from the rear. An instructive video came with the rifle explaining the entire takedown procedure. The workmanship and finish were beyond fault. The accuracy could be improved, we're sure, with a scope or smaller aperture if needed. Pretty much everything here was done just right, and the

cost was reasonable." The winner was the Winchester Model 1886 Limited Series 45-70 Government. We said, "This was a fine rifle in all respects. It cost more than the other two, might be harder to find, and was not in the same class as them for portability. The 1886 was never designed to be a handy guide's rifle. It felt great, looked great, and would provide many years of fun shooting along with ample pride of ownership to anyone lucky enough to find one."





Hearing Protection and Splattering Target Asks

Gentlemen, I saw in a previous issue that you were thinking of doing an article on hearing protection. I have been meaning to write to you on this subject, but it kept slipping my mind. You know, things you mean to do when you are on the computer but forget when you get there. Anyway, I am a range safety officer and have to wear hearing protection for long periods. So comfort is a big concern of mine. I have found only one set of muffs that were suitable, but they were not electronic, which is a must in this case. Also, because I need reading glasses, I am interested in how well they work with eyewear. I would appreciate it if these two factors can be incorporated in your evaluations. Finally, have you considered testing the splattering type of targets? I have not found one that is really effective in the smaller, .223, calibers at distances of 100 yards or more. They work fine for 30-calibers and above, but are not very effective below.

— John

We can certainly listen to your suggestions on the hearing protection test. Our experience with the splattering targets has been that they are much better than plain paper in terms of downrange spotting, irrespective of caliber. We do see the brighter-backed hole edges better than other colors. For example, here are two targets from a recent smallbore rifle test. The paper target at left is much more difficult to read through a scope at 50 yards than the Birchwood Casey Big Burst Target at right. But the fluorescent stickers on paper improve spotting, too. Hope this helps. — tw

PRINT SUBSCRIBERS: HOW TO GET WEB ACCESS TO THE ARCHIVES

Setting up free electronic access to our website allows you to search the **Gun Tests** archives for specific guns — and you get access to the current issue on the web before it hits your mailbox. Also, you can check the status of your subscription account, update your mailing or email address, pay your subscription invoice or renew your subscription, and communicate with the editorial staff. Current subscribers can begin activating free online access by typing this into your browser: **Gun-Tests.com/activate.**

To create your web-access login, you provide your first and last name, the ZIP/Postal Code, and your account number. That's the first 11 digits found on your magazine's mailing label just above your name. If you can't get the account activated, contact us at **Customer_Service@GunTests.info**, or call 1-800-829-9084.

There are two ways to find guns we've reviewed. The Compare Guns feature (top left corner of the page under the logo) allows you to input several descriptors and narrow the search results. Or you can use the Search function. If you search for a common item, such as "22 LR," you'll get tons of references. Basically, the search function finds every instance of the searched-for topic and lists the accompanying articles the topic appeared in. The more specific and unique the reference, the better the search. We do our best to list the catalog numbers for guns we've tested, so that's usually a good place to start. There's also an "Advanced Search" area to help you narrow the results.

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**

Perfect 10s? We Test a Trio Of Big-Bore Semi-Automatics

These 10mm Autos from Springfield Armory and Glock offer great accuracy, good triggers, and manageable recoil. If you're looking for a way to play big, then take a look at them.

In the past few years there has been a renewed interest in the 10mm Auto. That is odd because the birth of the 40 S&W Auto cartridge nearly suffocated the 10mm Auto out of existence. Not only are there more pistols chambered in 10mm, there is ammo loaded to velocities the 10mm Auto was designed for. Ammunition manufacturers like SIG and others provide these big-bore semi-autos with cartridges that live up to the 10mm's reputation.

Two 10mm Autos introduced in 2018 are from Springfield Armory (SA). SA chambered both the XDM and 1911 platforms in the round and, back in 2015, Glock got the hint from handgun hunters that we wanted a full-fledged 10mm for hunting, and the company obliged with the G40 Gen4 with MOS (Modular Optic System). We liked all three of these pistols because they all offered good accuracy, excellent to good triggers, and they were easy to shoot well. But we preferred one over the others.



The Springfield Armory XDM (center) has a slender grip and crisp trigger for a striker fire. The Glock G40 Gen4 MOS (left) has the typical Glock trigger and chunky grip, but it also has the ability to add a reflex sight. The Springfield Armory 1911 Range Officer Elite Operator (right) is an excellent adaptation of the 1911 platform to the 10mm Auto. When we factor in price, we feel the Springfield Armory XDM is a Best Buy, especially if you want to get into a 10mm Auto.

How We Tested

No jams. No failures. All pistols ran well and met our expectations of Springfield and Glock pistols. We averaged 2-inch five-shot groups at 25 yards using open sights across all three pistols. When we attached a red dot (actually a green dot), we found that the Glock pulled ahead of the group in ease of shooting. We like the G40 for its ability to mount an optic. And if you are paying attention, you may have guessed the RO Elite Operator offered the best accuracy with open sights. There is something to be said about the 1911 platform's single-action trigger. SA tuned this trigger nicely. Some of us were shooting cloverleaf patterns with holes overlapping each other using a rest with the Range Officer Elite Operator.

Ammo used during testing consisted of SIG Sauer V-Crown and FMJ cartridges loaded with a 180-grain JHP and FMJ bullets, respectively. We also had on hand some old Hornady Critical Defense 165-grain FTX ammo. All of these loads cranked out the muzzle doing a respectable 1200 fps on average.

For fast, unsupported shooting, we found these pistols do serve up recoil, but the pistols allowed us to manage it. Could we shoot these 10mms as fast as a 9mm or 45 ACP? Sure we could, but our accuracy decreased.

As a hunting round, the 10mm Auto can be effective on boar and deer if you know your limitations and those of the round. Maximum range with this round is 50 yards. With a muzzle energy of 550 to 600 foot-pounds with our test ammo, you could use these pistols as you would a 357 Magnum revolver. There are boutique ammunition manufacturers, such as

Buffalo Bore, Grizzly, and Underwood, that we have experience with and have fired their hotter loads designed for penetration and expansion. Some of the larger ammo makers like Hornady and Federal also make rounds suitable for hunting medium-size game.

Are these three pistols perfect 10s? In our opinion they are close, but one may be more suited to your shooting style. The devil is in the details, and we had a devil of a time wringing out these 10mms.

Glock G40 Gen4 MOS 10mm Auto, $706

We've tested the G21 Gen4 and rated it an A-. We expected more with the G40 and Glock delivered. The G40 is softest shooter of the guns tested, plus it was accurate and allowed the user to mount an optic.

The MOS feature on the G40 consists of a plate covering a milled-out section on the slide just forward of the rear sight. Remove the cover plate then add one of the four MOS mounting plates that fits with your reflex sight. We mounted a UTG Reflex Micro Dot ($80) with a green 4-minute-of-angle single dot. The Glock MOS plate 01 or 05 is compatible with the sight. We used the 05 plate. The UTG reflex sight also comes with a Picatinny rail mount. The sight is made of 6061-T6 aluminum and wears a matte-black finish. The dot has six brightness settings. The single button on the left side of the sight powers on the dot. You then press the button to get to the desired brightness. To turn off the sight, just press and hold the button. The next time you turn on the sight, it will go the last brightness setting the sight was set to. We liked this sight, and it took the abuse the 10mm deals out. The UTG had a small footprint on the G40, and we felt this was a good sight to use for hunting and more precise shooting. It also allowed us



A tale of three magazines: From left are the Glock G40's polymer-body magazine, the XDM's stainless-body magazine, both of which have polymer baseplates, and right, the Range Officer's flat-bottomed stainless single-stack magazine. The RO holds eight rounds compared to the double-stack capacities of the Glock and XDM at 15. Fifteen rounds of 10mm Auto is an awful lot of oomph.

10MM AUTO RANGE DATA

SIG Sauer V-Crown 180-grain JHP	**Springfield Armory XDM**	**Glock G40 Gen4 MOS**	**Springfield Armory 1911 Range Officer Elite Operator**
Average Velocity	1251 fps	1201 fps	1190 fps
Muzzle Energy	626 foot-pounds	577 foot-pounds	566 foot-pounds
Smallest Group	2.0 in.	2.2 in.	1.3 in.
Average Group	2.2 in.	2.4 in.	1.4 in.
SIG Sauer 180-grain FMJ	**Springfield Armory XDM**	**Glock G40 Gen4 MOS**	**Springfield Armory 1911 Range Officer Elite Operator**
Average Velocity	1260 fps	1238 fps	1200 fps
Muzzle Energy	635 foot-pounds	613 foot-pounds	576 foot-pounds
Smallest Group	1.6 in.	1.7 in.	1.3 in.
Average Group	1.8 in.	2.0 in.	1.4 in.
Hornady Critical Defense 165-grain FXT	**Springfield Armory XDM**	**Glock G40 Gen4 MOS**	**Springfield Armory 1911 Range Officer Elite Operator**
Average Velocity	1223 fps	1220 fps	1222 fps
Muzzle Energy	548 foot-pounds	545 foot-pounds	547 foot-pounds
Smallest Group	1.4 in.	1.5 in.	2.0 in.
Average Group	2.0 in.	2.0 in.	2.2 in.

To collect accuracy data, we fired five-shot groups from a bench using a rest. Distance: 25 yards with open sights. We recorded velocities using a ProChrono digital chronograph set 15 feet from the muzzle.

GLOCK G40 GEN4 MOS 10MM AUTO, $706

GUN TESTS GRADE: A

The longer sight radius and ability to mount a red-dot optic made the G40 a very close contender for top dog in the test.



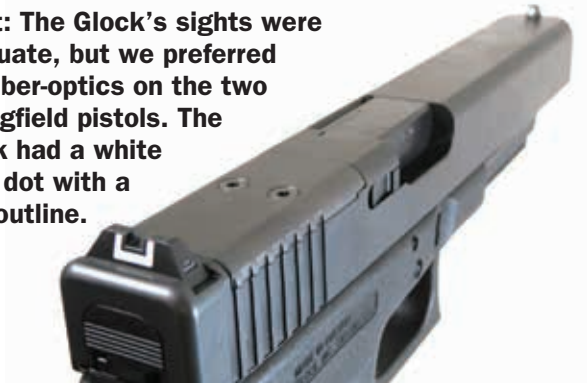
Action	Locked breech, striker fire, semi-auto
Overall Length	9.02 in.
Overall Height	5.47 in.
Maximum Width	1.34 in.
Weight Unloaded	35.45 oz.
Weight Loaded	44.62 oz.
Barrel	6.02 in.
Capacity	15+1 (double stack)
Slide	Black, steel
Slide Retraction Effort	20 lbs.
Frame	Black, polymer
Frame Front Strap Height	2.6 in.
Frame Back Strap Height	3.6 in.
Grip	Textured polymer, finger grooves
Grip Thickness (max)	1.34 in.
Grip Circumference (max)	5.75, 6.12, 6.25 in. depending on insert
Sight, Front	Fixed dot
Sight, Rear	Outline, optic mount
Trigger Pull Weight (Single Action)	6.0 lbs.
Trigger Span (Single Action)	2.9 in.
Magazines	3; polymer
Manual Safety	None
Warranty	Limited 1-year
Made In	Austria
Website	US.Glock.com



Above: The MOS feature on the G40 consists of a plate covering a milled-out section on the slide just forward of the rear sight. Remove the cover plate then add one of the four MOS mounting plates that fits with your reflex sight.



Anyone who's familiar with a Glock knows how simple the controls are. Top left is the takedown lever; top right is the slide-release button; and bottom, the magazine release is textured.



Right: The Glock's sights were adequate, but we preferred the fiber-optics on the two Springfield pistols. The Glock had a white front dot with a rear outline.



Above: Here are three views of the Glock's grips. The texture wasn't raspy like the Springfields.



Side by side, it's easy to see the differences in textures between the G40 and XDM, right.



Above: The Gen4 Glock G40 comes with four modular backstraps to fit a variety of hand sizes. We like the ability to swap backstraps to tune what testers said was a "chunky grip."



Above: The Glock MOS plate 01 or 05 is compatible with the UTG green-dot reflex sight. The sight is made of 6061-T6 aluminum and wears a matte-black finish. The dot has six brightness settings.

to get on target faster compared to iron sights — or plastic sights in Glock's case. There are other reflex sights that power off when not in use and offer easier battery replacement, but we felt the UTG was good for the cost, and if we wanted to, we could mount it to an AR or other rifle equipped with a Picatinny rail.

Like all Gen4 Glock pistols, the G40 comes with four modular backstraps to fit a variety of hand sizes and give users a total for five different grips. We like the ability to swap backstraps. Yet, some testers with smaller hands felt the G40 had a chunky grip compared to the other pistols. That chunky grip can be a liability in some cases, but what it does with the 10mm cartridge is help mitigate recoil. The increased surface area of the G40 grip transfers recoil to more of your palm, so there is not concentrated kick in one spot.

The G40 is the longest of the pistols tested and was lighter than the SA 1911 but heavier than the SA XDM. The longer slide of the G40 gives the user a longer sight radius and slightly more front-end heft. The dual recoil springs also help mitigate recoil. In our opinion the Glock had least felt recoil of all three pistols.

There are no cut outs in the slide like there is for Glock's G34 and G35, but instead is a solid chunk of steel.

The G40 came in a hard case with three magazines, four grip inserts, extra grip module pin, punch tool for grip modules, speed loader, cleaning rod and brush, and a lock. We appreciate the extra pin, which could easily become lost, and the punch tool. With the XDM, we had to locate a punch tool to change the grip modules. The sights on the Glock were adequate but were the least liked by testers. The plastic front uses a dot with the plastic rear sight being outlined. We preferred the fiber-optic front sights on the two SA pistols. The trigger was about 5.5 pounds. Typical Glock, meaning mushy at first then a consistent break.

Even though the G40's barrel was longer than either of the Springfield pistols, it still produced muzzle velocity comparable to the shorter-barrel pistols. The G40 does not have as a nice trigger pull as the XDM or Range Officer Elite Operator, but accuracy was very close to the other pistols.

Our Team Said: The Glock offered more versatility due to the MOS set up. It was also the softest shooter and was more customizable by the owner. With the UTG reflex sight, we would hunt deer or pigs with the G40 in a heartbeat.

Springfield Armory 1911 Range Officer Elite Operator 10mm Auto, $1028

We have tested SA's Range Officer series of 1911 pistols number of times in these pages and have found them generally to be good choices for those wanting a 1911 with adjustable sights. The features

SPRINGFIELD ARMORY 1911 RANGE OFFICER ELITE OPERATOR 10MM AUTO, $1145

GUN TESTS GRADE: A

This 1911 platform has been adapted well for the 10mm cartridge. We like the sights and love the trigger, which translates to more hits in the black. The G10 grip texture is a bit raspy in recoil.



Action	Locked breech, semi-auto single action
Overall Length	8.6 in.
Overall Height	5.5 in.
Maximum Width	1.4 in.
Weight Unloaded	41 oz.
Weight Loaded	45.8 oz.
Barrel	5.0 in.
Capacity	8+1
Slide	Black-T, steel
Slide Retraction Effort	20 lbs.
Frame	Black-T, steel
Frame Front Strap Height	2.6 in.
Frame Back Strap Height	3.2 in.
Grips	Textured Thin-Line G10
Grip Thickness (max)	1.1 in.
Grip Circumference (max)	5.2 in.
Sight, Front	Fiber optic
Sight, Rear	Tactical rack
Trigger Pull Weight (Single Action)	4.9 lbs.
Trigger Span (Single Action)	2.8 in.
Magazines	2; stainless steel
Safety	Ambidextrous thumb, beavertail grip
Warranty	Lifetime
Made In	Brazil/USA
Website	Springfield-Armory.com

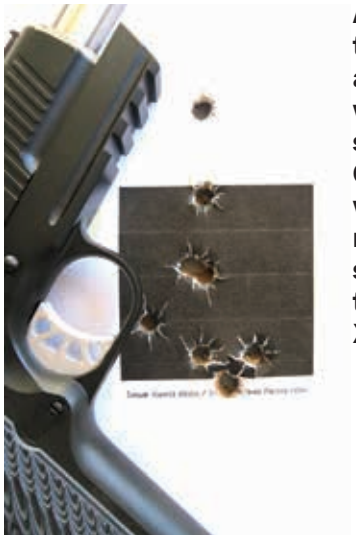
The Range Operator comes with two stainless-steel magazines that hold eight rounds each. The flat bottoms conceal well.



Right: The grip safety (right arrow) releases positively and easily, and we had no function problems. The ambidextrous extended thumb safeties (left arrow) were nicely blended in with no sharp edges.







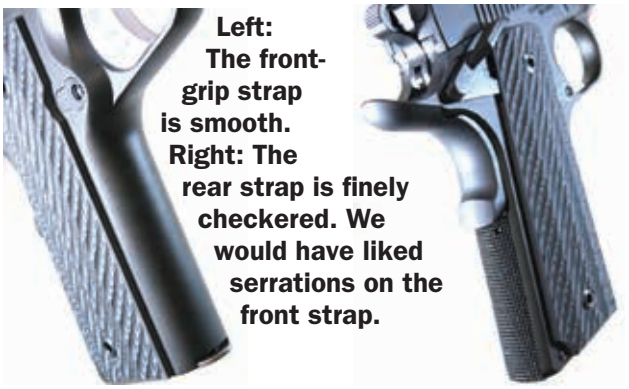
Above: The RO's trigger was crisp and consistent with a 4.9-pound single-action pull. Our smallest groups with 180-grain rounds measured substantially less than the G40 and XDM.



The RO's barrel is stainless and match grade. It also employs a GI-style recoil spring set up. It mates up with no wiggle or shake.



Our shooters liked the red fiber-optic front sight. We could see it distinctly on a black target. To line up the sights, it was easy to drop the red front dot between the two white dots on the rear.



Left: The front-grip strap is smooth. Right: The rear strap is finely checkered. We would have liked serrations on the front strap.

on these pistols elevate the RO series in 45 ACP above similar 1911 pistols and our sample in 10mm did the same. We liked the heft of the RO from the get go. The Elite Operator variant of the RO series incorporates an accessory rail that allows the addition of a light or laser and gives the pistol more weight to help mitigate recoil. The RO was the heaviest of all the pistols tested. This pistol also uses an 18.5-pound recoil spring that also helps lessen felt recoil.

Our sample came in a soft nylon case with two 8-round stainless-steel magazines. Starting with the slide, the RO features serration forward and aft that provide plenty of grip when racking the slide. The red fiber-optic front sight was appreciated by all testers. We could see it distinctly on a black target. The rear sight incorporates two white dots. Drop the red front dot in-between the two white dots for easy sight alignment.

The barrel is stainless and match grade with no wiggle. It also employs a GI-style recoil spring set up. The beavertail provides plenty of protection, and it takes little effort to depress the grip safety. It comes with ambidextrous extended thumb safeties, and they were nicely blended with no sharp edges. You might not notice this in a 1911 platform chambered in 45 ACP or 9mm, but the snappy recoil of the 10mm can rub against the user's thumb and web of the hand. We found SA did a good job ensuring the RO performed in 10mm.

The front grip strap is smooth and the rear is finely checkered. If anything, we would have liked serrations or a less aggressive texture on the front grip strap for added grip adhesion. The grip panels are thin-line G10 with plenty of texture. Some testers did note that the grip panel was raspy in recoil.

Where the RO shined was its trigger. Crisp and consistent. We were shooting holes in the target that touched and over lapped. In fact with 180-grain bullets, smallest group measured 1.4 inches, which was substantially less than the G40 and XDM. We also like the sights. The rear face of the sight was serrated to reduce glare.

Recoil was more noticeable with the RO since it has a thin grip and concentrates the recoil in your hand in a smaller area.

Our Team Said: Recoil was most noticeable with the RO, but the trade off was a crisp trigger and great accuracy. This is a solid 1911 in 10mm, and if you want a 1911 in 10mm, the RO Elite Operator would be an excellent choice.

Springfield Armory XDM 10mm Auto, $779

The XDM is an excellent platform for the 10mm cartridge. We didn't fire 10,000 through our test sample like SA touts they did in testing but we did run the XDM hard. In past reviews we have tested the XDM platform and the 5.25 Competition model in 9mm with A- ratings. Accordingly, we expected a lot from the XDM 5.25 Competition in 10mm, and it did not

SPRINGFIELD ARMORY XDM 10MM, $779
GUN TESTS GRADE: A (BEST BUY)

Great ergonomics, nice grip angle, modular grip strap, crisp trigger, nice sights, and a reasonable cost. There is a lot to like about the XDM, and we think it's a great value.



Action	Locked breech, striker fire, semi-auto
Overall Length	8.3 in.
Overall Height	5.75 in.
Maximum Width	1.2 in.
Weight Unloaded	32.8 oz.
Weight Loaded	41.97 oz.
Barrel	5.25 in.
Capacity	15+1 (double stack)
Slide	Black Melonite, steel
Slide Retraction Effort	18 lbs.
Frame	Black, polymer
Frame Front Strap Height	2.6 in.
Frame Back Strap Height	3.6 in.
Grip	Textured polymer
Grip Thickness (max)	1.2 in.
Grip Circumference (max)	5.45, 5.6, 5.7 in. depending on insert
Sight, Front	Fiber optic
Sight, Rear	Adjustable target
Trigger Pull Weight (Single Action)	4.75 lbs.
Trigger Span (Single Action)	2.6 in.
Magazines	3; stainless steel
Safeties	Grip, trigger
Warranty	Lifetime
Made In	Croatia/USA
Website	Springfield-Armory.com



The slide sports an adjustable rear sight that is flush with the rear of the slide. The shooter-facing surface of the rear sight is matte black and serrated to reduce glare.



Right: There is a noticeable difference in the grip angle on the XDM compared to the G40. The XDM grip angle is similar to a 1911 at about 110 degrees.



The slide is more sculpted than the G40 and has slide serrations at the muzzle and rear. A cut out in the top of the slide reduces slide mass, which along with the other sculpting, made the XDM the lightest pistol tested.



The XDM series features a modular backstrap, allowing the user to choose between three different rear gripstrap styles from nearly straight to two arched module inserts.





We liked the sights on the Range Officer and XDM more than the sights on the G40. The recoil was manageable with the XDM. Accuracy with all ammo tested averaged 2.0 inches for a 5-shot group. With the Hornady Critical Defense and SIG FMJ ammo, we shot our best groups, which averaged 1.5 inches.



The slide stop lever (right arrow) is a usable size and is easier to manipulate than the G40's slide stop, our shooters said. The magazine release (bottom arrow) is ambidextrous. The XDM has a grip safety (not shown) similar to a 1911 that gives the pistol an added level of safety, in our view.





The front grip strap and side panels wear a coarse texture that provide grip adhesion without rasping skin.

disappoint. The pistol came in a hard case with a foam insert cut to hold the pistol, three stainless-steel-body magazines, three grip modules, red and green fiber-optic tube replacements, sample of gun oil, and safety lock.

The XDM series features a modular backstrap, allowing the user to choose between three different rear gripstrap styles from nearly straight to two arched module inserts. We preferred the straight option. The front grip strap and side panels wear a coarse texture that provide grip adhesion without rasping skin.

The slide stop is a usable size and is easier to manipulate than the G40's slide stop. The magazine release is ambidextrous. The XDM has a grip safety similar to a 1911 that gives the pistol an added level of safety. There is also a cocking indicator pin that protrudes from the rear of the slide. In our opinion these features help make the XDM safer to operate.

There is a noticeable difference in the grip angle on the XDM compared to the G40. The XDM grip angle is similar to a 1911 at about 110 degrees, while the G40 grip angle is 112 degrees. This means that with the XDM, your wrist is straight, while with the Glock it is slightly bent. This is a personal preference, so try both to decide which one better fits your shooting style. The frame is built to accommodate a laser or light with a Picatinny rail.

The slide sports a fully adjustable rear sight that is flush with the rear of the slide to provide maximum sight radius. The shooter-facing surface of the rear sight is matte black and serrated to reduce glare. We prefer the sights on the Range Officer and XDM, but the G40's sights are a close third.

The slide is more sculpted than the G40's and has slide serrations at the muzzle and rear. The slide sculpting made the XDM the lightest of all pistols tested. There is also a cut out in the top of the slide to reduce slide mass.

Accuracy with all ammo tested averaged 2.0 inches for a 5-shot group. With the Hornady Critical Defense and SIG FMJ ammo, we shot our best five-shot groups, which averaged 1.5 inches. The recoil was manageable with the XDM. We did notice that fully loading the magazines took thumb effort. Racking the slide only took 18 pounds of effort compared to the G40, which took 20 pounds. We felt the XDM had better serrations to aid racking the slide.

Our Team Said: The XDM offers a comfortable 10mm shooting experience at a reasonable cost. This is our Best Buy choice for those wanting a full-size 10mm.

Written and photographed by Robert Sadowski, using evaluations from Gun Tests *team testers.* **GT**

Special thanks to Eastern Outfitters (EasternOutfitter.com) of Hampstead, NC, for their assistance.

SHORT SHOTS: NEW HANDGUNS FOR 2019

Mossberg Celebrates Centennial with Launch of MC1sc Handgun. In celebration of the company's 100th anniversary, O.F. Mossberg & Sons, Inc., has released a 9mm concealed-carry handgun: the Mossberg MC1sc (subcompact). Surprisingly, the company's first firearm design, called the Brownie, was a 22-caliber four-shot pocket pistol. The MC1sc is available in five initial 9mm offerings: the standard MC1sc and an optional cross-bolt safety version; two standard offerings with sighting systems (TruGlo Tritium Pro Night Sights or a Viridian E-Series Red Laser), and a Centennial Limited Edition with a production run limited to 1,000 commemorative models. After 100 years in business, Mossberg has grown to be the sixth-largest U.S. firearms manufacturer with more than 100 design and utility patents to its credit. The MC1sc reflects three years of development. Important features in a subcompact handgun are size, weight, caliber and carryability. The MC1sc has an overall length of 6.45 inches, weight of 19 ounces (with empty magazine), and a barrel length of 3.4 inches in the popular 9mm chambering. It comes with two single-stack magazines (one 6-round flush and one 7-round extended), has a glass-reinforced polymer frame, and suggested retail price of $421 for the two standard models. The MC1sc's Clear-Count single-stack magazines are constructed of a transparent, lubricious polymer compound that offer low friction and high wear-resistance while providing at-a-glance assessment of the number and type of rounds loaded. The magazines also feature easy-to-remove floor plates and high-visibility followers. The MC1sc has a patent-pending Mossberg Safe Takedown System, which unlike competitive products, does not require the user to pull the trigger to dissemble for routine cleaning or maintenance. Rounding out the design is an aggressive patent-pending Mossberg signature grip texturing, added palm swell, and grip angle similar to a 1911. The slide is constructed of stainless steel with a DLC (Diamond Like Coating) finish, aggressive multi-angle serrations for ease of slide manipulation, and dovetailed-mounted low-profile white 3-dot sights. The stainless-steel barrel also features a DLC coating and 1-in-16 twist rate. The MC1sc trigger has a flat profile and integrated blade safety; short, tactile reset; reduced overtravel; and has a 5- to 6-pound pull weight.



Trigger guards are also oversized and all MC1sc models have a reversible magazine release, located behind the trigger guard. If you have the spend, the MC1sc Centennial Limited Edition will be available, limited to a run of 1000 units with sequential serial numbering. Features include 24-karat gold accents engraved on the slide, a titanium nitride–finished barrel and metal small parts; and a special serial number. Model numbers are the 89001 and 89002 $421; the 89003 with TruGlo Tritium Pro sights, $526; the 89004 with Viridian E-Series Red Laser, $514; and the 89005 Centennial, with no price listing as yet.

All New Colt King Cobra. Following Colt's successful re-entry into the double-action-revolver market in 2017, the company has doubled down with the all-new King Cobra in 357 Magnum. It should already be available through Colt stocking dealers. Snake number two has arrived as Model KCOBRA-SB3BB, a 6-shot 357 Magnum sporting a heavy-duty frame, 3-inch barrel, and brushed stainless-steel construction. There's a brass bead front sight, Hogue Overmolded grips, and a fighting weight of 28 ounces. It's currently not available in California and Massachusetts. The King Cobra also features the same user-replaceable front sight and linear-leaf spring trigger (LL2) as the rest of the Cobra family. MSRP: $899.



Kel-Tec's New CP33 feeds from Quad-Stack Detachable Box Magazines. Yep, you read that right, and the mags hold a total of 33 rounds of 22 Long Rifle. Pitched to competitive shooters, the CP33 has a standard blowback operating system. Shooting it at Media Day at SHOT 2019, we opened the CP33's action by pulling back on an ambi non-reciprocating charging handle. It takes the optic and suppressor host game to the next level, turning long-range targets into short range bullseyes. The fiber-optic sights are adjustable for elevation and windage. On top is a 19-slot Picatinny optics rail, but the pistol comes with a pair of adjustable fiber-optic sights (green up front and red in the rear). Features: 10.6 inches long, with a 5.5-inch barrel threaded ½x28 TPI, twist rate of 1-in-14 inches, bilateral thumb safeties, polymer frame. MSRP, $475.



SHORT SHOTS: NEW HANDGUNS FOR 2019

Springfield Armory Rolls Out Saint Victor Pistols, New 9mm 911, Affordable 911 in 380 ACP. New for 2019, the Saint Victor series of pistols from Springfield Armory have many of the same features as the Saint rifles but in a stock-free, non-NFA pistol form with a 7.5-inch barrel in 5.56 and a 9-inch barrel in 300 BLK **(top)**. The 7.5-inch Saint Victor Pistol is equipped with an SA Forward Blast Diverter muzzle device, and the 9-inch pistol features an A2 flash hider, easily removed for suppressor use. Springfield pitches the Saint Victor Pistol as a close-quarters-battle compact design for home defense and delivers rifle power in a small, fast-handling package. It comes with an SB Tactical SBX-K forearm brace to enhance accuracy. Just like the Saint Victor Rifles, the M16 bolt carrier group is precision-machined from 9310 steel, shot peened, HPI/MPT inspected and finished in super-hard Melonite, as are the barrels, both inside and out. A staked receiver end plate features a QD mount for sling attachment. The Saint Victor Pistol Model STV975556B in 5.56mm has an MSRP of $1015. The Model STV909300B in 300 BLK also has an MSRP of $1015. Elsewhere, Springfield's introduction of the 911 380 ACP **(middle)** was so successful that Springfield upgraded it by offering the compact pistol in 9mm for 2019. The 911 9mm is only marginally larger than its 380 ACP counterpart, measuring in at 3.9 inches tall and 5.9 inches in length. That's the same height as the 380 and only 0.4 inches longer. The 911 9mm features an Ameriglo Pro-Glo green tritium front sight inside a yellow luminescent circle, and a tactical rack U-notch rear sight with green tritium inside of white luminescent circles. The low-profile design ensures a snag-free draw. Other features brought over from the 380 ACP include a Hogue G10 trigger shoe, a loaded chamber indicator, an oversized ambidextrous safety, Octo-Grip checkering, Hogue Thin-Line G10 Grips, and a 3-inch precision broached barrel. New 9mm Luger models include the PG9119 with a black-nitride finish; the PG9119S with a stainless slide; the PG9119H with black-nitride finish and Hogue rubber grips; the PG9119SVG with a stainless finish and grip laser; and the PG9119VG with a black-nitride finish and grip laser. MSRPs run from $650 to $849 for the laser-equipped units. The new 911 380 ACP Alpha **(bottom)** offers a value-priced variant that focuses on the essentials of the platform, while maintaining the quality and handling characteristics the gun is known for. MSRP, $429.







Walther Introduces New Q5 Match Steel Frame Competition Pistol. Walther Arms, Inc.'s new Q5 Match Steel frame pistol has the company's PPQ Quick-Defense Trigger housed in a high-quality precision-machined frame. The pistol comes standard with LPA Fiber Optic front sight, LPA Adjustable rear sight, and optic mounting plates to accommodate most micro red-dot optics available. The Q5 Match Steel frame will initially be available in two models: the standard model with three 15-round magazines and the PRO model with new Walther Performance accessories, including a low-profile magwell and aluminum magazine extensions that increase the capacity to 17 rounds. MSRP for the Q5 Match Steel Frame starts at $1,499 and is available for purchase immediately.



SIG Sauer Introduces P320 XCompact. SIG Sauer, Inc.'s new P320 XCompact comes into the P320 XSeries of pistols with a redesigned grip module that has an improved beavertail and fastback profile, contoured magwell, and a deep trigger guard undercut. "The P320 XCompact redefines what a compact pistol should be by combining concealability with full-size XSeries features," said Tom Taylor, chief marketing officer and executive vice president, commercial sales. The XCompact is a modular, striker-fired pistol with a serialized trigger group that makes it adaptable to multiple caliber, size, and grip options. The P320 XCompact is available in 9mm and features X-Ray3 day/night sights, a flat trigger, and a night-sight rear plate, making it optics ready. The three-point takedown of the pistol requires no trigger pull for disassembly, and safety features include a striker safety and disconnect safety. The P320 XCompact comes standard with two 15-round magazines. Other specs include: Total length, 7 inches. Barrel length, 3.6 inches. Weight (including magazine): 25.3 ounces. Height, 5.3 inches. Width, 1.3 inches. Sight radius, 5.5 inches.



SHORT SHOTS: NEW HANDGUNS FOR 2019

Auto-Ordnance Offers Custom 1911 Series. Auto-Ordnance is offering a series of Custom Commemorative 1911 pistols: the Case Hardened 1911, Victory Girls 1911, Fly Girls 1911 and Squadron 1911. Of the set, the Case Hardened 1911 adds a classic finish with distinct and unique patterns of color. Beneath the colorful surface is an all-steel 5-inch "GI"-pattern 1911 pistol chambered in 45 ACP. The grips are checkered wood with the "US" military logo. While every Auto-Ordnance GI 1911 is made to replicate the look of the original guns, they are also equipped with a precisely machined barrel. This guarantees that they may look like a GI pistol, but they will shoot with a level of accuracy the originals could not match. The Case Hardened 1911 Model 1911GCH ships with a 7-round magazine and has an MSRP of $1327.



Magnum Research Introduces 500 Linebaugh BFR. With the introduction of the new 500 Linebaugh BFR, Magnum Research, Inc., becomes the only company to offer this chambering in a production revolver. The 500 Linebaugh has a bullet diameter of .510 inch compared to .500 inch for other 50-caliber rounds, excluding the 50 BMG. The 500 Linebaugh was created in 1986 by John Linebaugh and is the largest production handgun caliber. Other companies offer the 500 Linebaugh as a full custom piece. The BFR is all stainless and has a precision-grade barrel that delivers lead or jacketed bullets. Up until now, the 500 Linebaugh was a custom proposition only, costing thousands of dollars and long wait times. The .500 Linebaugh BFR is available in four configurations. The standard model with a 7.5-inch barrel (BFR500LB7) or 5.5-inch barrel (BFR500LB5) has an MSRP of $1399, and the standard model featuring Bisley grips with a 7.5-inch barrel (BFR500LB7B) or a 5.5-inch barrel (BFR500LB5B) has an MSRP of $1482.



Stoeger Releases STR-9 Pistol. Like Mossberg, Stoeger is trying to extend its brand of durable, dependable shotguns to the world of semiautomatic pistols with the new STR-9. This striker-fired 9mm comes packed with features you'd expect in a pistol costing twice as much. It has an integrated rail, internal safety, reversible magazine release, optimized slide serrations, three-dot sight system and enhanced ergonomics. The outfitted three-dot sight system features snag-resistant edges to ensure smooth draws and holstering. Aggressive slide serrations ensure a firm grip in any weather for rapid cycling of the STR-9 with or without gloves. A low bore axis reduces muzzle jump, and a crisp trigger with internal safety breaks cleanly. The magazine release conforms to either to left or right operation, and three interchangeable backstraps help provide a comfortable, custom fit. MSRP: $350.



Taurus Expands Handgun Lineup with Introduction of TX22. The all-new Taurus TX22 is a 22 LR semi-auto that runs like a custom-tuned pistol out of the box but comes at a price point that fits a competition-level handgun in the budget of the mainstream shooter. The TX22 is a full-size polymer handgun with a 16-round capacity, a short, smooth trigger pull with its Pittman Trigger System (PTS), which utilizes a trigger reset that short, audible, and spring-assisted, and a single-action-only striker-fire system. Trigger pull comes in at 5 pounds. The TX22 weighs 17.3 ounces, thanks in part to a 7075 aluminum slide that includes front and rear serrations and features a hard-coat black anodized finish. Other goodies include a light slide weight, proprietary grip texturing, adjustable rear sight, suppressor-ready muzzle threading, a reversible mag release, and integrated accessory rail. Dimensions: Length: 7.06 inches; width: 1.25 inches; height: 5.44 inches, and barrel length, 4.1 inches. MSRP: $349.



Sub-Gauge Shockwaves Go Up Against Remington's TAC-14

We test two Mossbergs, in 410 bore and 20 gauge, against Remington's shorty in 20 gauge. Used correctly, these maneuverable guns are all good choices for home-defense effectiveness.

According to the ATF, the Mossberg Shockwave and Remington TAC-14 are classified as "other" firearms, meaning they are not handguns nor are they shotguns. It is not our intent to ignore ATF definitions, but it can be confusing to use the term "other" when describing these firearms. So, for less confusion, we will refer to them as firearms even though they shoot shotshells and slugs and have chambering descriptions in gauge and bore terminology.

Back in 2017, we tested the Mossberg Shockwave in 12 gauge, giving it an A grade. We expected as much — and less — from these sub-gauge models. "Less" meaning less recoil. The 12-gauge variants offer heavy recoil depending on the loads used. We also had some specialty .410 bore defense loads that we have used in 45 LC/410 revolvers and wanted to try them in one of these weapons.

The Mossberg Shockwave in 20 gauge (top) and Remington TAC-14 in 20 gauge (bottom) offer slick operation and less recoil than the 12-gauge variants. The petite Mossberg Shockwave in 410 bore (center) is nonetheless formidable, especially when stoked with specialty defense loads. Any of these three firearms classified as "other" by the ATF will make a good home-defense firearm, but be forewarned these shotguns require a new skill set to operate properly and efficiently.



MOSSBERG 590 SHOCKWAVE MODEL 50657 20 GAUGE, $455

GUN TESTS GRADE: A

The Shockwave in 20 gauge substantially reduces felt recoil, which all users appreciated. We liked the strapped forend, which offered good grip security. Mossberg 500 or 590 users will easily adapt to this one.



Action Type	Pump
Chamber Size	3.0 in.
Overall Length	26.37 in.
Capacity	5+1 (2.75-in. shells), 4+1 (3-in. shells)
Weight Unloaded	4.95 lbs.
Weight Loaded	5.75 lbs.
Barrel Length	14.375 in.
Finish	Matte blued
Choke	Cylinder bore
Grip	Bird's head-style, textured polymer
Forend	Ribbed polymer w/ strap
Front Sight	Brass bead
Trigger Pull Weight	5.8 lbs.
Safety	Ambidextrous thumb
Warranty	Limited lifetime
Telephone	(800) 363-3555
Website	Mossberg.com
Made In	U.S.A.



The 20-gauge Raptor grip was nicely mated to the receiver. The grip also featured a sling stud. This feature allows the user to attach a one-point sling, similar to how you would with an AR rifle or pistol.



The Shockwave is based on Mossberg's robust Model 590 action scaled down for 20 gauge. It was slick out of the box. The controls are like other Model 500 and 590 shotguns with an ambidextrous safety button on top.

We tested at 10 yards on plain cardboard sheets that measured 18 inches wide, the average width of a male torso. We fired slugs, birdshot and buckshot out of the 20-gauge weapons using Aguila 2.75-inch shells loaded with #2 buckshot, Federal Premium 0.75-ounce rifled slugs, and handloaded #8 birdshot shells, which one of our testers uses for skeet and sporting clays. For the .410 bore, we used the same distance and target and loaded up with 3-inch Winchester Super X quarter-ounce slugs, 2.5-inch Federal Premium #8.5 birdshot shells, and Hornady Critical Defense loads with one 41-caliber FTX projectile and two 35-caliber round ball projectiles. We fired to determine pattern size and found that with specialty and buckshot loads, these tiny blasters were surgical, allowing us to easily keep patterns on the 18-inch wide target. Birdshot destiny patterns were pretty close to covering 18 inches, but we did note some shot flew at a wider pattern — something one should consider if you were to use these weapons for home defense. Note that using birdshot will more than likely cause a large shot pattern with not all projectiles hitting the target. We would stick with buckshot and specialty loads for home defense and leave the birdshot for dispatching large rodents and snakes.

Our initial process was to accurately fire on the cardboard with birdshot, then buckshot/specialty loads, followed by slugs. Since the projectiles are of different sizes, it was easy to discern the different hole sizes. We also followed this process to quickly compare load types on our 18-inch-wide target.

These three pump-action weapons feature a 14-inch barrel with a Cylinder-bore choke and use a Raptor pistol grip. All weapons functioned flawlessly, though we did find the .410 bore slower to reload. There was also a distinct preference for the Mossberg versus the

REMINGTON MODEL 870 TAC-14 MODEL 81145 20 GAUGE, $464

GUN TESTS GRADE: A-

Everything is slick about the TAC-14 20 — the action, forend, and ease of use. If you are a Remington 870 fan, you will not have an issue adapting to the TAC-14.



Action Type	Pump
Chamber Size	3.0 in.
Overall Length	26.3 in.
Capacity	5+1 (2.75-in. shells), 4+1 (3-in. shells)
Weight Unloaded	5.5 lbs.
Weight Loaded	6.3 lbs.
Barrel Length	14.0 in.
Finish	Matte blued
Choke	Cylinder bore
Grip	Bird's head-style, textured polymer
Forend	MagPul M-Lok, polymer
Front Sight	Brass bead
Trigger Pull Weight	4.5 lbs.
Safety	Manual trigger block
Warranty	2 year
Telephone	(899) 243-9700
Website	Remington.com
Made In	U.S.A.

Note that the TAC-14 grip used an adapter to attach it to the receiver. We liked Mossberg's approach better. The TAC-14's Raptor grip also lacked a swivel stud for a sling. The Remington had the best trigger of all three weapons tested, with a break weight of 4.5 pounds.



The TAC-14 uses a Magpul MOE M-LOK forend. The grip surface was nicely ribbed, but the strap on the Mossberg provided more grip security, especially when cycled fast and dealing with recoil. The action was also super slick. The plain barrel is 14 inches in length and features a plain brass bead for sights.



The Magpul forend was flared at the ends so a user's hand was less likely to go toward the muzzle or get pinched between the forend and receiver.



SHOOTING THESE SUB-GAUGE SHORTIES

In our experience with Shockwave-style shotguns, there is a tendency to pull the grip close to your face. This can happen with shooters experienced with pump-action shotguns, especially after the first shot when they cycle the shotgun for a follow-up shot. It is habit to bring the firing hand and grip back to set the stock in your shoulder after cycling the slide with your support arm.

With a Shockwave-style weapon, the recoil does not go into your shoulder as it does with a pump shotgun. Recoil comes straight back, and if your firing hand is close to your face, you run the risk of getting whacked in the face as the weapon recoils. This is especially true of the Mossberg and Remington guns chambered in 20 gauge. The Mossberg in 410 has less recoil, and a more experienced shooter could put the gun closer to his face without risk. Obviously, the risk is even greater with a 12-gauge model, so we don't advocate trying it unless you want to make an ER run.

Firing these weapons is not like shooting a handgun or long gun. They are hard to aim and keep a steady hold with, but remember that these weapons were made for close quarters work, offering maneuverability and the power of multiple projectiles. They are designed to shoot fist-sized groups firing off hand. We found three ways to shoot these weapons with consistency and without the risk of recoil cracking a jawbone.

The first technique we call the Reverse Pump. Instead of using your support arm to pump the weapon, keep your support arm out and locked and use your firing grip to push the weapon forward to cycle the action. This ensures the weapon stays far enough from your face to avoid recoil, yet still allows you to use the bead sight to aim. We found the strap on the Mossberg Shockwaves allowed us to cycle the weapon easier than the TAC-14 using this style. The strap traps the support hand on the forend, so even if your support hand slips, it is still affixed to the forend via the strap and allows you to cycle the weapon. The TAC-14 forend has a nice raised edge at the front and rear of the forend that serves a similar purpose, but does not hold your support hand as securely as the strap on the Mossberg. We found this technique allowed us to aim more precisely.

The second technique is the Ribcage Hold. Hold the grip to the side of your ribcage between your arm pit and waist. This hold keeps the muzzle perpendicular to the target, and at close range we found this technique effective in keeping projectiles on target and also allowed for fast follow-up shots. With the Ribcage Hold, you can pump the action as you would a typical pump shotgun. This is perhaps the easiest way to shoot these weapons at close-range targets without a skill-set change like that needed with the Reverse Pump method. Recoil also pushes rearward along the side of your body with your arms absorbing the motion.

The Hip Hold technique is similar to the Ribcage Hold except you place the grip in front of your hip. We found this hold was comfortable with the 20-gauge and 410-bore choices. With a 12-gauge shorty and using 2.75-inch shells or larger, the recoil can be severe. With mini shells, recoil is similar to the 20-gauge models. With this technique you need to be more aware of your muzzle, so load power could affect how the shotgun reacts. Between shots, the support hand does the pumping and aiming. Some testers fired too high initially until they got a feel for the technique.

Shown at right, the Hip Hold technique is similar to the Ribcage Hold, except you place the grip in front of your hip.



With a Shockwave-style weapon, recoil comes straight back. If your firing hand is close to your face, you run the risk of getting whacked in the face as the weapon recoils.



With the Reverse Pump technique, keep your support arm out and locked and use your firing grip to push the weapon forward to cycle the action.



With the Ribcage Hold, hold the grip to the side of your ribcage between your armpit and waist.



Remington, or vice-versa, depending on what type of pump shotgun our testers had experience with. In our opinion, the Mossberg with the action lock lever behind the trigger guard allowed for fast manipulation without changing your grip. The ambidextrous safety on the Mossberg also gave it a slight edge over the Remington's safety in the trigger guard behind the trigger. We'd feel empowered to protect our castle with any of these weapons, but we would lean toward the Mossberg. Here's why.

Mossberg 590 Shockwave Model 50657 20 Gauge, $455

The Shockwave is based on Mossberg's robust Model 590 action scaled down for 20 gauge. It was slick out of the box. The Shockwave wore a matte black finish that was well executed. The ribbed forend is thin and offers plenty of texture along with a nylon strap. Slip your hand between the strap and forend and your support hand is secure even with severe recoil. It also prevents your support hand from being pinched between the forend and front of the receiver.

We liked how the Raptor pistol grip flowed seamlessly into the receiver and liked the sling stud out the butt. This feature allows the user to attach a one-point sling, similar to how you would with an AR rifle or pistol. We like this feature.

The controls are like other Model 500 and 590 shotguns with an ambidextrous safety button located at the top rear of the aluminum alloy receiver. The Shockwave is equipped with a heavy-wall plain barrel that is actually 14.375 inches long. The barrel features a brass bead. In hand, the Shockwave is light, compact and extremely maneuverable. The trigger guard/trigger group was made of polymer.

At the range, we started with our 2.75-inch handloaded shells with #8 shot and found the pattern measured 17 inches. This means you could have pellets not hit the target if you are not exactly aiming for center of mass. We next used Aguila #2 buck and saw the pattern shrink to 5 inches. We would use this load for home defense because it offered much more surgical patterns. We ran Federal Premium 0.75-ounce rifled slugs and managed 4-inch groups offhand, which we thought was good accuracy using the brass bead as the sight. Recoil was quite tolerable with the 2.75-inch shells. In fact, our speed shooting with the handloads made confetti out of the corrugated cardboard targets.

Magazine capacity was the same as a standard Model 590; 5+1 with 2.75-inch shells. We loaded the Shockwave by holding it with our firing hand in the ready position and feeding shells from underneath, and we loaded with the Shockwave flipped over so the loading port faced up. We found loading with the port facing up allowed gravity to help. Short- and long-brass shells fed with equal ease.

All three shooting techniques (see sidebar) worked well. We also fired it one handed and noted the recoil of the shot racked back the slide, and depending on the velocity of the load, ejected the empty shell, so all we had to do was slide the forend forward to load another round. We recommend keeping two hands on the Shockwave for optimal control.

Our Team Said: The 20-gauge Shockwave offered a lot of firepower with less recoil than a 12 gauge. It was accurate and effective. For a short-range home-defense weapon without jarring recoil, this is an option to consider.

Remington Model 870 TAC-14 Model 81145 20 Gauge, $464

Like the 20-gauge Mossberg, the Remington TAC-14 is built on a scaled down 20-gauge receiver, the Model 870 in this case. Out of the box, it wore a matte finish that was well executed. The action was also super slick. The Raptor grip lacked a swivel stud for





Above left: Look and feel familiar? Anyone who owns an 870 pumpgun will immediately recognize the control layout on the TAC-14 and could adapt with ease. However, the slide release ahead of the trigger guard on the 870 (arrow) was not as easily accessible on the TAC-14 as it was on the Shockwave, right.

MOSSBERG 590 SHOCKWAVE MODEL 50649 .410 BORE, $455

GUN TESTS GRADE: A

This Shockwave was easy to handle and offered little recoil. Loaded with one of the specialty 410 defense loads, this would make a good home-defense choice.



Action Type	Pump
Chamber Size	3.0 in.
Overall Length	26.37 in.
Capacity	5+1 (2.5-in. shells), 4+1 (3-in. shells)
Weight Unloaded	4.24 lbs.
Weight Loaded	5.04 lbs.
Barrel Length	14.0 in.
Finish	Matte blued
Choke	Cylinder bore
Grip	Bird's head-style, textured polymer
Forend	Ribbed polymer w/strap
Front Sight	Brass bead
Trigger Pull Weight	5.3 lbs.
Safety	Ambidextrous thumb
Warranty	Limited lifetime
Telephone	(800) 363-3555
Website	Mossberg.com
Made In	U.S.A.



Note how the strap keeps the user's hand from being pinched between the forend and receiver. We liked the strap and coarsely ribbed forend of the Mossberg 20 and .410-bore.



The loading port of the 410 Shockwave is similar in size to the 20 gauge variant but the .410-bore shell is narrow and needs to be aligned with the magazine.



The forend is slightly skinnier than the 20-gauge variant. Though the recoil of the 410 Shockwave did not necessitate a real need for the strap, we grew accustomed to it and relied on it.

a sling, and there was a transitional piece between the grip and the receiver which was not aesthetically pleasing. The transitional piece attached the receiver to the grip. We preferred the arrangement on the Mossberg. The forend was a Magpul MOE M-LOK model of molded polymer. The grip surface was nicely ribbed and featured a flared edge at the front and rear so your hand did not slip toward the muzzle nor between the receiver and the forend when cycled. The strap on the Mossberg provided more grip security, especially when cycled fast and dealing with recoil. The trigger guard/trigger group was made of polymer, with "Remington" molded on the outside of the trigger guard. The safety is located behind the trigger guard, as it is with all Model 870 shotguns. The plain barrel is 14 inches in length and features a plain brass bead for sights. The slide-release button is also like other model 870s, in front of the trigger guard on the left-hand side. As mentioned, whether you were a Model 870 shooter versus a Model 500/590 shooter decided what brand you preferred. The Remington had the best trigger of all three weapons tested, our testers said.

We loaded the TAC-14 using the same two techniques as employed on the Mossberg and found it was easy to load and easy on our thumbs. There were no sharp edges, and we became efficient at loading it fast. We also became efficient at shooting it fast using the three shooting techniques. Recoil was mild and pleasant. We could shoot the TAC-14 easily one handed, but we noted fatigue soon started with a 5-pound weapon being held in one hand. The Mossberg 20 gauge was similar in effect.

The TAC-14 gave us similar patterns with the birdshot, 17 inches. Compared to the Mossberg, the buckshot load opened up to 6 inches, and the rifled slugs shrunk to 3 inches. We were quite pleased with the TAC-14's accuracy and our ability to fire it for accuracy and speed. We'd use buckshot in the TAC-14 and would investigate different loads to see which offered the tightest pattern.

Our Team Said: Model 870 fans, if you are looking at one of these weapons for home defense, consider the TAC-14. We'd load it with buckshot and rest peacefully at night knowing we had a tool good enough to stop any intruders.

Mossberg 590 Shockwave Model 50649 .410 Bore, $455

The Mossberg 410 Shockwave is based on the .410 bore-scaled receiver for the Model 500 and Model 590 shotguns. It is lithe and petite in hand. It weighed about a pound less than the 20-gauge weapons.

The .410 bore Shockwave was essentially a scaled-down version of the 20-gauge Shockwave. The smaller Raptor grip flowed seamlessly into the smaller receiver, and the 14-inch plain barrel wears a brass bead. The forend is slightly skinnier than the 20 gauge variant, and it was coarsely ribbed and featured a strap. Though the recoil of the .410 bore Shockwave did not necessitate a real need for the strap, we grew accustomed to it and relied on it just as we did on the 20-gauge version.

The action was slick. Kudos to Remington and Mossberg for making the actions super slick to cycle. Where we found a difference in the .410 bore compared to the 20-gauge variant was in loading. The loading port of the 410 Shockwave is similar in size to the 20-gauge variant, but the .410 shell is narrow and needs to be aligned with the magazine. You just can't drop the shell in the port and push it in with your thumb as you could with the 20 gauge variant. There was a bit of finagling to push the skinny .410 shell in the magazine tube, which slowed down reloading.

Another trade-off with the .410 version versus the 20 gauge is less power/penetration in a smaller package. But that is not necessarily a bad thing because there are now numerous .410-bore specialty loads developed for revolvers like the Taurus Judge and S&W Governor. We cannot think of another situation in which a handgun spurred ammunition manufacturers to develop shotgun loads for defense.

During testing, we noted mild recoil with the .410 bore and a tighter 10-inch pattern with birdshot. We'd definitely not use birdshot in a home-defense situation unless we were shooting at snakes or rodents, which itself seems unwise to blow a hole in the floor or walls to kill a rat. Maybe in a barn or out-building birdshot makes more sense for vermin.

For self-defense use in the home, we'd stoke the .410 bore with Hornady Critical Defense loads, which feature an FTX slug and two round balls for projectiles. These patterned a tight 3 inches at 10 yards. We were also able to group slugs at 3.25 inches at the test distance. From across the width or length of a room, the .410 bore can provide serious defensive power with minimal recoil.

When we fired the .410 bore one handed, there was not enough recoil to force the forend rearward as there was with the 20 gauges. The action was slick, and we could easily rapid-fire the 410 using the Rib Cage Hold or the Hip Hold. Since the 410 Shockwave was lighter, it was easy to hold one handed. No need for Navy SEAL biceps with this petite shooter.

Our Team Said: The .410 bore was smaller and lighter, yet with specialty loads, we'd feel comfortable using it in a self-defense weapon. If you or someone in your household is recoil shy, the .410 bore is an excellent choice.

Written and photographed by Robert Sadowski, using evaluations from Gun Tests *team testers.* **GT**

Special thanks to Eastern Outfitters (EasternOutfitter.com) of Hampstead, North Carolina, for their assistance.

VALUE GUIDE: RECENT SELF-DEFENSE SHOTGUN RATINGS

GUN NAME	ISSUE	GRADE	COMMENTS
Remington 870 Youth Model 25561 20 Gauge, $330	Feb. 2019	A-	Our Pick. The Remington had ideal weight and a smooth action and trigger.
Mossberg Maverick 88 Youth Model 32202 20 Gauge, $198	Feb. 2019	B+	For home defense, the Mossberg is a fast-handling piece for the whole family.
H&R Pardner Youth Model NP1-2S1 20 Gauge, $165	Feb. 2019	B	A Best Buy. The least expensive shotgun never failed to feed, chamber, fire, or eject.
Mossberg 590 Tactical Shotgun 50665 12 Gauge, $480	Oct. 2018	A	The action is smooth, tight, and reliable. Feeding was very smooth.
Remington 870 DM Hardwood 81351 12 Gauge, $324	Oct. 2018	A-	A Best Buy. The least-expensive shotgun tested, may be the best suited for home defense.
Remington 870 Express Tactical Magpul 81209 12 Gauge, $729	Oct. 2018	A-	We liked the Tactical's ability to take choke tubes. You may also add a red dot.
JTS M12AK Semi-Auto Shotgun 12 Gauge, $450	Oct. 2018	A-	Generally successful, it does not handle as quickly as the conventional pump-actions.
Mossberg 590M Mag-Fed Pump-Action 50205 12 Gauge, $530	Oct. 2018	D	The shotgun did not function as well as the Remington DM or the tube-feds.
Mossberg 590 Shockwave 50659 12 Gauge, $455	Oct. 2017	A	Built to last. We'd opt for the OPSol Texas Mini-Clip and pack it with Aguila Mini Shells.
Century Arms RAS47 AK Pistol 7.62x39mm, $749	Oct. 2017	A	The RAS47 was reliable with any ammo we ran through it. Definitely opt for the arm brace.
Remington 870P Standard 12 Gauge, $225	Sept. 2017	A	Best Buy. Patterns were good. Experimentation may find a load that does even better.
IAC (Norinco) Wild Bunch 12 Gauge, $300	Sept. 2017	B	Tactically, the design leaves some other shotguns in the dirt. It is fast to load and empty.
Mossberg 505 Youth Pump-Action 57110 20 Gauge, $300	Sept. 2017	A	The Mossberg 505 Youth is an overlooked gem. The fit wasn't bad for most raters.
Benelli Nova Tactical Pump 20051 12 Gauge, $372	Dec. 2016	A	Best Buy. Lockup is tight. Sights are among the best combat-style units. 10-year warranty.
Tristar TEC-12 No. 25120 Pump/Auto 12 Gauge, $557	Dec. 2016	A	Modern styling and handles just like the expensive Benelli M3.
Mossberg 930 Tactical 85320 12 Gauge, $514	Dec. 2016	A-	The 930 was the lightest kicker and had the highest magazine capacity.
IAC Imports Hawk Model 982 Defense 12 Gauge, $233	Oct. 2016	A	Among the least-expensive 12-gauge pumps we have tested. Never malfunctioned.

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.

VALUE GUIDE: RECENT SELF-DEFENSE SHOTGUN RATINGS

GUN NAME	ISSUE	GRADE	COMMENTS
Remington M870 Express Synthetic Tactical 12 Gauge, $346	Oct. 2016	A	We liked the magazine capacity, and we will take the muzzle brake.
Remington 870 Modified Police 12 Gauge, M4 Stock, $420	Oct. 2016	B	The Adaptive Tactical M4 stock provides a shotgun that handles like an M4.
Beretta Model 1301 Tactical No. J131T18 12 Gauge, $1075	May 2016	A	The Beretta performed without a hiccup while producing good patterns and loading fast.
Mossberg Model 930 SPX Tactical 85360 12 Gauge, $836	May 2016	B	Lighter hit to the pocket book. Good handling and flawless functioning.
Benelli Model M4 Tactical No. 1170712 Gauge, $2000	May 2016	B-	We could not get past its higher price and failure to cycle low-velocity loads.
Century Arms Catamount Fury SG1874-N 12 Gauge, ~$400	Mar 2016	D	The Fury SG1874-N looked like the Izhmash Saiga, but was plagued by malfunctions.
Century Arms Catamount Fury II SG1875-N 12 Gauge, ~$575	Mar 2016	D-	Beset by malfunctions, the Fury II SG1875-N shotgun was worse than its stablemate.
Chiappa Triple Threat No. 930-032 12 Gauge, $1599	Oct. 2015	B-	Three barrels. Too unwieldy for anything other than close-quarters self-defense.
Standard Mfg. DP-12 DP01130 Pump-Action 12 Gauge, $1700	Oct. 2015	C	The unique double pump was too unwieldy and too pricey for us.
Remington Model 870 Pump 81180 20 Gauge, $530	Sept. 2015	A-	Good trigger, good handling and good patterning combined for its good ranking.
Legacy Escort Gladius Magnum 20 Gauge, $580	Sept. 2015	B+	Attractive and functional tactical features, good handling. Needs a lighter trigger pull.
Tristar Tec-12 25120 Pump/Auto 12 Gauge, $689	July 2015	A-	Performed well in both pump-action and semi-automatic modes.
Mossberg Model 590 Magpul 50669 Pump 12 Gauge, $773	July 2015	C-	Excessive recoil and poor accuracy. Nice trigger pull of 5.5 pounds.
CZ-USA Model 612 HC-P 06510 12 Gauge, $366	June 2015	B+	This tactical firearm would be a fine self-defense tool for budget-minded shooters.
Weatherby PA-459 TR No. PA4591219PGM 12 Ga., $499	June 2015	B-	This pump action performed well with only minor flaws in handling and accuracy.
Remington 870 Express Tactical Pump 81200 12 Gauge, $442	Feb. 2015	A	The 870's 18.5-inch-long barrel handled quickly in close quarters.
Mossberg 930 Tactical SP Semi-Auto 85330 12 Gauge, $544	Feb. 2015	B	Fast handling, kicked less than expected. Had a failure to extract.

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.

Which Cowboy Revolver? We Test Three 357 Magnum Guns

Here are single-actions in the popular Sheriff's Model, Gunfighter's Model and Artillery Model configurations. Each is a special edition and a departure from standard fare, especially the middle length.

We recently tested three single-action traditional-style revolvers in the popular 38 Special/357 Magnum chambering to find which revolver would be best for Cowboy Action Shooting. We also considered the merits of each as a trail gun. While some may scoff, there are many single-action revolvers in use for home protection, including protecting the homestead against predators, so we had to consider this role as well. The three revolvers were from Traditions Performance Firearms: the Sheriff's Model, the Liberty Model, and the Frontier Model. The qualifying difference between the three revolvers are their barrel lengths, though in this test, they are vastly different overall. The longer the barrel, the greater the weight of the revolver as well. The barrels were 3.5, 4.75, and 5.5 inches long. While we liked the 5.5-inch barrel the best based on balance, point, and fast-paced accuracy, the gun itself was the roughest revolver tested as far as the trigger action went and the only one that gave trouble. It wasn't difficult to get it up and running, but this just isn't welcome in a new revolver. On the other hand, the Sheriff's Model was a fun gun to shoot, but not the most practical. We cannot recommend it for CAS competition, but it makes a good recreational handgun and perhaps even a personal-defense revolver for those skilled with the single action. The 4.75-inch-barrel Liberty revolver was the most accurate revolver and was well finished with beautiful laser engraving. It was more accurate than the longer-barrel revolver from the benchrest but not as easy to get a fast hit with on the action course.

When you choose a single-action revolver for Cowboy Action Shooting, a sense of style and history are important. Reliability and good value are also important. When considering the single-action revolver, the 7.5-inch barrel length is regarded as too large and heavy by most shooters. A shorter-statured shooter may find the muzzle in his boot tops in a conventional holster. The fit, finish, and barrel length and balance, then, are important. For recreational use, one may be as good as the other. The greatest accuracy, velocity and handling advantages are more important in a handgun to be used in CAS competition. Considerations other than accuracy, such as heft and fast handling, are important. The speed of the draw is important. The so-called Tall Draw with a long-barrel revolver isn't as fast as with the shorter handguns. This fact gave birth to the original SAA that came to be known as the Gunfighter's barrel length. The barrel was cut right to the ejector rod, and this resulted in a 4.75-inch-barrel revolver. The compromise 5.5-inch barrel length was often called the Artillery revolver and issued to cannoneers. The short 3-inch-barrel revolver was called the shopkeep's or, more popularly, the Sheriff's Model. We tested all three to determine which has an advantage.



The Liberty is one handsome revolver. The barrel length at 4.75 inches is a good compromise for the Cowboy Action gunfighter. The laser engraving is well done but relatively inexpensive. We liked the contrast of different styles on the Traditions revolver. This original-pattern shoulder holster is from Rocking K Saddlery.

The caliber wasn't difficult to choose. While the 45 Colt, 44-40 and 38-40 may be more authentic to the time period, the 38 Special is the superior cartridge for competition today, we believe. The larger calibers are sometimes smoky when downloaded. The 38 Special responds well with Cowboy Action loads. If you desire, the 357 Magnum cartridge may be loaded for use as a trail gun or as a defensive handgun. Anyone who uses the SAA revolver well in CAS competition would be a formidable opponent in a home-defense situation.

For ammunition, we chose three loads, one in 38

Special and two in 357 Magnum. We used a handload consisting of the Magnus cast bullets 200-grain RNL ($49.10 for 500 bullets from MagnusBullets.com) and enough Titegroup powder for 720 fps. This is an outstanding load with plenty of bearing surface for accuracy. It hits the steel plates hard. Next, we used the Black Hills Ammunition 357 Magnum 158-grain cowboy load ($30.30/50 rounds from AmmunitionToGo.com). Loaded to 805 fps on average, this load offers the ease of loading of the full-length Magnum case but is loaded to 38 Special velocity. Finally, we used the Federal 125-grain JHP as a general-purpose 357 Magnum load to determine how the pistols perform with Magnum loads. It costs $21.30/20 rounds. While Cowboy Action guns are seldom fired with full-power ammunition, for GUN TESTS, Magnum loads were an important part of the evaluation equation.

Traditions 1873 Sheriff's Model SAT73-005 357 Magnum, $410

The Traditions Sheriff's Model is the personal gun of one of our raters. He had wanted a short SAA, he said, for more than a decade. This revolver is affordable. The fit and finish are good. The case-hardened frame and blued barrel, cylinder, and grip strap are well done. The sights are typical of modern SAA clones, a little better than the original SAA revolvers because the sight notch is wider and the front sight more likely to be properly regulated. The trigger action is particularly good at a crisp 3.5 pounds. Like the other two revolvers, this piece features a transfer-bar ignition system. The original SAA and some modern clones used a firing pin in the hammer. Such revolvers demand the chamber below the hammer is kept empty. The modern transfer-bar system allows carrying six rounds safely. Just the same, many still load only five beans under the wheel. For safety, we also loaded the Pietta revolvers with only five rounds. We loaded one cartridge, skipped a chamber, loaded four and then cocked the hammer to lower it on an empty chamber. While the Pietta revolver uses a transfer bar design, it loads in the traditional manner. The hammer is placed at half cock and the loading gate opened. (Ruger revolvers also feature a transfer-bar system but load with the hammer down.) Cartridges are loaded and the cylinder rotated to load each chamber.

The fit of the cylinder and the backstrap to the frame are good, as were cocking action and rotation of the cylinder. The grip isn't quite the same as the original SAA; it is a little larger and we like that. The defining feature of this revolver is the 3.5-inch barrel. We like the balance, although it is a little handle heavy. Unlike the original Sheriff's Model, this revolver features a functioning ejector rod. We feel that's why the Pietta-made revolver features a 3.5- rather than a 3-inch barrel, so as to provide workable ejection. The short ejector rod actually works and ejects the cases just fine with the muzzle pointed upward. We fired the revolver at man-sized targets at 7, 10, and 15 yards, firing 25 rounds each of the 200-grain handload and the Black Hills Ammunition 158-grain cowboy load. Results were good. The Sheriff's Model is a lot of fun to shoot, no question about that, and it is accurate enough. The cartridges ejected fine without excess-

RANGE DATA

Handload: Titegroup Powder Magnus 200-grain RNL	**Sheriffs Model (3.5-inch barrel)**	**Liberty Model (4.75-inch barrel)**	**Frontier Model (5.5-inch barrel)**
Average Velocity	700 fps	720 fps	715 fps
Muzzle Energy	217 ft.-lbs.	230 ft.-lbs.	226 ft.-lbs.
Average Group Size	2.4 in.	1.8 in.	2.6 in.
Black Hills 357 Magnum 158-grain Cowboy Load	**Sheriffs Model (3.5-inch barrel)**	**Liberty Model (4.75-inch barrel)**	**Frontier Model (5.5-inch barrel)**
Average Velocity	799 fps	805 fps	824 fps
Muzzle Energy	223 ft.-lbs.	227 ft.-lbs.	238 ft.-lbs.
Average Group Size	2.8 in.	1.75 in.	2.4 in.
Federal 357 Magnum 125-grain JHP	**Sheriffs Model (3.5-inch barrel)**	**Liberty Model (4.75-inch barrel)**	**Frontier Model (5.5-inch barrel)**
Average Velocity	1370 fps	1442 fps	1480 fps
Muzzle Energy	520 ft.-lbs.	577 ft.-lbs.	607 ft.-lbs.
Average Group Size	2.75 in.	1.75 in.	2.4 in.

To collect accuracy data, we fired five-shot groups from a solid benchrest. Distance, 7 yards. We recorded velocity with a Shooting Chrony Master Chronograph. The first sky screen was 10 feet from the muzzle.

TRADITIONS 1873 SHERIFF'S MODEL SAT73-005 357 MAGNUM, $410

GUN TESTS GRADE: B

No kidding about this one; we really like the looks. The revolver works well, with a smooth action. We consider smoothness of cocking and loading as well as the trigger action when we say smoothness, and this revolver has that. The shorter barrel, however, limited its performance in all regards, including accuracy, energy, and a full powder burn.





The Traditions Sheriff's Model case-hardened finish is attractive.

Type	Single-Action Revolver
Capacity	6
Weight Unloaded	38.4 oz.
Weight Loaded	40.1 oz.
Overall Length	9.0 in.
Barrel Length	3.5 in.
Sight Radius	4.5 in.
Overall Height	5.1 in.
Front Strap Height	2.1 in.
Back Strap Height	3.4 in.
Maximum Width	1.7 in.
Grip Thickness (Maximum)	1.4 in.
Grip Circumference (Maximum)	4.1 in.
Frame	Case-hardened-finish steel
Barrel	Blued steel
Grip Material	Wood
Trigger Pull Single Action	3.5 lbs.
Trigger Span Single Action	2.9 in.
Telephone	(860) 388-4656
Website	TraditionsFirearms.com



Fired offhand, the Sheriff's Model was a joy to shoot with 38 Special ammunition.



This stubby barrel appealed to many shooters, but accuracy results were low on the totem pole.



The tall front sight was well regulated for most loads. We liked the broad rear sight.

pressure signs. The revolver is as fast on target as the other two cowboy guns, but it is not as fast to an accurate follow-up hit, we found. The short sight radius demands a little more time to line up. The Sheriff's Model was accurate enough at this range, and sight regulation was dead on with the 158-grain load and a little high with the 200-grain handload. The pistol is fast from leather but just doesn't balance as well as the heavier longer-barrel handguns.

When working from the benchrest to fire for accuracy, we found the Sheriff's Model is an accurate handgun. Taking time to line the sights properly demanded more time than the other revolvers, however. Another drawback is muzzle blast. Firing from the benchrest position, we felt the muzzle blast across our face when firing the full-power Magnum cartridge. All short-barrel 357 Magnum revolvers demonstrate this trait. Accuracy was good, with two of the three loads exhibiting five-shot groups of 2 inches or less. The Magnum load opened up a little, but we feel that recoil and blast had much to do with this.

Our Team Said: In the end, we don't feel that this is a viable revolver for CAS shooting. The balance just isn't as good as the longer-barrel revolvers. It isn't appreciably faster on the draw than the 4.75-inch-barrel handgun, and the natural point isn't that good. However, this is one neat-looking revolver with an attractive appearance. For recreational shooting or even home defense, it is not a bad choice among single-action revolvers.

Traditions 1873 Liberty Model SAT73-119LIB 357 Magnum, $550

The Liberty is very nicely finished in a bright blue that is both deep and dark. The grips are white of a plastic-like material. There is a very slight overhang on the front strap from the grips that could be filed

easily. The extra $142 over the Sheriff's Model is worthwhile if you like the pistol's laser engraving. We are not experts on bank-note or leaf-style engraving, but we know what we like. A few years ago Pietta contracted with a company in Italy to perfect a specific type of machinery to laser-engrave revolvers. The result is affordable high-quality engraving a few steps above etching. The result is very well done. (A nick in the engraving wasn't a factory defect, it was from the owner's weekly use of the revolver.) The Liberty features a 4.75-inch barrel. This was the original Gunfighters barrel length. It was practically as fast from the Rocking K belt slide or the Lobo Gunleather pancake during the evaluation as the Sheriff's Model and much better balanced. When going for fast work on targets at close range, the 4.75-inch barrel was very fast. Recoil with the handload and the Black Hills 158-grain 357 Magnum Cowboy load was modest. However, we found the 5.5-inch barrel length is faster for repeat shots. Firing from the bench, the 4.75-inch-barrel Pietta revolver was the most accurate handgun tested. Some groups were less than 1.5 inches at 25 yards. Muzzle blast was much less offensive than with the 3.5-inch-barrel Sheriff's revolver. The sensation is more pleasant than with a 4-inch-barrel double-action revolver as well. The plow-handled grip is well known for absorbing heavy recoil. The single-action revolver isn't as fast in a combat course or as fast to load as a double-action revolver — of course not — but it can be at least as accurate and it is more comfortable to fire. With the Federal 357 Magnum cartridge, the Liberty was comfortable to use and fire. We carried the Liberty in a number of holsters, from the Rocking K belt

TRADITIONS 1873 LIBERTY MODEL SAT73-119LIB 357 MAGNUM, $550

GUN TESTS GRADE: A (BEST BUY)

The fit and finish were nice, and we really like the laser engraving. A combination of accuracy and good handling make it the best buy of the test. As a cowboy gun, there were no drawbacks. The 4.75-inch barrel seems the best compromise for overall handling.



Type	Single-Action Revolver
Capacity	6
Weight Unloaded	39.5 oz.
Weight Loaded	42.0 oz.
Overall Length	10.25 in.
Barrel Length	4.75 in.
Sight Radius	5.75 in.
Overall Height	5.1 in.
Front Strap Height	2.1 in.
Back Strap Height	3.4 in.
Maximum Width	1.7 in.
Grip Thickness (Maximum)	1.4 in.
Grip Circumference (Maximum)	4.1 in.
Frame	Nickel-finished steel
Barrel	Nickel-finished steel
Grip Material	White plastic
Trigger Pull Single Action	4.5 lbs.
Trigger Span Single Action	2.9 in.
Telephone	(860) 388-4656
Website	TraditionsFirearms.com



Above and left: The laser engraving appeared in close to full coverage of the Liberty. Below: We liked how the 4.75-inch barrel handled.



slide to a well-done recreation of the original Old West spring-loaded shoulder holster by the same maker. This side test of holsters demonstrated that the 4.75-inch barrel length is the handiest for carry, whether in the field or just for the fun of carrying a single action.

Likewise, the Liberty was the most accurate revolver from the bench, despite the limitation of a smooth, but heavy, trigger action at 4.5 pounds. The break, however, was clean. As the test results show, sometimes a heavier comparative trigger action is not that great an impediment, at least in trigger actions below 5 pounds.

Our Team Said: For practical use, from Cowboy Action Shooting to personal defense and recreational shooting or trail use, the Liberty is our choice and the only "A"-rated gun in the test.

Traditions Frontier Series 1873 Barrel Nickel/White PVC SAT73-126 357 Magnum, $550

This revolver was obtained in order to provide a valid comparison of the two common barrel lengths deemed suitable for Cowboy Action Shooting, the 4.75 inch and 5.5 inch, as well as a comparison to the 3.5-inch-barrel Sheriff's Model. In this barrel length we ordered a nickel-plated revolver, giving us a blue engraved-finish revolver, a blue-and-case-hardened revolver, and a nickel-finish gun, similar to the common finish variations found in the Old West. While gunfighters may have preferred the Gunfighter's gun, when doing our research, we found that the great exhibition shooter Ed McGivern ordered one of the first Colt SAA revolvers in 357 Magnum, with a 5.5-inch barrel. We were in good company it seemed. This

TRADITIONS FRONTIER SERIES 1873 BARREL NICKEL/WHITE PVC SAT73-126 357 MAGNUM, $550

GUN TESTS GRADE: B-

We really like the handling of this revolver. While the majority of the raters liked the appearance of the Liberty best, a couple who examined the Frontier revolver liked the nickel-plated revolver better. For a revolver destined for CAS shooting, we want a reliable handgun, but it isn't as critical as a personal-defense revolver. We feel that the Frontier revolver must have had a burr in the action of some sort that caused a function problem.





Type	Single-Action Revolver
Capacity	6
Weight Unloaded	41 oz.
Weight Loaded	43 oz.
Overall Length	11.0 in.
Barrel Length	5.5 in.
Sight Radius	6.5 in.
Overall Height	5.1 in.
Front Strap Height	2.1 in.
Back Strap Height	3.4 in.
Maximum Width	1.7 in.
Grip Thickness (Maximum)	1.4 in.
Grip Circumference (Maximum)	4.1 in.
Frame	Nickel-finished steel
Barrel	Nickel-finished steel
Grip Material	White plastic
Trigger Pull Single Action	3.75 lbs.
Trigger Span Single Action	2.9 in.
Telephone	(860) 388-4656
Website	TraditionsFirearms.com

We liked the Frontier Model 357, but had reservations concerning its performance. Close examination detected brush marks. Tool marks were evident around the rear sight. A few hard spots and perhaps a lack of final polish may have contributed to the revolver's locking up when firing Magnum loads. After the Frontier revolver locked up, we were able to get it apart. The fired 357 Magnum cartridge did not exhibit any excess pressure signs.



revolver features a nice let off, pound wise, at 3.75 pounds. However, it felt rougher than the other trigger actions, with a slight hitch just before let off that sometimes presented itself and sometimes not. The finish was generally good, but there were polishing marks on the left side of the receiver. The area just below the sights where the hammer impacts on firing — a lower portion of the hammer actually strikes the frame-mounting firing pin — wasn't as well polished as the other revolvers. The sight trough in the top strap was also rougher than the other revolvers. While okay for a revolver at this price point, the nickel gun simply wasn't as nicely polished as the other revolvers. The fit of the grips to the grip frame, however, was excellent. The Liberty grip-to-grip-frame fit was okay, but a sliver of material hung off the front strap. The nickel gun is better fitted in this regard, but the polish wasn't as good.

Fired off hand in combat shooting or CAS drills, the 5.5-inch-barrel revolver gave good results, mainly because of the slight extra weight out front and a slightly longer sight radius. With 0.75-inch more sight radius and just over an ounce more weight, the Frontier handled well and gave good results on the firing range. An advantage over a 45 Colt revolver in most types of shooting is that the 357 Magnum revolver weighs more. The Frontier 357 weighs 4 more ounces than a 5.5-inch barrel 45 Colt revolver we had on hand for comparison. After firing the fast-paced drills, we rated the Frontier 5.5-inch barrel superior in all speed drills, although the 4.75-inch barrel was not far behind. The difference, however, was real and verifiable. While the 4.75-inch Gunfighters gun clears leather more quickly and may be handier in a close-range fight, for what we do with single-action revolvers these days, the 5.5-inch barrel is clearly a better offhand shooter.

A problem came when we moved to the full-power Magnum loads. At Gun Tests, all ammunition in a specific category must be from the same lot for consistency. The Frontier revolver was the last test fired for accuracy. The ammunition used was the same type used in the other revolvers without incident. When the hammer fell and the 125-grain 357 Magnum fired, the hammer could not be cocked for another shot. The revolver locked up. At first, the cylinder would not budge. We removed the cylinder pin carefully, taking care not to allow our hands to cross the muzzle. We were able to bump the cylinder out by raising the hammer a bit. The fired cartridge case appeared normal. The primer had not flowed. There were no pressure signs, and the cartridge case slid from the cylinder by simply pushing it out with the cylinder pin. In any case, there was no primer flow to flow back into the firing pin or lock the gun up. An advantage of Magnum revolvers with frame-mounted firing pins is that such a lock-up caused by primer flow is less likely.

The verdict? This had nothing to do with the ammunition, other than perhaps the harder recoil of the Magnum load. The revolver's action just locked up on firing. We were able to get the action going by spraying oil in the action and jiggling the hammer. It went back to normal operation. The action, heavily lubricated with FP10, was cycled one hundred times and seemed normal thereafter.

We resumed firing, and the Frontier revolver gave good, if not outstanding, results in accuracy. The Liberty revolver was more accurate. The Sheriff's Model revolver was less accurate. The Frontier revolver is accurate enough for most chores. During the accuracy test, we painted the front sight with red paint, otherwise the sun glinting on the front sight would have been a serious impediment. This isn't a demerit if you want a nickel gun.

Our Team Said: We rated the Frontier down based on the action problem and

— continued on page 32

GUN TESTS

THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

1. To Change Your Address

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

Name

Company

Street

City

State Zip

2. To Order/Renew

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

__ One year: $49
__ Two years: $98
__ New subscriber
__ Renewal

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

3. To Give a Gift Subscription

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

__ Send a One-Year Gift
__ Send a Two-Year Gift

Name

Street

City

State Zip

Return this coupon (or a photocopy) to:

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

— continued from page 31

also for tool or polishing marks the other revolvers did not have. The action problem was resolved without much difficulty, but should not have occurred.

We liked all three revolvers for different reasons. If recreation is your game, then the Sheriff's Model has appeal. But even recreational shooters like to hit the target more often than not, and the Sheriff's Model isn't the most accurate revolver of the three. There are folks who purchase handguns based solely on looks, but that isn't what we do at Gun Tests. The Sheriff's Model isn't a bad revolver at all; rather, it is a good revolver less suited to the tasks outlined than the other revolvers. The Frontier revolver with its nickel plate and 5.5-inch barrel will appeal to some shooters and not to others. We did not like the action problem. We did not disassemble and examine the revolver, but you can be certain we will at a later date. We will report on that.

The Liberty 4.75-inch revolver is the Best Buy based on several factors. It is eye catching, and this appearance came cheap, we felt. Performance was excellent. Despite a slight edge in fast snap shooting with the nickel-plated revolver, we feel that with practice, the final outcome would all be decided by the shooter. The Liberty is more accurate than most single-action revolvers despite a trigger action that was the heaviest of any revolver tested. We liked the nickel-plated Frontier, but it is all a matter of taste. The problems with the action soured us on this revolver. Obviously, with two well-performing revolvers from the same maker, it cannot be representative of the factory. We simply chalk it up to our ongoing bad luck. Of all the gun magazines published in the whole world, we seem to get all the malfunctioning guns. But that's okay, because Gun Tests readers are the beneficiaries.

Written and photographed by Gun Tests *staff.* **GT**

COMING UP IN GUN TESTS

- Long-Slide 9mms. We look hard at three of these pistols, the CZ P09, FNH 9, and the Glock 34. We also test a counterpoint, the Springfield XDM 4.5 with 5.3-inch barrel as well. We enjoyed them all, but in the end for concealed carry, a surprising choice was our top pick, while another gun won for home defense.

- Plus Firing Line, Short Shots, Downrange and other buying advice.

GUN TESTS
THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

Customer Service Contacts

If you have a problem with your magazine subscription, damaged or missing issues, need to change your mailing or email address, or renew your subscription, visit Online Customer Service at:
Gun-Tests.com
Click "Contact Us"

CALL TOLL FREE: 800-829-9084

SUBSCRIPTION DEPARTMENT
Gun Tests (US)
P.O. Box 8535
Big Sandy, TX 75755-8535

Gun Tests (Canada)
Box 7820 STN Main
London ON
Canada N5Y 5W1

QUANTITY REPRINTS
Reprints of **Gun Tests** articles are available.
Minimum Order: 1,000.
Contact:
GunTestsEditor@icloud.com

EDITORIAL OFFICES
Gun Tests *welcomes letters or email concerning our articles. Please include your name, telephone number, and hometown.*

We will respect your request not to publish personal information. Email comments to GunTestsEditor@icloud.com.

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