GUN TESTS®

THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

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9MM SUBCOMPACTS

As promised, here's our take on three hideout guns you've been asking about: The Beretta Nano BU9, Ruger's LC9s Standard, and the Springfield Armory XD-S 3.3. **Page 6**



44 SPECIAL & 44 MAGNUM TRAIL GUNS

Take a walk with us as we try out three wheelguns with plenty of pop, but not a lot of sag: The Charter Arms Target Bulldog in 44 Special and the Taurus 44 Tracker and Smith & Wesson Model 69 in 44 Magnum. **Page 12**



TACTICAL SHOTGUNS FROM REMINGTON, MOSSBERG

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DOWNRANGE

MENTAL ILLNESS AND GUNS



Todd Woodard

A **significant** court ruling happened in late December 2014, in the case of *Tyler v. Hillsdale Co. Sheriff's Dept.* The United States Court of Appeals for the Sixth Circuit determined that a prohibition on firearms possession for persons who have been "committed to a mental institution" was unconstitutional. In its opinion, the court examined the Gun Control Act's categorical prohibition on firearms possession for persons who have sought or received mental care.

In this case, the ban applied to an individual who had been committed 28 years earlier and had no viable option for seeking restoration of his rights. In its decision, the court wrote, ""The government's interest in keeping firearms out of the hands of the mentally ill is not sufficiently related to depriving the mentally healthy, who had a distant episode of commitment, of their constitutional rights."

According to court documents, Clifford Tyler is a 73-year-old man who does not currently suffer from mental illness and has no history of violence, unlawful behavior, or substance abuse. In 1985, when Tyler was 45 years old, his then-wife of 23 years left him for another man, depleted his finances, and filed for divorce.

Understandably, Tyler became distraught and suicidal, and he was involuntarily committed by a Michigan probate court, after his daughters called police for fear of his safety. Less than a month later, Tyler was released from the facility and returned to the workforce for nearly two decades. A psychologist who evaluated Tyler in 2012 determined the 1985 commitment "appeared to be a brief reactive depressive episode in response to his wife divorcing him."

The court found that as applied to Tyler, the law was not narrowly tailored. The court also reasoned that Congress did not intend for all previously committed people to lose their Second Amendment rights for life.

The Law Behind Sandy Hook Suit. You may also have heard that in December, nine families of victims killed at Sandy Hook Elementary School in 2012 and one survivor filed suit against Bushmaster Firearms International, Camfour, a firearms distributor, and Riverview Gun Sales, a gun shop located in East Windsor, Conn. that sold the rifle to Nancy Lanza. The main legal issues underlying the suit deserves some explanation. A 2005 federal law called the Protection of Lawful Commerce in Arms Act (PLCAA) shields gun manufacturers from most lawsuits. An exception in the PLCAA allows one party to be held liable for entrusting a dangerous product to another party, who then causes harm to someone else, a third party. This "negligent entrustment" is the main basis for the suit. Big problem in the theory: The Sandy Hook AR-15 was purchased legally by the gunman's mother, who was shot and killed before the attack on the school. We don't see how a manufacturer, distributor, and retailer can be penalized for selling a lawful product to a qualified, legal buyer. **GT**

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More on Broomhandles, Lugers

Several readers praised our coverage of two semi-autos that have been out of production for decades. We also address a sight issue on a Beretta, and learn a new way to use our data.

Re "9mms: Classic Artillery Luger Vs. 1896 Mauser Broomhandle," January 2015

I very much enjoyed the article on the Luger versus the Broomhandle Mauser. My Dad had a Luger with both uppers, artillery and short barrel, which my brother has now. It was, and is, a great shooting weapon. Dad was in the 483rd Bombardment Group of the 15th Air Force and remained in Europe with the occupation until the Japanese surrender. He had the chance to pick through a warehouse of weapons and recounted how the late Lugers would blow the toggle bolts when submachine-gun ammo was fired in them. He settled on a 1917 Crown, which would digest anything. I can recall that he picked up several thousand rounds of really hot German 9mm out of Canada in the 1960s, which we fired up. I recall firing some at a concrete block about 100 yards away, which was about 1-foot square, and hit it with regularity. The hold was 6 o'clock with the artillery barrel, two-handed offhand hold. My recommendation for ammo is a bullet weight of 124 grains as hot as you can get it for pre-WWII Lugers, loaded with military ball-type bullets. The Luger never malfunctions with the German military ammo of the time, at least not the submachine-gun ammo. It would malfunction with American ammo that was not hot enough.

— Ken Brewer

I was very excited with your January 2015 edition due to the story on the Artillery Luger and 1896 Mauser Broomhandle handguns. It did not mention any special license for these handguns with stocks. I was under the impression they had to be registered as short-barreled rifles. If there is no special license needed,



why can the Russian PPS-43c not be imported with the stock usable? Is it because it is modern made? I enjoyed the story on these two pistols.

— Ken Bealer

Product Coordination Editor Kevin Winkle responds: This is posted on the ATF website: "If a person has a pistol and an attachable shoulder stock, does this constitute possession of an NFA [National Firearms Act] firearm?" The BATF answered, "Yes, unless the barrel of the pistol is at least 16 inches in length (and the overall length of the firearm with stock attached is at least 26 inches). However, certain stocked handguns, such as original semiautomatic Mauser Broomhandles and Lugers, have been removed from the purview of the NFA as collectors items. [26 U.S.C. 5845, 27 CFR 479.11]" As you can see, it does not mention anything about whether or not the stock is original or a replica. There is other correspondence on the BATF website that addresses that question

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.

in detail. The best advice is to check with the seller about whether the gun is an NFA item or a C&R, and also check your local and state laws, which may be more restrictive.

I concurred with Grade "D" rating of this pistol. Only those who are really interested in Mauser Broomhandles should consider buying one, because they are not for the faint of heart.

The only thing about this article that I would like to add is about the Mauser Broomhandle. The article incorrectly identified it as Mauser 1896. I believe this one is a Model 1930, identified by the step on the barrel and different safety. The reference came from the Mauser self-loading pistol book by James N. Belford and Jack Dunlap. I happen to own this particular model and know that the only part that is not interchangeable with the standard C96 is the safety. The safety, once applied, allows you to manually drop the hammer (with great care of course). The safety, once applied, will push the back of the firing pin into the rear of the bolt, and when the hammer drops, it will not touch the firing pin. This improved safety system rectified the problem that was mentioned in the article about the safety having to be disengaged to lock the bolt back. I had a negligent discharge with my C96 once during my attempt to lower the hammer while putting the pistol on safe. The M1930 safety will decrease the chance of such an accident, but even so, I adhere to the safety rule and keep the pistol pointed in a safe direction at all times. To my knowledge, the only place that carries the M1930 safety is Sarco, Inc. [e-Sarcoinc.com]. The reproduction part is well made and works great.

The problem with failures to feed and excessive recoil can be cured with a new spring from Wolff Gunsprings [GunSprings.com]. The extra-heavy spring will cushion the recoil and reduce the beating on the bolt, but the magazine spring needs to match with the follower, too. I have installed a new magazine follower on mine because the old follower allowed the cartridge to tilt inside the magazine housing and cause some double feed.

The article mentioned difficulty in getting the cross pin that holds the bolt out. I am not sure if the writer was referring to the recoil spring abutment or not, but to get the bolt out, you have to use flat-tip screwdriver or the tip of a Broomhandle cleaning rod and push the back of the firing pin and turn it clockwise to disengage the firing pin from the bolt. After that, you can push the recoil-spring abutment forward, disengage it from the recoil spring, and wiggle it out from the frame.

I thoroughly enjoyed reading this testing classics article and would love to see that Gun Tests include a "classics" test every issue. The issue arrived a day after I came across a decent looking Artillery Luger with wooden stock and leather holster combo, and the only reason it did not come home with me was a $3,500 price tag — but I bet it was worth every penny.

— Thana Sathirachinda

Re "Smith & Wesson M&P40c Vs. Beretta's Storm Compact Forty," January 2015

I enjoyed the review of the S&W M&P 40c and the Beretta Px4 Storm in the January issue. I'm sure that you know better, but some of your readers may not — at the end of the Beretta review you said, "The Beretta was rated down because loads shot from it struck low on target, and this should be fixed with a taller front sight." I hope none of your readers attempt to correct the Beretta (or any other handgun that is shooting low) by putting on a taller front sight.



That will only make the gun shoot even lower! To correct a gun that is shooting low, the front sight needs to be shorter. **— Terry Smith**

From Bob Campbell: "You are correct. My observation was based on my memory of the sights on recently tested 9mm and 45 ACP Storm handguns that have fired to the point of aim. In the case of the Storm 40 S&W, filing the existing front sight shorter would bring the bullet's impact higher, but there wasn't a lot of sight to work with. Sorry about the mistake." Also, thanks to Gun Tests *readers Loren Tilton, Phil Emore, Norm Thompson, John Gertig, and others for pointing this out. — tw*

I just read your excellent article on these two CCW pistols. I was particularly interested because I subscribe to the sometimes heard USMC logic that any defensive handgun is a good one as long as the caliber begins with a "4."

Regardless of the point-of-impact problem, I would choose the Beretta over the S&W and simply modify the front sight, if necessary, because I'm in favor of the Beretta's decocker. Since I use an IWB holster, with the S&W I'd worry about the very real anomaly that could crop up where in the heat of a self-defense confrontation, the trigger could be accidentally pulled on draw, with a double-action-only pistol blowing a hole in part of my anatomy instead of my assailant's. The only solution I can think of for this problem, which may occur very rarely or maybe never at all I'll have to admit, would be to leave the double action's chamber empty and rack the slide on the draw, which to me is totally unacceptable for defensive purposes. But then I have a lot of experience with Beretta pistols, so a decocking-type safety isn't a problem for me.

— John Gertig

Whither the DB15?

I am a new subscriber. I have interest in a report on Diamondback

DB15 pistol. Can you email me that information? Thank you,

— Charles Mahoney

Dear Mr. Mahoney: As a subscriber, you have access to the full back-issue archives at Gun-Tests.com. Follow the directions for sign up here on page 5. However, we have reviewed the Diamondback DB9 ("9mm Handguns Big and Small: Taurus, Walther, DiamondBack," March 2012) and the DB380 ("Pocket-Sized 380 ACP Pistols: S&W, Taurus, and Diamondback," January 2011), but not the DB15. — tw

Using Gun Tests Data

I have enjoyed your magazine for several years now. Using the data on your website, I put the circumference and trigger-reach data (9mm pistols) into a spreadsheet and compared them to a 1911-style pistol. I use the 1911 as the ideal based on its longevity with so little change. I could only do this using your data, so I am really glad you all measure pistols so thoroughly. From what I can see so far, it may explain why one of my friends that is new to firearms really likes the FNP-9. It also explains my attraction to a Steyr M9 and a Springfield XDM, which now I am motivated to rent at the local range. Also, the Beretta 92 A1-C is very close to a 1911 in these terms, so now I need to find one of those too. I am glad I ordered a short-reach trigger for my 92A1 — that should bring in the reach to something more manageable. The Stoeger Cougar fits better, which looking at the data, should be expected. Thought you might like to know, and keep up the good work. — Craig

Thank you very much. We do include some seemingly oddball measurements, trigger span being one of them. It is a vital piece of handfit information, as you've found out. We may also add slide retraction effort as a standard measurement for pistols as well. I've found that that single measurement (the external effect of the recoil spring stiffness plus mechanical drag, slide shape, and other factors) is a primary exclusion for older folks, those with diminished hand strength, and many women when they're considering a pistol. Also, you're doing what I recommend to people who ask me what gun to buy — use our reviews to cull the herd to a manageable few, then go shoot them. I see writers at other magazines doing top-10 lists and I always ask myself, "Top 10 for whom?" The Gun Tests staff really does want to recommend the right gun for every single reader, but we know that's inherently impossible, a Sisyphean task. So, instead, I imagine an informed GT reader looking at a review of a pistol he or she is interested in purchasing, comparing the objective data, seeing if there's a fatal problem with a given gun, picking one, then renting or shooting a friend's similar gun to confirm/deny whether our descriptions fit an individual's use of the gun. I appreciate you sending in the idea. — tw

What About the LC9s, XD-S?

Back in October, a fellow subscriber asked about a comparison between these two pistols. You responded that they had been shipped to Bob Campbell and a report would be coming in couple of months. In the meantime, I continued to load up my Cabela's credit card for the points to buy one or the other based on your evaluations. Alas, a couple of months have come and gone and no review as yet. My points are burning a hole in my pocket and can't wait to pull the trigger on your recommendation.

— Richard B. Park

Richard, please turn the page. — tw.

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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 without your permission, but we may need to contact you.* **GT**

9mm Subcompact Shoot-out: Nano, LC9s, and the XD-S 3.3

As promised, here's our take on these hideout guns. Beretta's Nano comes up short, while Springfield's pricey XD-S shoots like a service gun. The affordable Ruger falls somewhere in between.

Subcompact 9mm handguns are very popular carry guns, and in the past we have tested various 9mm compacts that are basically scaled-down service pistols, such as the Glock 26 and the Smith & Wesson Military & Police Compact. In contrast, the handguns covered in this report are 9mm subcompacts designed from inception as compact carry guns. Our test guns chambered in 9mm Luger were the Beretta BU9 Nano JMN9S15 9mm Luger, $369; the Ruger LC9s Standard 3235 9mm Luger, $339; and the Springfield Armory XD-S 3.3 XDS9339B, $494.

Our Beretta BU9 Nano JMN9S15 had an MSRP of $445, but we got ours at CheaperThanDirt.com for $369. At that MSRP, our black Nano, a pink version (JMN9S65), and a Flat Dark Earth-colored one (JMN9S55) are the least expensive pistols in the line, which includes state "compliant" models (JMN9S15FC, JMN9S65FC, JMN9S55FC) in the same colors, respectively, for $452. More expensive versions come with Crimson Trace lasers for MSRPs that start at $650.

Ruger's recently announced LC9s Pro (Model Number: 3248) has no external manual safety or magazine disconnect, making the original LC9s tested here the "Standard" model. Both have MSRPs of $449, but the price above reflects what Cheaper Than Dirt! was selling the gun for at the time of our test.

The XD-S pistols are the first single-stack polymer-framed versions from Springfield Armory. Our basic black XD-S 3.3 externally resembles the XD-S 45, which we tested in the December 2012 issue (Grade A). There's also a 9mm Bi-Tone 3.3-inch gun (XDS9339S) as well as 4-inch-barrel XD-S models.

When firing for accuracy at 15 yards, we used two loads from HPR, 115-grain jacketed hollowpoints ($28.13 for 50 rounds at CheaperThanDirt.com) and the HPR 124-grain XTP (also CheaperThanDirt.com, $26.65 for 50 rounds). We also used Black Hills TAC +P, which uses a Barnes 115-grain Tac-XP hollowpoint bullet, available from MidwayUSA.com for $25.20/50. We also handled the guns in more realistic tactical situations to assess their suitability for carry. Here's what we found:



During the tactical testing, the subcompact pistol offered good reliability, but performance demanded concentration from the shooter.



The three pistols top to bottom are Springfield's XD-S, the Ruger LC9s, and the Beretta Nano. Most important, we found they were all reliable during our testing. However, they have different shooting characteristics that lead us to prefer the XD-S if money is no object and the LC9s if it is. As shown below, the Ruger was the tallest handgun tested.







Beretta BU9 Nano JMN9S15 9mm Luger, $369

Beretta broke new ground with the striker-fired Nano. The company calls it a single action, but its function is similar to the Glock, which we think of as a double

action, and in the end performs in a similar manner. The striker safety protrudes from the top of the slide just in front of the rear sight as the trigger is pressed and the safety is released. There is also a decocker button to release the prepped striker. It requires a pin be pressed into the button, at the top rear of the grip frame. This eliminates the need to press the trigger to decock prior to disassembly. These are good features, and the Nano seems to be a well-thought-out pistol for concealed carry. It trades less weight, less bulk, and less barrel length for smaller sights, less capacity, and fewer features.

As an example, the Beretta does not have a slide lock in the conventional sense. The slide locks open as the last cartridge is ejected. The magazine is removed and the slide remains locked, and it is grasped at the rear to release. Speed loads are best accomplished by grasping the rear of the slide and releasing the slide on a fresh magazine. When firing service loads, it is common for the thumb of the support hand to bump into the slide lock in very small handguns, and we saw this happen often enough that we realized how the absence of a slide lock may improve combat reliability. One-hand operation would be another matter.

At 7.5 pounds, the trigger action was heavier than we like. While smooth enough, this heavy activation weight bore on the muscles during a range session. We are certain accuracy was affected by this trigger action, along with the small sights and grips. Only two fingers may be placed on the grip when the six-shot magazine is loaded. With the eight-round magazine in place, the grip is much more comfortable. Still, for the pocket, the six-round magazine is better. In IWB carry we believe the eight round magazine would be as concealable as the shorter unit.

The sights were the subject of some debate. They were almost as small as the bumps that are called sights on

9MM LUGER SUBCOMPACT RANGE DATA

High Precision Range (HPR) 115-gr. Jacketed Hollowpoint	**Beretta Nano**	**Ruger LC9s**	**Springfield XD-S**
Average Velocity	996 fps	970 fps	1038 fps
Muzzle Energy	253 ft.-lbs.	240 ft.-lbs.	275 ft.-lbs.
Average Group	3.6 in.	3.0 in.	2.0 in.
High Precision Range (HPR) 124-gr. Jacketed Hollowpoint	**Beretta Nano**	**Ruger LC9s**	**Springfield XD-S**
Average Velocity	884 fps	860 fps	890 fps
Muzzle Energy	215 ft.-lbs.	203 ft.-lbs.	218 ft.-lbs.
Average Group	3.5 in.	3.2 in.	2.8 in.
Black Hills Ammunition 115-gr. TAC-XP +P	**Beretta Nano**	**Ruger LC9s**	**Springfield XD-S**
Average Velocity	1052 fps	1020 fps	1100 fps
Muzzle Energy	282 ft.-lbs.	265 ft.-lbs.	308 ft.-lbs.
Average Group	3.2 in.	2.8 in.	2.4 in.

To collect accuracy data, we fired five-shot groups from a solid bench rest. Distance was 15 yards. We recorded velocity with a Shooting Chrony Master Chronograph. The first sky screen was set 10 feet from the muzzle.





Above: Some of the loads we used for reliability testing, included, from left, Cor-Bon's 95-grain DPX, HPR's 124-grain jacketed hollowpoint, and Black Hills' 115-grain Tac-XP +P. We used Black Hills loads, shown with the Nano at left, for range work and accuracy testing. The Beretta's frame roughening gave good purchase when we were firing the heaviest loads, but overall, we thought the Nano was the least controllable during rapid fire.



Right: Each pistol was carried in the Barber Leather Works Chameleon IWB/Belt Slide holster. Concealment was good in each case.

32 ACP and 380 ACP pocket pistols. They were white-outline three-dot units set atop a square-top slide, which we thought affected visibility. For example, on the Ruger, the slide tapers to the top, and the taller Ruger sights accordingly draw the eye. Also, the Nano's sights were smaller than the Ruger or Springfield sights.

Despite the Nano's light weight — right at 20 ounces unloaded — it was comfortable to fire, according to our shooters. We fired several 9mm loads, including the Black Hills 115-grain FMJ load (MidwayUSA.com, $9.18/20 rounds) during the familiarization stage of the test.

Even when firing the hotter Black Hills 115-grain TAC +P, we still thought the Nano was comfortable to fire. We also fired a small quantity of the Cor-Bon 95-grain DPX (Corbon.com, $33.63/20) load. We did not have enough for a thorough test, but this seemed to be a good short-barrel load and with it, the Nano remained comfortable to fire.

In combat drills at 5, 7, and 10 yards, our shooters found the pistol drew quickly from the Barber Leatherworks Chameleon holster used during the evaluation. Our shooters said that while firing the 115-grain FMJ load off hand, the Nano demanded concentration. We did not have to adjust our hand position after a string, and we thought the modest stippling on the grip was adequate for control. However, the Nano was the least controllable of the three pistols in rapid fire. Hits on the steel plates were more difficult, and combat groups were not as tight as the other pistols. One rater felt that he had to work to reacquire the sight picture after every shot. The level of accuracy was not up to the level demonstrated by the other handguns. Our shooters tried their best and simply could not speed up and get hits. In our view, the sights are less than ideal and so is the trigger.

When we shot five-round groups for accuracy, the pistol tended to put two shots in one group and two to three in another, evenly spaced. We think this had much to do with the

BERETTA BU9 NANO JMN9S15 9MM LUGER, $369

GUN TESTS GRADE: B-

The Nano offers a compact design. The action is simple, and operation is straightforward. The Nano never failed to function. Even though the Nano is supplied with a spare magazine, the pistol is not a good buy compared to the less expensive Ruger LC9s, which shoots better as well.



Flat, compact, and snag free, the Nano gets high marks for pocket carry. The only control on the Nano is the magazine release (above, arrow). This is simplicity. The Beretta Nano was the least accurate of the 9mm pistols tested, but it offers good control when fired offhand.



Action	Locked Breech DAO Semi-Auto
Overall Length	5.7 in.
Overall Height	4.25 in.
Maximum Width	0.93 in.
Weight Unloaded	20.0 oz.
Weight Loaded	25.0 oz.
Barrel Length	3.0 in.
Barrel	Steel
Capacity	6+1; optional 8+1
Slide	Steel, Pronox Finish
Frame	Polymer
Frame Front Strap Height	1.5 in.
Frame Back Strap Height	2.75 in.
Grips	N/A
Grip Thickness (max)	0.875 in.
Grip Circumference (max)	5.12 in.
Sights	Drift tAdj. Rear; 3-Dot Steel
Sight Radius	4.92 in.
Trigger Pull Weight	7.5 lbs.
Trigger Span	2.5 in.
Safety	No Manual Safety
Warranty	1-year Limited
Made In	USA
Website	BerettaUSA.com
MA and CA Approved	No



The Beretta comes apart easily into these components. Disassembly is accomplished by turning a screw located on the right side of the frame (arrow) about a quarter turn. There is no takedown lever.

RUGER LC9S STANDARD #3235 9MM LUGER, $339

GUN TESTS GRADE: A (BEST BUY)

We found the Ruger to be reliable and accurate enough, and the trigger action was the best of the three guns tested. You will need a spare magazine, but even with that, the price remains low for a reliable handgun.





The primary difference in appearance between the new Ruger LC9s and the older LC9 is that the LC9s features a dust cover over the rear of the slide — there is no hammer. The Ruger is relatively thin, with a smooth profile in the frame and slide.

Action	Locked Breech DAO, Striker Fired Semi-Auto
Overall Length	6.0 in.
Overall Height	4.6 in.
Maximum Width	0.9 in.
Weight Unloaded	17.2 oz.
Weight Loaded	19.8 oz.
Barrel	Blued Alloy Steel; 3.12 in. Long; 1-10 RH Twist, 6 Grooves
Capacity	7+1
Slide	Blued Alloy Steel
Grip Frame	Checkered Black Glass-Filled Nylon
Frame Front Strap Height	2.1 in.
Frame Back Strap Height	2.75 in.
Grip Thickness (max)	0.875 in.
Grip Circumference (max)	5.0 in.
Sights	Drift Adj. Rear; 3-Dot
Sight Radius	3.82 in.
Trigger Pull Weight	5.25 lbs.
Trigger Span Single Action	2.8 in.
Safety	Manual Thumb
Warranty	No Written Warranty
Made In	USA
Website	Ruger.com
MA and CA Approved	No

Below: Its lighter weight and grip profile explain why the Ruger LC9s offered the most felt recoil of the three tested. From left to right are the XD-S, LC9s, and Nano. The thin grip makes the gun more wearable for everyday carry, but it also provides the least area for recoil to be absorbed into.





The Ruger's slide and frame contain an unobtrusive take down lever, slide lock and manual safety. Ruger's major redesign of the LC9 into the striker-fired LC9s subcompact has been successful, in the opinion of our shooters.

shooter attempting to control the trigger, the small sights, and short sight radius. The average group with the Black Hills load was 3.25 inches, while the largest average group was 3.6 inches with the HPR 124-grain JHPs. Bullets fired from the Nano averaged slightly greater velocity than the Ruger. As an example, the Black Hills 115-grain TAC load averaged 1052 fps from the Nano versus 1020 fps from the Ruger.

Disassembly is accomplished by turning a screw located on the right side of the frame about a quarter turn. There is no takedown lever. It looks cheap, but it works. The screw did not become loose during firing tests.

Our Team Said: The Nano never failed to function. It was the shortest handgun tested, so if pocket carry is important, this is the most concealable handgun, in our estimation. In the end, though, we rated the pistol down for its small sights, heavy trigger, and worst of group accuracy.

Ruger LC9s Standard #3235 9mm Luger, $339

The LC9s is a striker-fired variant of the LC9. That is saying a lot in a few words. The pistol has undergone a major redesign. The hammer is contained in the frame in the LC9; the striker is all in the slide in the LC9s. The trigger mechanism and firing-pin block are also different. The trigger incorporates a lever in the trigger face to prevent the pistol from firing unless the trigger is pressed to the rear by the trigger finger.

Trigger compression was the strong point of this handgun. The trigger broke at 5.25 pounds and it was clean, with a slight take-up and a fast reset. Combat accuracy was superior to the Nano, but not on par with the Springfield. That was probably as much a function of the trigger as the sights. The sights were good, noticeably better than the Nano's, in our estimation.

The Ruger was the only pistol tested that features a manual safety. This was more important to some shooters than others. The thumb safety was unobtrusive, positive in operation, and may be activated

easily. It featured good indent, so it will not slip off easily. It fell under the thumb when taking a natural firing grip. The Ruger's takedown, accomplished by pulling a bar on the left side of the frame, was simple enough to do.

On the downside, the Ruger developed the least energy and velocity of the three pistols. The Black Hills TAC +P load delivered 1020 fps, a full 80 fps less than the 3.3-inch-barrel Springfield. The 30-fps advantage of the Nano with this load wasn't significant in our view, but 80 fps is. Conversely, the Ruger seemed to exhibit the greatest felt recoil of any of the handguns tested. Not uncomfortable or startling, but greater than the other 9mm handguns. The pistol was thin, which we liked, but the grip frame was the longest of the pistols tested, making the Ruger LC9s the tallest handgun of the three test pistols.

In benchrest testing, the Ruger demonstrated acceptable accuracy, with the best average group coming with the Black Hills TAC +P load at 2.8 inches. Accuracy was better than the Nano by a margin, but it was not as good as the Springfield's average.

Our Team Said: When comparing prices of the handguns we liked the best, the Ruger's $339 price seems attractive compared to the Springfield's $494. However, the Ruger doesn't have the plastic holster and magazine carrier of the Springfield, but then holsters are personal and you will wish to get a good concealment holster anyway. The major gripe with the Ruger is that it is supplied with only one magazine. The average price of a Ruger LC9 magazine is about $30, so this brings the Ruger up to $370, on par with the Nano and still much less than the Springfield. Given its performance, we think the Ruger is the best buy for the money.

Springfield Armory XD-S 3.3 XDS9339B 9mm Luger, $494

The Springfield XD-S is a highly modified XD that stands on its own merits. It resembles the larger XD pistols, but the operation is different. The XD-S is more like a service pistol than the other handguns tested, in our opinion. It is also the longest —

SPRINGFIELD ARMORY XD-S 3.3 XDS9339B 9MM LUGER, $494

GUN TESTS GRADE: A (OUR PICK)

The XD-S was a great shooter. Its accuracy was the best of the handguns tested. The pistol was reliable. We liked the safety features. With the extended magazine, the XDS also offers ten shots for home defense.





The little XDS has a family resemblance to the larger XD pistols, but it is a purpose-designed compact handgun. With the extended magazine, the XDS 3.3 is more comfortable to fire.



Action	Locked Breech DAO Semi-Auto
Overall Length	6.3 in.
Overall Height	4.43 in.
Overall Height w/extended mag.	5.43 in.
Maximum Width	0.9 in.
Weight Unloaded	23 oz.
Weight Loaded	26 oz.
Barrel	3.3 in. Long; Melonite-Finish Steel
Capacity	7+1
Slide	Melonite-Finish Steel
Grip Frame	Textured Black Polymer
Frame Front Strap Height	1.9 in.
Frame Back Strap Height	2.75 in.
Grip Thickness (max)	0.9 in.
Grip Circumference (max)	5.75 in.
Sights	Fiber-Optic Front; Steel Dovetail Rear
Trigger Pull Weight	7.0 lbs.
Trigger Span Single Action	2.6 in.
Magazines	2; Stainless Steel
Safety	No Manual safety
Warranty	Lifetime Limited
Made In	Croatia
Website	SpringfieldArmory.com



The XD-S comes apart easily into these components. The dual wound recoil spring of the XDS helps control recoil (arrow).

Left: The XD-S comes in quite a package, which for some shooters will justify the extra cost. The hard case, extra magazine, and magagine carrier are worth some bucks. We think the provided holster is likely to be replaced with a more personalized item.

The front sight of the Nano, left, rides low and is snag free but does not offer the bold sight picture of the Springfield XD-S, right.





At left: The rear sight of the Springfield XDS, top, was more effective in directing fire than the Beretta Nano's rear sight, bottom. This was reflected in the guns' accuracy scores, wherein the Springfield dominated.



Though we prefer the Ruger and Springfield guns, left and right, respectively, if you strictly want a hideout piece, the Nano, top, may be the best fit. Of the three, the Nano clearly has the smallest footprint. The Nano's overall length is 5.7 inches, compared to the Ruger's 6-inch length and the Springfield's 6.3-inch length. The Nano is shortest, too, at 4.25 inches overall height, just a tad below the Springfield (4.43 inches) and Ruger (4.6 inches.) All three are less than an inch thick.

but not the tallest, that's the Ruger — and the easiest to use well.

The pistol featured a dust cover on the rear of the slide rather than the characteristic exposed striker of the larger XD. The stippling and surface abrasion of the Springfield were ideal for our shooters. The finish was never uncomfortable, and the grip was never in question. The XD was also the only handgun with an ambidextrous magazine release. Takedown was via a lever, a feature on larger service-grade handguns.

The low profile sights featured a red fiber-optic front component and a drift-adjustable steel rear sight. This made for good results when running a combat course at high speed. We began the combat course with the Black Hills 115-grain FMJ load, progressed to the HPR 115- and 124-grain loads, and fired a single magazine of the Cor-Bon DPX load. Results were excellent. We were able to keep the steel plates ringing and combat groups were excellent, but then this was the heaviest handgun and the one with the longest barrel. During this time at the range, we thought the trigger compression was suitably controllable, but not as good as the Ruger's. At 7.0 pounds the XD-S didn't have a light trigger, but we had greater confidence in this trigger than the Nano's.

Early on, we experienced a failure of the slide to lock back on the last round after every magazine and with both magazines. After the first four magazines of ammunition, the slide began to lock back. This may have been shooter error, as we may have rode the thumb on the slide lock. Also, on several occasions, we felt that too much effort was needed to operate the magazine release. Again, this cleared up during the test. Perhaps we simply needed to learn the touch. In any case, the slide never locked back during a firing string, so we were not applying upward pressure during recoil — a neat bridge on the frame prevents this from happening. Each handgun must be learned for its own merits and foibles.

Once the magazine-release problem was solved, the pistol exhibited excellent speed in magazine replacement. We fired with both the 7-round and the optional 9-round magazine. There wasn't a lot of difference. If maximum concealment is needed, the shorter magazine works well, while the longer magazine gives 10 rounds at the ready when concealment isn't as important.

When firing for accuracy off a bench rest, the Springfield put out the best averages across the board, most notably 2.0 inches with the HPR 115-grain JHP loading. The XD-S also demonstrated the greatest energy, 308 foot-pounds compared to 265 foot-pounds for the Ruger and 282 foot-pounds for the NANO when using the Black Hills Ammunition 115-grain TAC +P.

Our Team Said: The XD-S is supplied with a range holster, magazine carrier, and a spare magazine. The Springfield also had a rail, a loaded-chamber indicator on the top of the slide, and grip inserts. If you are willing to spend the extra money and carry the pistol in an inside-the-waistband holster rather than the pocket, the XD-S represents a good option. The Springfield, in the words of one rater, "Shoots like a big gun." The Ruger may represent the better value, but we preferred the Springfield XD-S.

Written and photographed by Bob Campbell, using evaluations from Gun Tests *team testers.* **GT**

Five-Shot 44-Cal Trail Guns from S&W, Taurus, and Charter Arms

Three revolvers, two chambered in 44 Magnum and one in 44 Special, are lightweight shooters that pack a punch. We liked the Model 69 best, but the Tracker and Bulldog are good, too.

A 22 LR revolver in single or double action can make an excellent trail gun—an inexpensive plinker and plenty of medicine for fisher cats, snakes, and squirrels for the pot. But once you start to hike in the woods and come across bear, wolf, or lion tracks, and the limitations of the 22 LR cartridge become real. Packing more power means a heavier caliber, which translates into a heavier pistol. That lightweight 22 LR may be easy to carry and pack into the back country, but what is required is a handgun that combines light weight with a powerful punch.

Our testers live in a very populated state with pockets of very rural territory where deer and coyote thrive. Occasional news reports of rabid coyotes are not uncommon on local TV. One spring, a black bear walked through the center of town looking for the ripest-smelling garbage can he could find. Even a mountain lion — unheard of this far east — was reported to be on the prowl. And then there are the two-legged predators. For all of these potential threats, some of our testers like 44 calibers, and Gun Tests reader e-mails seem to agree; in fact, we were asked to match up 44-caliber revolvers with 4-inch barrels that are light in weight and well suited for trail work. Add the lightweight criteria to a 44 caliber with a 4-inch barrel and that means a 5-shooter. We were specifically asked to test the Charter Arms Target Bulldog in 44 Special and the new S&W Model 69 in 44 Magnum. The new S&W actually has a 4.25-inch barrel. We also added into the 5-shot face off the Taurus 44 Tracker, which we have reviewed before and found to be a good choice and a useful baseline for comparing the other handguns.

Using a 44 revolver range rod (080-618-044WB, $25) from Brownells, we checked the alignment of the chambers to the barrel in all three new 5-shooters. We assumed they would be in spec and confirmed they were. Cylinder-gap gauges, also from Brownells (60/68 Cylinder Gauge, 080-633-668WB, $36), were used to check the headspace between the rear of the cylinder and the recoil plate. We also used feeler gauges from Brownells (606-950-252WB) to measure the gap between the front of the cylinder and the forcing cone of the barrel. Too close and the revolver will bind because of powder residue; too big a gap, and precious gas is siphoned off, reducing velocity. A gap of 0.003 inches is desirable. The Taurus was the tightest at 0.002 inches, followed by the S&W with 0.005 inches and the Charter Arms at 0.007 inches.



When walking the back 40 or hiking big woods, lightweight gear means we can travel farther with less effort, but still carry some power. We looked at three 44-caliber revolvers, from bottom, the Charter Arms Target Bulldog ($470), Taurus 44 Tracker ($693), and the new Smith & Wesson Model 69 ($849). The new Smith has a lot to offer but the Charter Arms and Taurus are good choices, too.

All three had firing pins built into the frame. The Taurus used a transfer bar between the hammer and firing pin while the Charter Arms and S&W used a hammer stop. For added safety, the Taurus and Smith & Wesson had a built-in lock to disable the revolver. A provided key allows the owner to lock and unlock these two guns.

Ammunition selections consisted of 44 Special and 44 Magnum fodder, both of which were used in the 44 Magnum–chambered revolvers. We knew the Charter Arms could not compete in the power category with

the two other revolvers, but the 44 Special is a formidable caliber on its own, with a reputation for accuracy and quite a lot of punch. Old-school Remington 44 Special with a lead roundnose 246-grain bullet was used in all three revolvers. Hornady Critical Defense 44 Special loaded with 165-grain FTX bullets clocked close to 1000 fps out of the Target Bulldog. The Smith and Taurus were fed a steady diet of Sellier & Bellot and new Black Hills 44 Magnum ammunition, both loaded with 240-grain jacketed hollowpoints, a sweet-spot bullet weight for this caliber. During the range testing, we found the lightweight 44 Magnums were wrist crackers. Here's how they performed individually:

Charter Arms Target Bulldog 74440 44 Special, $470

Our testers knew the Charter Arms Bulldog in the 2.5-inch barrel variants. What differentiates the Target Bulldog from the other Bulldog models is 4-inch barrel and adjustable rear sights. The rest is standard Bulldog, and as we have found in previous tests with the Bulldog, it is a well-made revolver for a reasonable price.

The small frame — smaller than those on the Taurus and Smith — meant the Target Bulldog was also lighter. When loaded, the Charter Arms weighed 11 ounces less than the Taurus and 14.2 ounces less than the Smith. Because the Target Bulldog is constructed of a one-piece frame, it was rugged and could take the pounding of the 44 Special. The one-piece frame and full-lug barrel had a matte-stainless finish, which was non-reflective and serviceable. Some minor tool marks showed.

On top was a ramp front sight machined as part of the barrel. The muzzle was crowned as well as rounded off to assist reholstering the pistol. Also at the muzzle was a relief cut along the lug that was attractive and trimmed a bit of weight. The rear sight was finished in a matte-black color, and the notched blade was adjustable for windage and elevation.

CHARTER ARMS TARGET BULLDOG 74440
44 SPECIAL, $470
GUN TESTS GRADE: A-

The Target Bulldog is a good-quality revolver for the price. We'd buy a variety of ammo to find the one it liked best.





The ejector purged the empties with authority, but gravity is required to empty all the chambers because the rod does not fully eject cases.

Action	Double Action
Overall Length	8.8 in.
Overall Height	5.0 in.
Maximum Width (Cylinder)	1.5 in.
Weight Unloaded	23 oz.
Weight Loaded	25.6 oz.
Barrel Length	4.0 in.
Capacity	5
Frame Material/Size	Stainless Steel/Medium
Cylinder	Stainless Steel, Fluted
Frame Front Strap Height	2.0 in.
Frame Back Strap Height	3.7 in.
Grips	Checkered Rubber w/Finger Grooves
Grip Thickness (max)	1.1 in.
Grip Circumference (max)	5.0 in.
Front Sight	Ramp
Rear Sight	Adjustable Notch
Sight Radius	5.8 in.
Trigger Pull Weight Single Action	4.0 lbs.
Trigger Pull Weight Double Action	12 lbs.
Trigger Span Single Action	2.7 in.
Trigger Span Double Action	3.2 in.
Safety	None
Warranty	Lifetime
Telephone	(203) 922-1652
Website	CharterFirearms.com
Made In	USA



Five 44 Special cartridges are squeezed into the Target Bulldog, making it the most compact of the three 5-shooters.



The front edge of the cylinder (arrow) wore a nice chamfer to assist in reholstering.



The front ramp sight is machined into the barrel, one of the cost-effective details of the Target Bulldog.

The grip was checkered rubber with slight finger grooves that all testers agreed felt good in hand and provided enough traction. The Charter Arms had the thinnest grip of the three revolvers tested, which caused a problem we get into later.

The trigger was smooth in double-action operation, but the feel of the trigger was slightly gritty compared to the slick Taurus and even slicker S&W, but most team members didn't think twice about it. The extra slickness in the trigger of the other two pistols is what costs extra. The DA pull on the Charter felt the lightest of all three revolvers. The hammer had serrations that provided adequate cocking traction by the thumb. The shooter pushed the cylinder latch forward to swing open the cylinder, and that part worked precisely, with no slop.

Elsewhere, lock up was good; the Charter Arms had about as much wiggle as the Taurus, which was not much. The front of the cylinder face wore a chamfer on the edge, which we liked, and the cylinder was relieved with fat flutes along the circumference. The ejector rod was enclosed under of barrel. Ejecting empties with the Target Bulldog was fast and easy due to the length of the ejector rod, which was knurled at the tip. With all three revolvers, full ejection required gravity assist.

Loading up the Target Bulldog with the old-school Remington cartridges, we found the light weight and small grip resulted in more felt recoil. It was not unmanageable, but it was noticeable, especially with the hot Hornady loads. Still, team members liked firing the Target Bulldog. It loaded easy and fast with the fat 44 Special cartridges, and the ejector dumped empties quickly, though gravity is needed since the ejector rod is not full length so it doesn't fully eject the cases from the chambers.

The sights were good, though the Taurus and S&W sights were better, we thought. Getting on target fast was not an issue with the Target Bulldog. Accuracy with the Target Bulldog was fair, averaging 2.5-inch groups

TAURUS 44 TRACKER MODEL 44TRACKER4SS
44 MAGNUM, $693
GUN TESTS GRADE: B

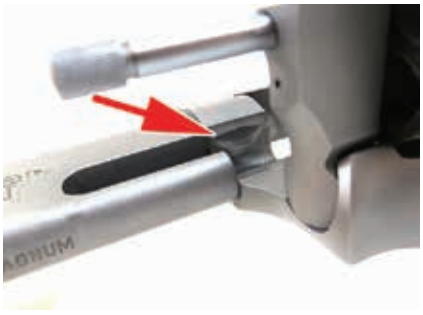
The 44 Tracker had a ported barrel and excellent grips, which made shooting the revolver pleasant even with hot loads.







Note the detent (arrow) on the top of the crane; the Taurus ejected the long 44 Magnum cases out about half way.



That semi-circular slot (arrow) is where the 44 Tracker detent locks into the frame.

Action	Double Action
Overall Length	9.0 in.
Overall Height	5.4 in.
Maximum Width (Cylinder)	1.6 in.
Weight Unloaded	34 oz.
Weight Loaded	36.6 oz.
Barrel Length	4.0 in.
Capacity	5
Frame Material/Size	Stainless Steel/Medium
Cylinder Material	Stainless Steel, Fluted
Frame Front Strap Height	2.3 in.
Frame Back Strap Height	3.8 in.
Grips	Ribbed Rubber
Grip Thickness (max)	1.3 in.
Grip Circumference (max)	5.2 in.
Front Sight	Ramp
Rear Sight	Adjustable Notch
Sight Radius	6.0 in.
Trigger Pull Weight Single Action	4.7 lbs.
Trigger Pull Weight Double Action	10.5 lbs.
Trigger Span Single Action	2.8 in.
Trigger Span Double Action	3.4 in.
Safety	None
Warranty	Lifetime
Telephone	(800) 327-3776
Website	TaurusUSA.com
Made In	Brazil



The Taurus filled the shooter's hand; testers felt the ribbed grip was excellent in helping reduce felt recoil.

44 MAGNUM RANGE DATA

Black Hills (new) 44 Magnum 240-gr. JHP	Taurus 44 Tracker 44TRACKER4SS	Smith & Wesson Model 69
Average Velocity	990 fps	956 fps
Muzzle Energy	522 ft.-lbs.	487 ft.-lbs.
Average Group	1.06 in.	0.76 in.
Sellier & Bellot 44 Magnum 240-gr. SP	**Taurus 44 Tracker 44TRACKER4SS**	**Smith & Wesson Model 69**
Average Velocity	1175 fps	1188 fps
Muzzle Energy	736 ft.-lbs.	752 ft.-lbs.
Average Group	0.69 in.	2.26 in.
Remington Express 44 Special 246-gr. LRN	**Taurus 44 Tracker 44TRACKER4SS**	**Smith & Wesson Model 69**
Average Velocity	683 fps	679 fps
Muzzle Energy	255 ft.-lbs.	252 ft.-lbs.
Average Group	2.46 in.	1.16 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 at 15 feet from the muzzle.

44 SPECIAL RANGE DATA

Charter Arms Target Bulldog	Hornady Critical Defense 44 Special 165-gr. FTX	Remington Express 44 Special 246-gr. LRN
Average Velocity	996 fps	698 fps
Muzzle Energy	364 ft.-lbs.	266 ft.-lbs.
Smallest Group	2.2 in.	2.6 in.
Average Group	2.4 in.	2.9 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 at 15 feet from the muzzle.

at 25 yards using a rest. The other two revolvers shot circles around the Target Bulldog, but they are different calibers and at different price points.

The Target Bulldog was not only the lightest of the three 5-shooters, it was the most compact. Wearing it on a belt was effortless. We used both IWB and OWB holsters to carry the Charter Arms around town concealed and along some land-trust trails for a few weeks. We swapped off and on with the Taurus and S&W and found the Target Bulldog to be the most comfortable to carry, followed by the 44 Tracker and then the Model 69.

Our Team Said: The Target Bulldog is a nice 44-caliber revolver for the money; you could get nearly two Target Bulldogs for the cost of the S&W. Accuracy was adequate and felt recoil was manageable. Many testers thought this revolver would be at home in their kit, though some opted for more juice in the 44 Magnum caliber.

Taurus 44 Tracker Model 44Tracker4SS 44 Magnum, $693

Next in order of weight was the Taurus 44 Tracker. This is a solid, well-built revolver with features that separate it from the Target Bulldog and Model 69. First, the 44 Tracker is ported, with four round holes drilled into the bore at about the 11 and 1 o'clock positions. The porting made a slight difference in reducing muzzle flip and felt recoil, our shooters said.

The second feature was a front lock-up on the cylinder. In the crane, a semi-circular detent snapped into place in the frame. It made the lock-up on 44 Tracker tight, but it was nowhere near as tight as the Model 69, in our estimation.

Third was the ribbed rubber grip on the 44 Tracker. This is a hand-filling grip with a cushioned palm swell to help reduce felt recoil. In our view, it made the Taurus more comfortable to shoot than the S&W with 44 Magnum loads.

The finish on the 44 Tracker was adequate. We did a double take on the rollmark of the name on the left side of the revolver. The name looked blurred, as if it had been stamped twice. This was an obvious aesthetic flaw that should not have left the factory. Other than that, the finish was executed well. The full-lug barrel and frame wore a matte-stainless finish, while the hammer and trigger had a more polished finish.

Above the porting was a ramp front sight machined into the barrel, with a blade pinned into it. The blade had a red insert, which made it faster to get on target than the Target Bulldog. The matte-black rear sight with a white-outline notch was adjustable for elevation and windage. These sights were a step up from the Target Bulldogs' sights, in our view. The barrel used a full lug and shrouded the ejector rod. The muzzle was



Four ports on each side of the Taurus front sight help with recoil; note lack of a crown (arrow).

tapered to assist reholstering, but it wasn't crowned. If we owned the gun, we'd crown the barrel immediately since one drop to the muzzle could adversely impact accuracy.

To open the cylinder, the shooter pushed the cylinder latch forward. It worked easily and precisely, as we expected. The latch was finely checkered, providing good purchase when pushed forward with the thumb. The hammer was also checkered and provided a sure grip. The hammer spur was wider and longer than the hammer spur on the Target Bulldog. The trigger was smoother in DA than the Charter Arms, but not as slick as the S&W's trigger.

The 44 Tracker shot well with the (relatively) inexpensive S&B ammo. It also preferred faster-moving bullets than the Model 69. The 240-grain Sellier & Bellot ammo gave excellent accuracy results at 25 yards. We thought that was due, in part, to the grip and perceived felt recoil — we simply could shoot it better. The Taurus had the opposite reaction to the slower Black Hills ammo and the even slower velocity 44 Special. With slower ammo, the Taurus had accuracy on par with the Charter Arms, which was adequate. The fast stuff was very accurate, which we liked. We actually fired more rounds than our shooting hands appreciated. Shooting 44 magnum rounds, the 44 Tracker had noticeable recoil and was not for the recoil shy.

While loading it, we noted that one of the chambers was harder to load. Perhaps a light touch with a polishing wheel would have opened it up. Like the target Bulldog, the ejector rod required gravity's assistance to have empties fall from the cylinder's chambers. Carrying the 44 Tracker was easy with an IWB holster, even though it was bulkier than the Target Bulldog due to the larger girth of the ribbed grip.

Our Team Said: The 44 Tracker has routinely graded well with team members, and this one is no different. For the price, you get a ported barrel and excellent grips to handle the bone-crushing 44 Magnum recoil. We liked it even more because it was

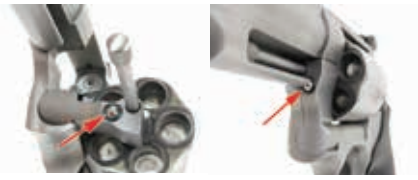
SMITH & WESSON M69 162069 44 MAGNUM, $849

GUN TESTS GRADE: A

The new Model 69 from Smith & Wesson is an excellent downsized 44 Magnum with a good, smooth trigger pull in DA and crisp in SA. The sights were well designed and user friendly.







Left: That is the ball detent (arrow) that locks up the front of the cylinder; it snaps into a V-shaped groove in the frame. Right: With the cylinder closed in the frame, note the ball detent is locked into the frame at the bottom edge of the shroud.



The Model 69 had the longest ejector rod and better dispensed empty brass.

Action	Double Action
Overall Length	9.75 in.
Overall Height	6.0 in.
Maximum Width (Cylinder)	1.6 in.
Weight Unloaded	37.2 oz.
Weight Loaded	39.8 oz.
Barrel Length	4.25 in.
Capacity	5
Frame Material/Size	Stainless Steel L-frame
Cylinder Material	Stainless Steel, Fluted
Frame Front Strap Height	2.2 in.
Frame Back Strap Height	4.2 in.
Grips	Rubber Finger Groove
Grip Thickness (max)	1.2 in.
Grip Circumference (max)	5.7 in.
Front Sight	Red Ramp
Rear Sight	Adjustable White Outline
Sight Radius	6.0 in.
Trigger Pull Weight Single Action	4.8 lbs.
Trigger Pull Weight Double Action	12.0 lbs.
Trigger Span Single Action	2.6 in.
Trigger Span Double Action	3.3 in.
Safety	None
Warranty	Lifetime
Telephone	(800) 331-0852
Website	Smith-Wesson.com
Made In	Springfield, Mass.



The front blade is pinned in place and can be changed depending on the user's needs.



Here you can see the barrel shroud and barrel; the muzzle was nicely crowned.



Left: The Smith's thick front blade and wide notch made the sights very user friendly. Center: From an operator's perspective, the Target Bulldog had usable sights that were quick to get on target. Right: The red insert of the pinned front blade helped get the Taurus on target faster.

accurate even with less-expensive ammo. All told, the one sticky chamber, lack of a crowned muzzle, and double-stamped rollmarks made us mark down this revolver.

Smith & Wesson Model 69 162069 44 Magnum, $849

The Model 69 Combat Magnum debuted in 2014 and is a departure from S&W's typical 44 Magnum revolvers. The new Model 69 is built on an L-frame, which Smith brought out in 1980 for the 357 Magnum. An N-frame revolver is S&W's typical frame used for the 44 Magnum. To fit the caliber in the L-frame, the cylinder capacity was reduced to five shots; N-frames have six shots. There is nothing special in the metallurgy of the L-frame, S&W's current heat-treating process already makes the metal plenty strong enough to handle the pressures from a 44 Magnum. S&W did, however, have to change the geometry on the cylinder crane so the cylinder would close without hitting the barrel inside the frame.

The Model 69 is constructed of stainless steel and wears a glass-bead-matte-stainless finish. Barrel length is 0.25 inch longer than the other reviewed revolvers. The two-piece barrel was made with a stainless-steel barrel shroud over a steel barrel. Unlike the other two revolvers tested, the Smith used a half lug under the barrel. Even though it uses a half lug, the Model 69 was the heaviest revolver of the trio at 37.2 ounces empty. The top of the barrel was serrated, and at the muzzle was a pinned serrated blade with a red insert. The fully adjustable rear sight also had a white outline around the notch. This was an excellent set up, according to our crew. The top strap of the frame was also drilled and tapped under the rear sight, which could also be removed and an optic attached if so desired.

The trigger, hammer, and cylinder latch were blued and contrasted nicely with the rest of the revolver's finish. The trigger was smooth, and the hammer spur offered plenty of traction to thumb back the hammer and fire in single action. The cylinder latch was precise, and we had no doubt the cylinder was locked up tightly. At the front of the crane was a ball detent that locked into a V-shaped groove in the frame. Team members liked this



Note the comfortable girth of the Taurus ribbed grip (left) compared to the smaller Charter Arms grip (middle) and the full-size S&W Model 69 grip (right).

set-up better than the cylinder lock on the Taurus. We felt it was better built and locked the cylinder into the frame better. With the cylinders swung open, we could also see the spaces between the chambers on the Model 69 and the 44 Tracker were beefier, with more metal, than the Target Bulldog. That was due to the difference in cartridges. The Model 69 also placed the cylinder notches directly between the chambers where there was the most metal. We thought the cylinder was plenty tough. The Smith also had a longer ejector rod than the other two, and it better ejected empty cases.

The Smith's hard-rubber grip with slight finger grooves and a slight palm swell had a nice texture and felt good in the hand for most reviewers. It was more filling than the Target Bulldog and less bulky than the 44 Tracker. It was a full-size grip and was the largest of the three guns tested.

In action, the Model 69 was a pussycat with 44 Special ammo. Recoil was very manageable for experienced shooters, but this is still not a novice's revolver. Change to 44 Magnum and the Model 69 was a real wrist cracker, according to some testers. The lighter weight of the L-frame, compared to the typical N-frame, made felt recoil more pronounced with hotter loads than the Taurus, in our estimation.

Accuracy with the new Black Hills ammo was excellent. Using a rest and firing in single-action mode, we were able to shoot groups under an inch at 25 yards. The Model 69 seemed to like the slower bullets. The faster Sellier & Bellot ammo, with a muzzle velocity of 1188 fps, gave larger groups. The Black Hills 44 Magnum and Remington 44 Special clocked at 956 fps and 679 fps, respectively.

We used an OWB holster to carry the Model 69 because it was longer and heavier than the other two revolvers. Carried that way as a trail gun, we liked it. Reviewers thought it would make a great deer gun for use at bow-hunting range. The Model 69 would also be at home hunting black bear over bait or running with dogs.

Our Team Said: The new S&W Model 69 is an excellent revolver that's well made and nicely finished, with very usable sights and a smooth trigger in double action that is also crisp in single action. Irrespective of its heavy price, team members would buy the Model 69 to hang on their belts.

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

Tactical Models: Mossberg 930 Versus Remington 870 Pumpgun

Every home-defense situation likely needs a shotgun — they're powerful, have suitable capacities, and are usually reliable. Of this pair, one got nearly all the way to the end before stumbling.

In the scheme of things, the defensive shotgun is the problem solver for homeowners, ranchers, ship captains, zookeepers, and anyone in need of decisive stopping power. In personal defense, area defense, and defense against animals, the shotgun reigns supreme. Powerful, effective, and versatile, the 12-gauge shotgun is an awesome defensive tool. The question is often whether the self-loader is the better choice, particularly since most of us use self-loading handguns and rifles. In this test we put two well-known and popular brands, Remington and Mossberg, to the test. We fire a version of Big Green's most popular service-grade pump-action shotgun — the Remington 870 — against the Mossberg 930 self-loading shotgun.

There are important differences and similarities between the shotguns, other than the operating systems, self-loading and manual. Each featured plastic furniture and bead front sights. Each was drilled and tapped for an optical sight.

Both shotguns produced similar patterns with Federal, Remington, and Winchester 2¾-inch full-power 00 buckshot loads. There was no difference in the patterns worth mentioning when the guns were fired at 7, 10, and 15 yards. Reduced-recoil WinLite loads showed the best pattern at short range, as they often do, while Federal Magnums began to show an advantage at 15 yards. We also fired a limited number of slugs and learned that the Remington fired to the point of aim with Federal slugs at 10 yards.

The Remington was simple and rugged, but the 930 was also a capable and effective choice. In the end, a single feeding bobble separated the pair:





With a self-loading shotgun or a pumpgun, the shooter can keep shells in the air and a lot of buckshot headed toward the target. Top is the Mossberg 930, bottom is the Remington 870. In size and feel, the shotguns were more alike than they differed.

Remington 870 Express
Tactical Pump Action 81200 12 Gauge, $442

The price reflects what this firearm cost at CheaperThanDirt.com at the time of our test. The Remington 870 Tactical Model was supplied with a black synthetic stock and forend, a plastic trigger assembly, a six-round magazine, a bead front sight, and a muzzle brake that Remington calls a tactical choke. There is a slightly less expensive variant without the tactical choke. The 81198 version features rifle-like sights. The version tested features a receiver drilled and tapped for scope mounts. On an all-round defensive shotgun, the bead front sight did not bother us at all; in fact, we found it is ideal for fast pointing at close-in targets.

Pointed teeth around the end of the muzzle brake were similar to the special door-breaching-braked shotguns used by the military. These jagged edges are intended to tear into a wooden door, break windows, and otherwise damage stuff, and the ports stabilize the muzzle during rapid firing. The synthetic buttstock featured stippling at the grip that made for good adhesion. The synthetic forend looked skimpy compared to wide wooden forends, but it fit all our hands well and performed well in all testing with all raters. The Remington's dual action bars gave good, smooth cycling.

The safety was located at the rear of the trigger guard, and its operation was positive and sure. The raters were split in their preferences between this safety and the Mossberg's tang-mounted safety. The Remington's safety

REMINGTON 870 TACTICAL 81200 12 GAUGE, $442

GUN TESTS GRADE: A (BEST BUY)

Remington's proven 870 shotgun keeps on shooting, despite a number of cost-cutting measures, such as a plastic trigger-group housing, matte finish and synthetic hardware.



Action Type	Pump	Receiver	Steel
Overall Length	39 in.	Stock & Forend	Synthetic
Overall Height	5.25 in.	Sights	Bead Front Post
Capacity	6+1	Trigger Pull Weight	6.5 lbs.
Weight Unloaded	7.5 lbs.	Warranty	2 Years
Weight Loaded	8.3 lbs.	Telephone	(800) 243-9700
Barrel Length	18.5 in.	Website	Remington.com
Barrel	Steel	Made In	USA



Right: Top is the Remington muzzle brake/choke. Bottom is the Mossberg. Both brakes are designed as breaching tools, and in a pinch, can serve as close-in pain-application devices. Patterning out of both chokes was what we expected, and we didn't see much that distinguished them.



The Remington's cross-bolt safety received high marks for ease of use and surety. You can also tell that the trigger guard is polymer. We'd prefer steel for durability, but that adds weight and cost.



The Remington's bolt release sits on the front of the trigger guard. We found the Remington to be fast and smooth during all firing drills.

location was easily manipulated by the shooter. However, it was more difficult to return to the Safe position than the Mossberg. On the Mossberg, the thumb solidifies the firing grip, but on the Remington, the firing grip is broken to place the Remington on Safe. Despite the best attempts of the raters to pick a winner, neither safety proved faster to engage or disengage. However, the Remington was more difficult by a small margin to place back in the Safe position. Tactically, this isn't particularly important.

As we have done for some time, we began the test with Winchester birdshot, just to get the feel of handling the shotgun. The six-shot tubular magazine was easily loaded. We progressed to firing a mix of buckshot loads. We did not rate the Remington superior to the Mossberg due to its six-shot magazine, because we could have ordered the Mossberg with an extended magazine. We simply chose the model that was available. Two more shells were nice to have, however, so factor that into your choice if you go with the Mossberg.

Our Team Said: The 870's 18.5-inch-long barrel handled quickly in close quarters with both reduced-power buckshot loads and full-power loads. Recoil was what we expected with full-power buckshot, but it wasn't harsh. There were no shooter-induced malfunctions, no short cycles, and no problems of any type.

Mossberg 930 Tactical Special Purpose Semi-Auto 85330 12 Gauge, $544

The price reflects what this firearm cost at CheaperThanDirt.com at the time of our test. The Mossberg 930 is a gas-operated self-loading shotgun. The 930 featured a black synthetic stock, bead front sight, and tactical-design muzzle brake/choke.

In early use, we found the cocking handle to be well designed for tactical firing. Loading the four-shot magazine wasn't a chore, and grasping the handle and quickly racking the action wasn't difficult. The grip gave good purchase, and the forend, which was slightly wider than the Remington's,

felt good in the hand and gave our testers good control.

The Mossberg cannot cycle with less than full-power ammunition, so we used a combination of Winchester and Federal 00 buckshot for most of the testing. One of the raters added a box of Sellier & Bellot loads, and these functioned fine as well.

As noted above, the position of the Mossberg 930 safety lever received good marks. Standing with the shotgun at low ready, it was easy to put the safety on Fire and address multiple targets in one smooth motion. We also noted the trigger reset was crisp and short, which allowed the 930 to slightly outpace the Remington in rapid-fire drills.

During rapid fire, we also noted that recoil was also slightly less, due in part to the gas-fed action operation and in part to the Mossberg's quarter



The Mossberg 930 was well balanced and got on target quickly, The eye picks up the bead front sight easily in rapid-firing drills. The Mossberg's gas-operated action produces less recoil than a pump shotgun when firing full-power shells.

MOSSBERG 930 TACTICAL SPECIAL PURPOSE SEMI-AUTO 85330 12 GAUGE, $544

GUN TESTS GRADE: B

We all liked the 930. It was fast handling, kicked less than expected, and was controllable in rapid fire. But we had a failure to extract, which knocked its grade down a notch. But we did not see ongoing failures that would have lead to us failing it.



Action Type	Gas-Operated Self Loader	Stock	Synthetic
Overall Length	38 in.	Forend	Synthetic
Overall Height	5.3 in.	Sights	Bead front post
Capacity	4+1	Trigger Pull Weight	5.5 lbs.
Weight Unloaded	7.75 lbs.	Warranty	2 Years
Weight Loaded	8.25 lbs.	Telephone	(800) 363-3555
Barrel Length	18.5 in.	Website	Mossberg.com
Barrel & Receiver	Steel	Made In	USA

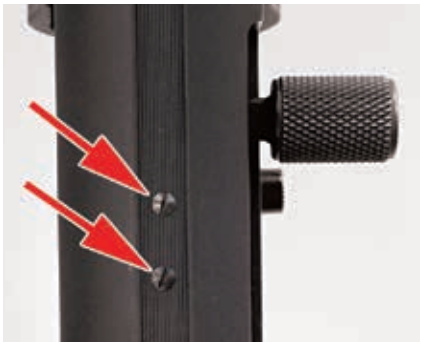
This is the malfunction suffered with the 930, a failure to fully extract a shell. The 930's failure to extract resulted in a tie up with another shell on the carrier. The bolt locked to the rear.



The Mossberg 930 will carry a payload of 5 shells.



The Mossberg 930 is drilled and tapped for scope mounts (arrows). Note the large and handy cocking handle.









Left: Our test loads were primarily full-power buckshot rounds from Winchester (top) and Sellier & Bellot (center). Below: But we also fired some Federal Premium reduced-recoil slugs in some drills. After about 20 rounds of all-out buckshot firing, most shooters don't mind powering down to a lighter load. Note that the buckshot loads both have nine pieces of shot in them.

pound of extra weight. We happily fired the Mossberg and noted that it patterned well, and our test team's overall the impression of the shotgun was excellent.

Each shotgun was new in the box when we started, but we always clean and lubricate test firearms so we know their initial state is the same. We had run the Mossberg with just over 100 shells, noted that it had done well during several range sessions, so we cleaned and lubricated it and returned it to the safe — one of the raters was going to use it as his truck gun after the last range excursion. Before handing it over to its future owner, at the beginning of what we had determined would be the last magazine we'd shoot in it, we had a malfunction. We fired a single shell, and the shotgun stopped operating. We thought, at first, it was a double feed, but examination showed the first shell was not ejected. The fired casing had been pulled from the chamber, so the failure was not ammunition related, but the extractor appeared to have lost its hold on the shell. The bolt returned to the rear and locked in place. The next live shell was tied up under the fired shell that failed to eject.

Our Team Said: When comparing shotguns, reliability comes before everything else. The Mossberg's single FTE did not meet the reliability standards of the Remington. You may decide this isn't important, but we cannot dismiss this malfunction that came well after break in was done. Also, the Mossberg requires high-performance shells to function, and this may make it unsuitable for a shared weapon for home defense. It isn't pleasant to fire full-power buckshot loads for most shooters. The Remington functions with any type of load, including light birdshot loads, full-power buckshot, or reduced-recoil 12-gauge buckshot loads originally developed for law-enforcement use. In the end, the Remington is a Best Buy compared to the Mossberg, in our view. With the 870 Tactical, we saved a hundred-dollar bill and got better reliability.

Written and photographed by R.K. Campbell, using evaluations from Gun Tests *team testers.* **GT**

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S&W Customer Service Report

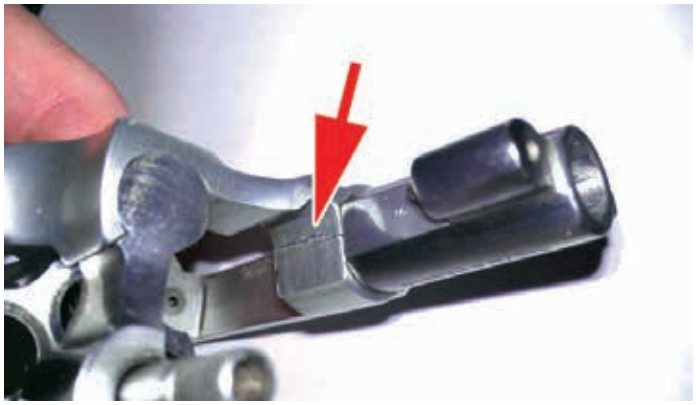
We sent an S&W J-frame to the factory for repair and received a new replacement at no cost. Needless to say, we're happy.

Gear breaks, parts wear out. It is a fact with anything mechanical, and firearms are not immune. We can all relate to horror stories of trying to deal with a company's customer service to have our firearm repaired. Some companies just do not understand that a happy customer can be a lifelong customer and brand advocate. On the flip side, you have probably heard stories from a customer who had stellar customer service and cannot say enough good things about a company that went the extra mile to make them happy. Here's one of those stories.

We purchased a Smith & Wesson 642 Airweight 38 Special knowing the frame was cracked because we wanted to repair it and experience S&W's customer service. We had one of our anonymous team members send the pistol so we would not get preferential treatment. Here's what happened. On December 26, our representative went to Smith-Wesson.com, and under the Resources panel, clicked Service for Contact Information. The website apologized in advance and asked for our patience and provided an email address. Not a good sign. We typed up a short note that read:

Smith & Wesson Service, I have a S&W .38 Special Airweight revolver, and I believe the frame is cracked below the barrel (see attached photo). The serial number is BMA3896. The numbers on the left side are A5 9X887. The numbers on the right side are 21104 241. It is also marked MOD 642. Please let me know what I need to do in order to get this revolver repaired. Thank you.

We clicked "send" and shortly received an automated reply, saying it would be up to five business days before we would receive a response. On January 6, we received an email with detailed instructions on how to pack the revolver, along with what to include: a note describing the issue and our contact info. A FedEx mailing label was included. We shipped it promptly, and with the FedEx tracking number found out it had arrived at S&W on Friday, January 10. On January 17, we received a telephone call from a representative of S&W stating the company would replace rather than repair the pistol and wanted our FFL's info so they could ship the new gun.



This is the Smith & Wesson 642 Airweight we had purchased, knowing it was in need of repair. We then shipped it to S&W for repair and received back more than we expected. Note the crack in the frame below the barrel.

It took a total of 22 days to resolve our issue. Even though it to took longer than the five days for S&W to get back to us after the initial contact (seven days), it was, after all, during the Christmas and New Year's holidays.

Our Team Said: We got a brand-new 642 at no charge — more than we expected. Obviously, we are happy with the service.

Written by Robert Sadowski. **GT**

Bushnell Elite Tactical XRS

This $2200 Extreme Range Scope with Horus H-59 reticle can help you shoot more accurately at greater distances.

Thanks to advancements in military technology, many innovative products are now available to the civilian buyer. We suspect that such products are a couple of generations behind what is actually in the hands of our elite soldiers, but in the case of the Bushnell Tactical Elite XRS riflescope ET45305ZA, with the Horus Vision TRMR2 H-59 reticle, the civilian may indeed have his hands on the cutting edge. The H-59 reticle offers "precision mil-marking clusters interspersed throughout the reticle to enable fast accurate measurements at .1, .2, .5 and 1 mil increments," according to Bushnell literature. This enables the operator to quickly range targets and also correct for windage, elevation, and even movement without necessarily having to adjust the respective turrets manually.

In a recent discussion with high-level contractors, one trainer tasked with producing snipers and designated

BUSHNELL ELITE TACTICAL XRS EXTREME RANGE SCOPE (ITEM NO. ET45305ZA) WITH HORUS H-59 RETICLE, $2200

GUN TESTS GRADE: B+

This made ranging targets and judging off-center holds easy. It was also instructive, acting as a virtual ruler that helped us repair misses in record time. Our only beef was the added cost of the reticle pushed the suggested retail price into the next level of optics, where more was expected in regards to clarity and light transmission.



Magnification	4.5-30X
Tube diameter	34mm
Objective	50mm
Eye relief	3.70 in.
FOV @ 100 yds.	24 ft.
Focal plane	First
Adjustments per click	0.10 Mil
Total clicks (Elevation)	290
Total clicks (Windage)	100
Length	14.0 in.
Weight	37.6 oz.
Sunshade	Yes
Warranty	Lifetime
Manufactured In	Japan
Website	Bushnell.com

marksmen for the military said, "I've got squads using this very scope running through mock battles right now."

Horus Vision of San Bruno, California developed the Horus family of reticles and offers a similar scope under its own brand name. The Horus Vision HDMR 3.5-21X50 scope with H-59 reticle carries a suggested retail price that is considerably less ($1600), but the Bushnell offering is more robust, as signified by its 12 ounces of additional weight. The Bushnell Elite Tactical XRS Extreme Range Scopes are built to Mil-Spec standards, including a special protective finish on its aluminum body. Our scope featured a Zero stop, or Z-stop, function, which means once the zero is set on the elevation turret, the operator can return to this baseline virtually with his eyes closed. This becomes imperative when elevation adjustments require more than one revolution. Of contemporary long-range rifle scopes built to Mil-Spec standards, the $2200 Bushnell Elite Tactical XRS Extreme Range Scope is probably the least expensive unit, making it, in our view, the most accessible of its kind for the civilian shooter interested in extreme long-range accuracy.

In terms of visual impact, we're not sure everyone is prepared for opening the box and finding a 2.9-pound scope built on a 34mm tube. The 50mm objective lens doesn't taper much, and the Flat Dark Earth finish will not blend in with a black rifle. Also, the turrets are tall, in part because they utilize caps that pull away (without detaching) for adjustment. Push them back down, and the new setting is locked. This amount of adjustment is needed because each click changes the setting only one-tenth of a mil (or 10 clicks per 1 Mil). This is an advantage at longer distances when a small change means a lot.



The Kestrel 4500NV Horus unit worked in tandem with the scope and was able to figure windage and elevation for a number of contemporary military rifle combinations or any other combination you may have.

In addition to these exterior cues, there's also a third turret, the parallax adjustment, on the left-hand side. This is used primarily to focus the target. It wasn't marked for yardage because such calibrations are merely guidelines. The shooter's eye is the final judge. But it

was marked with successive dots of increasing size and offered about 300 degrees of one full rotation. This dial did not lock nor click, but each detent felt positive, and it proved safe from unwanted movement. Focal adjustment of the reticle was achieved at the eyepiece via the diopter adjustment ring, but we can't recall anyone on our staff changing the factory setting throughout our tests. The 4.5-30X magnification ring was stable and easy to use, turning independently of the body. Each time we sighted in, we reset the windage and elevation knobs to display zero by using a coin to unscrew the locking cap, lifting off the knob, and replacing it. The locking caps contained a rubber O-ring to seal it from moisture. The zero-stop feature is controlled by two set screws and a locking ring beneath the elevation cap. We found it quick and easy to set and reset.

We thought finding 34mm rings would be a problem, but there on Brownells.com, we saw about ten different sets. None of them were a color match, but we chose 1.275-inch-high aluminum rings by Badger Ordnance with a 0.5-inch hex nut for tightening (093-000-017AK, $200).

With the shooter behind the scope, the Horus reticle presents what our shooters described as a virtual ruler in the form of a calibrated grid that allows the shooter to adjust much more precisely than visualizing a point of aim hanging in open space. For example, during our sight-ins, we were able to accurately measure how far off our initial shot was by locating the misplaced bullet hole on the reticle while holding the crosshairs on the original point of aim. Then we could dial in these adjustments without looking, and our next hit would be dead on.

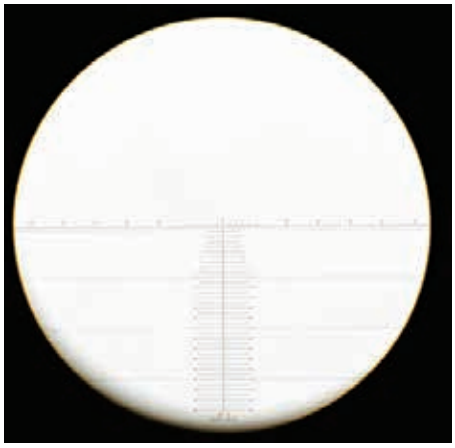
The Bushnell Tactical Elite scopes operate with the reticle in the first focal plane. This means the reticle appears larger and smaller depending on magnification. At our scope's lowest power (4.5X), the grid formed by the mil markings came together and formed a spire that pointed to the center. This offered a degree of coarse aim for center-mass hits at nearer targets. At full magnification, the grid is at its widest and most easy to read, but the ranging of targets (determining the distance to a target of known size by measuring its height as it appears against the calibrations of the vertical crosshair) may be performed with magnification adjusted to any power, minimum or maximum. This is why many precision shooters prefer the first focal plane feature.

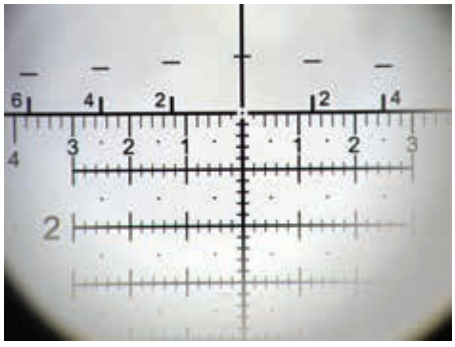
Ranging, or "rifle scope range estimation," is commonly figured by dividing target height in inches multiplied by 27.77 by the height of the target in mils as it appears in the scope. But the Horus H-59 reticle also incorporates Todd Hodnett's Accuracy 1st Speed Shooting Formula, making it possible to rapidly determine elevation hold by making use of the moving target lead lines (yes it figures lead, too) found above the horizontal crosshair, or stadia.

The Accuracy 1st Speed Shooting Formula begins with focusing on a 12-inch-square portion of the target or even a 12-inch object near the target. Place the 12-inch area on the horizontal crosshair and move it into position so that it fits tightly beneath one of the series of broken lines that rise and fall above the crosshair. This is called bracketing. Once bracketed into place, the target area will appear bisected by a vertical line rising from the crosshair with a corresponding numerical value. The amount of elevation change necessary will be half of this value. But the faster way to account for elevation change is to raise the scope so that the target is now centered on the corresponding stadia line below center.

The Horus reticle system was designed to make the user fully independent in the field. But it's also a natural for computer applications. Palm Pilot apps are available, but we chose to synchronize our scope with the Kestrel 4500NV Horus ATrag Ballistics Meter, ($590 from KestrelMeters.com).

For tests, we chose two different





With the Horus H-59 reticle in the first focal plane, it seemed to compress and expand with magnification. At its minimum 4.5X magnification (top), it could be used as a pointer for center-mass hits on close range targets. Bottom: At 30 times magnification, the H-59 reticle neatly lays out a grid of precision mil-marking clusters. We found it much easier to use than expected, but we wish it didn't add to the cost of the scope. You can use the reticle merely as a visual aid without understanding it, but the more we learned, the more fun it was to use. The horizontal lines above and below center are used in conjunction with the vertical lines to compute lead for engaging moving targets.

223 Remington rifles. We wanted to use a round that was more likely to be deflected by crosswinds so we could better evaluate the extra calibration points displayed in the Horus H-59 reticle. With a maximum range of only 600 yards to play with, we wanted to make sure our range



Pulling away the windage and elevation knobs allowed the operator to quickly make changes and lock in the new setting. Here the sealed windage cap is removed so that it can be repositioned over the turret displaying zero value. Our "Z-stop" model scope offered a zero stop function secured from beneath the elevation cap. This prevents the operator from losing track of his or her zero by seizing the mechanism before it can be turned below the preset baseline.

sessions were challenging. Test rifles were a Bushmaster AR-15 with 20-inch barrel and a Kimber Light Police Tactical bolt-action rifle. The Bushmaster was used for our short yardage tests of the adjustment turrets to find out how well we could repeat zero. The Kimber rifle had recently been rebarreled with a Shilen 1:8-twist barrel by master smith Mike Bryant (Mike@BryantCustom.com, [806] 826-5618). Fully broken in, this rifle allowed us to print 100-yard 5-shot groups measuring about 0.37 inches across on a regular basis, so we knew we had a good test bed for our scope. The AR-15 was loaded with new manufacture Black Hills 60-grain V-Max rounds, and the Kimber LPT rifle was fed its favorite Black Hills remanufactured 77-grain BTHP rounds.

Our first test was to see if the windage knobs could be turned right then left and return to the same point of zero. Test distance was 50 yards. One full turn of windage (10 mil) was available, and our first attempt showed two results. First, return to zero left us a little more than ½ inch shy of return to zero. We also noticed that our groups at the extreme left and right were tighter than our group in the center. We wondered if the mechanism was more stable when locked against its maximum adjustment and was floating when the forces of its locating springs was relatively relaxed. This condition improved with repeat tests, so we think there was an element of break-in as the springs that push and pull were used. Much more elevation adjustment is available than 10 mil (about 29 mil, or 290 total clicks), but we stuck with our 10 mils up, 20 mils down, and 10 mils up to zero procedure. Results showed that the elevation mechanism was spot on. When measuring to find the center of each group above and below our original point of aim, return to zero was within 0.1 inch. With so much capability to hold off left or right, mechanical elevation adjustment is by far the more critical measurement, and the Bushnell scored high in this area, we thought.

Switching the scope to the Kimber LPT, we concluded that the relatively short body of the Bushnell Tactical Elite caused it to be sensitive to eye relief. With a limited amount of space along the 34mm tube to mount the rings, there was little opportunity to shift the scope forward. At 30X power, a full-field view was at times difficult to maintain. For this reason, we would assess that this scope would be easier to mount on an AR-style rifle offering a longer top rail. Long-action bolt-guns might have an easier time of it by providing a longer scope mount, but one of the chassis systems such as Surgeon or Accuracy International would probably be ideal.

With the Kimber LPT sighted in at 100 yards, we decided to consult the Kestrel for come-ups for both 300- and 600-yard shots. Up to 56 rifle and load combinations can be entered, but standard information specifically for the Black Hills 77-grain BTHP rounds and other commonly used military loads such as 308 Win., 308 Win. for the short-barreled rifle or Scout style, 300 Win. Mag., and 338 Lapua were already on file and waiting for relative input. This included temperature, humidity, bore height (the differential between bore line and sight line), ballistic coefficient and velocity. Average wind speed could also be calculated and entered. The Kestrel was capable of reporting calculations in minutes of angle (MOA) or Mil, and we could read the results in one of two ways. First was by scrolling down a range card in 50-yard increments on screen. This included windage adjustments as per our previous input. Elevation adjustment was also displayed as True Bullet Drop. We liked this better because we could scroll through a separate line for actual distance and get an elevation adjustment computed to the 1/100th mil (or 1/100th MOA).

Our 100-yard zero and our shots from the 300-yard line and 600-yard lines were performed on three different days. Each day was different in terms of available light, time of day, wind speed, and direction of the wind. The barrel was not cleaned between sessions to avoid the necessity of a fouling shot. In each case, we consulted the Kestrel for the proper setting, and in each case our shots landed precisely where the Kestrel predicted. (We tried the Kestrel with a comparably priced scope offering a Mil-dot reticle and found that it was just as accurate.)

Our Team Said: The Bushnell Elite Tactical XRS Extreme Range Scope ET45305ZA with Horus H-59 reticle at $2200 is a super-specialized piece of optics. Because of its price, weight, complexity, and in comparison to other scopes in the $2000+ MSRP price range, its light transmission and clarity, we gave it a B+ grade. Also, for the experienced marksman raised on simple crosshairs, one question immediately comes to mind. Is the sight picture too busy? Not everyone can be

blessed with intuitive aim, but anyone can learn to use this scope. We were able to keep the grid in perspective and not let it block out what we needed to see downrange. If the reticle had instead been in the second focal plane and not changed with the field of view, we think it might have indeed been distracting. If we were concerned with the extra markings making us lazy in terms of developing hold-off skills, we think it was a teaching tool rather than an impediment.

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

Just Right Carbine Follow-Up

After it took a trip to the factory for warranty work, we had another look at this 45 ACP–chambered self-defense rifle.

The first time we tested the Just Right Carbine in the June 2014 issue, we had beaucoup malfunctions and gave the rifle a "D" grade. Yet, the rifle seemed to have promise. Handling was good to excellent, the light-rail well designed, and compatibility with Glock magazines gave good utility. The accuracy test was a struggle due to malfunctions. But we did not have to go through hell and high water to get it working. We sent it back to the factory. When it returned, the JRC carbine was a different bird and sang a pretty tune. And we just may have learned a few things about pistol-caliber carbines in the second test. Make no mistake, it is best when the firearm works the first time, but the Just Right Carbine has potential. Here's what we thought after the follow-up test.



With a mounted red dot, the Just Right Carbine was fast to target, with excellent shooting characteristics. Once it was working properly, we liked it.

Just Right Carbine (Glock Based) 45 ACP, $773

The JRC doesn't mimic the AR-15's gas operation, only the handling. The JR doesn't use a complicated gas or piston system, but is instead a blowback design. With a carbine using a pistol cartridge, blowback operation is feasible. For more on its features and operation, please see the original story.

At the time of our first test, we found it difficult to fire for accuracy due to feed malfunctions, but we did so, achieving a 1.7-inch 25-yard group with the HPR 230-grain FMJ. It fed this round the best, but not completely reliably. We had saved a representative sample of the same lot number of the HPR 230-grain FMJ (CheaperThanDirt.com, $26.31, 50 rounds.) We also saved a supply of the Winchester 230-grain PDX Defender (CheaperThanDirt.com, $21.70, 20 rounds.) Finally we used the Hornady 220 grain Critical Duty +P. (Cheaper than Dirt, $18.53, 20 rounds.) We were relieved to find that this time, the rifle fired normally. The first magazine was fired into the berm as quickly as we could pull the trigger. This was the HPR FMJ load. When firing the first magazines into the berm, we didn't aim. We were simply burning ammunition for function. We did not hold the stock into the shoulder. A couple of times we had a round feed into the chamber, but the bolt did not cock the firing pin. This was the equivalent of a short cycle with the Glock — shooter error. We put the gun to the shoulder and never had a problem thereafter.

45 ACP RANGE DATA

HPR 230-gr. Full Metal Jacket	**Just Right Glock Mag Carbine**
Average Muzzle Velocity	970 fps
Muzzle Energy	480 ft.-lbs.
Average Group Size	1.4 in.
Hornady Critical Duty 220-gr. +P JHP	**Just Right Glock Mag Carbine**
Average Muzzle Velocity	1166 fps
Muzzle Energy	664 ft.-lbs.
Average Group Size	1.5 in.
Winchester PDX 230-gr. JHP	**Just Right Glock Mag Carbine**
Average Muzzle Velocity	1103 fps
Muzzle Energy	621 ft.-lbs.
Average Group Size	1.7 in.

Notes: Average velocity readings were recorded by firing five-shot strings over a Competition Electronics Pro Chrono. The muzzle was 10 feet from the first sky-screen. Elevation: 815 feet above sea level. Accuracy figures are the average of three five-shot groups. For accuracy, we fired the test gun from a sandbag rest at a target 25 yards away.

JUST RIGHT CARBINE (GLOCK BASED) 45 ACP, $773

GUN TESTS GRADE: A-

After a frustrating start, the Just Right Carbine gave good results. After a trip to the factory for warranty repair, the JRC is now reliable, accurate, and useful for a variety of shooting chores. It is also among the best fun guns to own, with mild recoil, subdued report compared to a rifle, and good handling.



Overall Length (Min/Max)	32.5/36 in.	Magazine	Glock 21
Barrel Length/Twist	16 in., 1:16	Stock	AR-15 type
Overall Height w/o Mag.	8 in.	Trigger Pull Weight	7.75 lbs.
Length of Pull	14.25 in.	Warranty	2-Year Limited
Weight Unloaded	6.8 lbs.	Telephone	(585) 396-1551
Capacity (Glock Mags)	13 to 30	Website	JustRightCarbines.com
Action & Barrel Finish	Black	Made In	USA

We reshot the test with the same lots of the original loads: the Hornady 220-grain +P, the Winchester PDX 230 grain, and the HPR 230-grain FMJ.



The occasional +P cartridge exhibited high pressure signs, top. This is SOP for blowback carbines. Case-head expansion was normal.



Moving to the two hollowpoint loads, a magazine of each gave similar results. The rifle wasn't proofed yet, but it earned a day at the range.

The same Tasco red-dot sight previously used was mounted. The rifle was fired with a full 50-round box of the HPR 230-grain FMJ load. There were no failures to feed, chamber, fire, or eject using the supplied Glock 13-round magazine. This time we had a much better feel for the carbine. The rifle allowed a trained shooter to reach to the end of the forend and control the carbine in rapid fire and traverse between targets. The Just Right Carbine would be a formidable home-defense firearm. Considering the energy exhibited by 45 ACP loads in this carbine, the JRC equals or exceeds common 44-40 WCF rifle ballistics with factory ammunition. During offhand testing, we also fired 20 rounds each, ten to a magazine, of the Winchester PDX and the Hornady 220-grain +P loads. Recoil remained modest, but we knew that we were firing a +P with the Hornady load. By the time we settled into bench rest firing, we had fired 200 rounds in the JR Carbine, and we enjoyed the ride.

It is a rule of thumb that you do not feed +P loads into blowback pistol-caliber carbines, but that wasn't the cause for the malfunctions with the Hornady +P loads during the first test. During this follow-up, one of our raters picked up the brass for handloading. We routinely check fired brass for excess pressure and firing pin drag marks, and in this case found that a number of the Hornady cases, about 15 percent, showed high-pressure signs. Case-head expansion was not excessive, however. If you need to take advantage of the Hornady load's 664 foot-pounds of energy, use this load sparingly.

We also added a full box of Remington's 230-grain UMC load after we ran out of the original test loads. Function was flawless, and the rifle performed well with this load.

Settling down to bench-rest fire, we tried the HPR 230-grain FMJ first. The original five-shot average had been 1.7 inches. This time, the accuracy standard was improved, 1.4 inches. The Hornady averaged 1.5 inches, compared to the Thureon's 1.3-inch average with this load. The Winchester averaged 1.7 inches in the JRC, compared to the Thureon carbine's 1.4 inches. The results were consistent, which make us believe we were shooting right up to the potential of the carbine.

The Just Right carbine also showed a slight advantage in muzzle velocity and energy compared to the Thureon.

Our Team Said: Though the accuracy demonstrated may not be

impressive compared to an AR-15, the Just Right Carbine will make a single ragged hole at typical personal-defense distances. Recoil is light, and muzzle report is much more subdued than the .223. As for interchangeability of magazines, if you own a Glock 21, the Just Right is a good idea as a partner carbine. In the end, we find the Just Right Carbine what we were hoping for in the beginning, a reliable and useful firearm.

Written and photographed by R.K. Campbell, using evaluations from Gun Tests *team testers.* **GT**

A Trio of Mako AR Accessories

We tried out the FAB Defense Survival Buttstock, the Monopod Buttstock Addon, and the Magazine Well Grip/Funnel.

The list of extras and "hop-up" parts for the AR-15 never seems to stop growing. Some of these parts are just for looks, but others do have a lot to offer. In the case of adjustable-length buttstocks, many are designed to improve cheek weld and offer a more secure, wobble-free locking system. We bought a pair of $122 FAB Defense Survival Buttstock GL-MAG units from TheMakoGroup.com to see what utility they might give us over a standard stock. We installed them on two different AR-15 carbines.

Promotional materials for the stocks said they provided a spare magazine well located immediately forward of the buttpad. The obvious advantage is that you can pick up the rifle and have an extra magazine in tow. In addition to extra rounds, a loaded magazine located in the buttstock provides ballast, allowing the operator to re-balance the rifle as he prefers.

The Survival Buttstock will stow any length or capacity AR-15 magazine (but not magazines for AR-10s).

The Survival Buttstocks arrived with 10-round magazines in place. The magazine-release buttons were located on the left side of the buttstocks.

We installed one stock on a carbine built to Mil-Spec standards and the other on a commercial-size tube. Installation was by standard procedure, simply slipping them on the buffer tube. The initial inlet of the Survival Buttstocks had some extra material that was not apparent when installing on the commercial-size AR-15. It glided smoothly into place, yet didn't wobble at all on the buffer tube. Getting the buttstock onto the buffer tube of our Mil-Spec AR-15 was more difficult. But a call to Mako's service rep assured us to go ahead and be more forceful. Once past the extra detent, the buttstock was secure and still moved easily forward and back.



Our Team Said: The Survival Buttstock was very comfortable against the shoulder and cheek. Operation proved solid and smooth. The primary difference from the standard buttstock was the length-of-pull adjustment release lever. Instead of pinching it upward from behind its pivot point, we had to press the lever from the leading edge of the buttstock. We'd trade this small difference for the extra magazine. Actually we'd buy it just for the addition of the flat surface supplied by the magazine basepad

Houston-based instructor Joe Woolley (FortTexas.us) has up to 61 rounds of 223 Remington at his command thanks to the addition of the $122 Survival Buttstock from TheMakoGroup.com (left arrow). No need to strap on a belt and magazine pouch. The $25 Magazine Well Grip/Funnel (right arrow) offers a welcome alternative to adding a vertical forend grip.





AR-15 buttstocks are notorious for the lack of surface area beneath the pad. If you need another reason to buy the Survival Buttstock beyond the extra rounds, it's to get the flat surface added by the basepad of the supplied 10-round magazine, above and detail, left.



Above: With support under the front of the carbine, the installed Monopod Buttstock Addon makes target alignment easier. This means you can wait out the wind with the rifle resting at or near the right height on target.



The Survival Buttstock adds an extra magazine well for on-rifle storage. The magazine release is the pushbutton directly above the magazine well (arrow). The Monopod Buttstock Addon adds about 1.2 inches in stock length and is an easy slip-on install. The monopod is adjustable, with two stages of extension offering 2.8 inches to 4.2 inches in additional height.

located at the rear of the buttstock. We found when shooting prone or from a bench, the basepad of the 10-round magazine offered a flat surface for additional support. In our view, this was a big advantage because the bottom side of standard AR-15 buttstocks are notorious for being void of any such platform.

GUN TESTS GRADE: A

We also tried another upgrade from the Mako Group. This was the $97 Monopod Buttstock Addon (item MBA). The Addon is a separate buttpad with a two-stage adjustable-height monopod. The monopod rides hidden until pushing a button on the left side releases the first stage via spring tension to its maximum length of about 2.8 inches. Monopod height was adjustable in smaller increments by pressing the release and letting it go at the desired length. The second segment was extended by rotation. Full extension of both segments totaled about 4.2 inches in height.

The Addon replaced the original buttpad completely. The buttpad retention lever was visible from inside the magazine well. Push it in with a screwdriver or other object, and it slides right off. The Addon lengthened the buttstock by about 1.2 inches overall.

Our Team Said: Monopods are best used on hard surfaces or a shooting mat. During long waits between shots, you can set the weapon pretty close to how high you need the stock for precise aim. The MBA proved sturdy, easy to deploy, and there was a lot of available adjustment. Installation was simple and reversible if so desired.

GUN TESTS GRADE: A

Our last Mako Group upgrade was the $25 Magazine Well Grip and Magazine Funnel (item MWG). This added three finger grooves to the forward surface of the magazine well. The plastic MWG consists of two halves connected by three screws to clamp it over the magazine well of the AR-15 lower. This also added a funnel to the mouth of the well. There's a cutout window on one side so it won't block out the serial number of the lower frame. During installation, the MWG had to be ground to fit over our Bushmaster lower, but it went on our DPMS carbine without modification.

Our Team Said: The magazine well grip-technique is a good alternative to attaching a vertical forend grip. It's also more comfortable if you have a bad shoulder and have difficulty extending your arms.

GUN TESTS GRADE: A

Written and photographed by Roger Eckstine, using evaluations from Gun Tests *team testers.* **GT**



The Magazine Well Grip and Magazine Funnel, detached at left and installed, right, adds three finger grooves to the forward part of the magazine well.

New UZI Pro Pistol to Debut

This version will come with a side-folding stabilizing brace.

IWI US, Inc. has introduced a new UZI PRO Pistol to the American consumer market. The UZI PRO SB UPP9SB is notable for its side-folding stabilizing brace.

Two versions of the UZI PRO Pistol will be available in the U.S. The UZI PRO SB UPP9SB has a MSRP of $1,309. It has a side-folding stabilizing brace produced by SB Tactical LLC, designers and manufacturers of the original SB15 and SB47 Pistol Stabilizing Braces. With the side-folding brace, the UZI PRO SB pistol can be fired with or without the stabilizing brace extended.

The basic UZI PRO Pistol UPP9S has an MSRP of $1,109. Based on the UZI submachine gun, the UZI PRO is a 9mm Luger semi-auto with a polymer pistol grip. The cocking handle is located on the receiver side, allowing for a full-length Picatinny rail on the top receiver cover. A short Picatinny rail is also incorporated into the polymer body, mounted below the barrel.

The UZI PRO and UZI PRO SB feature three safety mechanisms; a conventional manual thumb safety, a firing-pin block and a grip safety that must be fully depressed before the gun can be cocked and fired.

Simple maintenance on the UZI PRO requires no special tools for field stripping. Each UZI PRO Pistol comes with one 20-round and one 25-round magazine.



IWI US, Inc. is the USA-based subsidiary of Israel Weapon Industries (IWI) Ltd. of Ramat Hasharon, Israel and a member of the SK Group, companies that operate in the global defense and law enforcement markets. The IWI US line of products includes several configurations of the TAVOR SAR, Jericho 941 pistol, UZI pistol and Galil ACE rifles and pistols.

UZI PRO SB UPP9SB Specifications

Caliber:	9mm Para
Operation:	Blowback, closed bolt
Barrel:	Cold-Hammer forged CrMoV, 4 groove 1:10 RH twist
Barrel Length:	4.5 in.
Overall Length:	9.5 in.
Weight:	3.66 lbs.
Magazines:	1-20 & 1-25 round
MSRP:	$1,309

Magnum Research Introduces All-Stainless Desert Eagle

For the first time, Magnum Research's Desert Eagle 50 AE can now be purchased with an all-stainless-steel frame, slide, barrel, and frame rail. A second stainless model with an integral muzzle brake will also be available in 2015.

Frank Harris, VP of sales and marketing for the company, said, "The Desert Eagle has always been considered a bit of a beast, and now, with the stainless-steel frame, slide and barrel, black appointments, and the new Picatinny bottom rail for accessories, it has an overpowering appearance at the gun counter and at the range."

Harris noted that it will also be much easier to repair minor scratches on the stainless DE than on the company's custom-finish models.

For 2015, the Desert Eagle all-stainless-steel model is offered in either a standard 6-inch barrel or with an integral muzzle brake. The integral muzzle brake is also offered on the DE50, DE44, and the DE357 6-inch-barrel models in black.



MSRP on the new all-stainless-steel model DE50SR, top, is $1793 and for the integral muzzle brake model DE50SRMB, bottom, MSRP is $1931.

The integral muzzle brake will replace the add-on brake which Magnum Research has offered for several years. The integral muzzle brake offers significant recoil reduction, less muzzle flip and a new streamlined look. In addition, since the overall length remains the same as the standard 6-inch-barrel model, the same holsters will fit the integral brake model. The integral muzzle brake model also means it can be offered at a lower price than the add-on muzzle brake.

MSRP on the new DE50IMB, DE44IMB, and DE357IMB black with integral muzzle brake is $1742 and $1710 respectively.

Ruger Introduces 22 Charger Takedown Pistol

For 2015, Sturm, Ruger &

Company, Inc. will offer a new 22 Charger Takedown pistol, which like the original Charger handgun introduced in 2007, is built on the Ruger 10/22 platform.

The company is also producing an updated version of its original 22 Charger pistol this year.

The new 22 Charger Takedown model employs the quick-disconnect feature found on the full-sized 10/22 Takedown rifle that allows the firearm to be disassembled quickly and easily. Simply push the recessed lever in the forend, twist the subassemblies and pull them apart.

Weighing around 3.2 pounds, the new 22 Charger pistol (Model Number: 4917, MSRP $309) has an overall length of 19.25 inches and features a 10-inch precision-rifled threaded barrel with a ½"-28 thread pattern. The redesigned brown laminated stock sports a standard A2-style pistol grip, which makes the platform easy to customize with most modern sporting rifle grips.

The matte-black receiver features a factory-installed Picatinny rail, which provides ample space for numerous types of optics, anything from scopes to red-dots.

Also new and included with both models is the BX-15 magazine, a 15-round version of the BX-25 magazine. The BX-15 is the right height when shooting the Chargers with the included bipod prone or from the bench and also fits all other 10/22 models.

Neither Charger model is approved for sale in Massachusetts or California.



The 22 Charger Takedown (Model Number: 4918, MSRP $409) features a Green Mountain laminate stock and comes in a custom hard case. An adjustable bipod is also included.



MSRP on the Auto Ordnance 1911BKO is $517.

Auto Ordnance Introduces Budget-Priced 1911BKO

Pomona, NY–based Kahr Firearms Group has introduced the Auto Ordnance 1911BKO.

The Auto Ordnance 1911BKO frame incorporates GI specs and features a matte-black-finish frame, barrel and slide. The carbon-steel slide, sear, and disconnector are machined from solid bar stock and heat treated to assure durability and long life.

The low-profile sights feature a blade front and a rear drift adjustable for windage. The grip is brown checkered plastic.

This .45 ACP has a 5-inch barrel and an 8.5-inch overall length. Weight is 39 ounces. The 1911BKO is made in the USA and ships with one 7-round magazine. The BKO has a thumb safety, grip safety and firing pin block.

Recover Tactical's Grip/Rail System for Beretta 92/96

Recover Tactical's new Recover BC2 grip and rail system for the Beretta 92/96 series of pistols is now available. The $50 BC2 adds a functional picatinny rail to the Beretta and can be installed in about three minutes without a gunsmith.

The BC2 grip is manufactured in Israel from glass-reinforced polymer and will not scratch or damage a gun it is installed on. It adds about 65 grams to the gun weight, but doesn't change grip thickness.





The Recover Beretta grip and rail system is currently available in black, desert sand, OD green, and digital camo and comes with a limited lifetime warranty.

Ruger Rolls Out New LC9s Pro

Sturm, Ruger & Company's new Ruger LC9s Pro pistol is based on the



Like the LC9s reviewed in this issue, the LC9s Pro has a striker action, a capacity of 7+1 rounds of 9mm Luger, and uses the same holsters, magazines, and accessories as the LC9s.

— *continued from page 31*

LC9s, a compact striker-fired 9mm pistol that the company released in July of this year and which is reviewed elsewhere in this issue. The LC9s Pro contains many of the same features, but is offered without the thumb-operated external manual safety and magazine disconnect.

The Pro version is designed to meet law-enforcement specifications as a back-up gun for high-stress situations in which there may not be time to deactivate an external manual safety. The absence of a magazine disconnect safety also is a benefit for tactical reloads that allow the user to engage a target with one round remaining in the chamber and the magazine out of the gun for reloading.

It also features a blued, hardened, alloy-steel slide, a high-performance glass-filled nylon grip frame with texturing, a grip-extension magazine floorplate to improve handling, and a windage-adjustable three-dot sighting system.

The 17.2-oz. Ruger LC9s Pro has a 3.12-inch barrel, an overall length of 6 inches, a height of 4.5 inches and a 0.9-inch width. Other performance features include a short trigger reach, a visual loaded chamber view port, an internal striker blocker, and an internal trigger safety, which requires finger pressure on the trigger to fire.

The LC9s Pro ships with one 7-round magazine, a soft case, and a cable-locking device.

Compiled by Gun Tests *staff.* **GT**

COMING UP IN GUN TESTS

- High Capacity 357 Magnum Carry Revolvers. Are 8-shot revolvers worth the expense? We pit the higher-capacity S&W Performance Center Model 627 ($1079) and the S&W Performance Center Model 327 ($1309) against the tried-and-true 6-shot S&W Model 686 ($850).
- Commander Shoot-Out: Honoring a request from the reader, we test the Colt XSE Commander and the new Remington R1 Commander for quality, accuracy, and reliability — and value.
- Personal Defense Rifles: Beretta ARX 100 Vs. Colt's LE6920.
- Bullet Penetration in Homes: We test penetration of bullets in pine boards, bricks, cinder blocks, wallboard, and other media with shotgun, pistol, and rifle rounds.
- Gauging the 20 for Home Defense: While a comparison to the 12 gauge is inevitable, we look at the 20-gauge shotgun on its own merits.
- Firing Line: Gun Tests Readers Sound Off.

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