GUN TESTS®

THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

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308 BOLT-ACTION RIFLES

Tested: Tikka T3x Lite Stainless JRTXB316, $748; Remington's Model 7 CDL 26423, $798; Ruger's Hawkeye Compact 37139, $691; and the Winchester Model 70 Featherweight Stainless 535234220, $951.

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22-CALIBER WHEELGUNS

These rimfire revolvers from Ruger, S&W, and Taurus offer a lot of plinking fun and inexpensive training. One costs much more but is very nice, one is light enough to be a kit gun, and one has swappable cylinders. See which is which on... ● Page 17



SHOULDER HOLSTERS COMPARED

We examine several nicely appointed rigs that make toting even a heavy gun more comfortable. But there are quirks to take into account with this specialty carry mode. ● Page 25









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DOWNRANGE

A BLUEPRINT TO TAKE YOUR GUNS



Todd Woodard

A **document** produced jointly by the Alliance for Gun Responsibility, the Giffords gun-control group, and the Educational Fund to Stop Gun Violence is raising alarms for the Second Amendment Foundation (SAF), and GUN TESTS readers should also be aware of what's in this playbook.

SAF has learned about a new "toolkit" for gun-control lobbying groups to help them campaign for passage of "Extreme Risk Protection Orders," aka red flag laws or ERPOs. I have written previously about how dangerous the ERPOs are to gunowners' rights, and how gun confiscations in California and Florida are much higher than anticipated.

The ERPOs are designed to take firearms from people based on allegations from family members, intimate partners, or others. They run roughshod over due process rights, much less the 2A. The ERPO document lays out a how-to strategy to expand red-flag laws in additional states and jurisdictions.

SAF founder and Executive Vice President Alan M. Gottlieb said of the gun-grabbing ERPO manual, "There's a lot in it about taking someone's guns, but only two paragraphs about returning firearms to their rightful owner."

Gottlieb takes issue with many parts of the document, pointing out the inclusion of a letter from a California sheriff's official that referred to a May 2014 multiple murder in Isla Vista, California as "a shooting spree."

"Six victims in that rampage were stabbed or slashed to death," Gottlieb recalled. "It also suggests the shooting occurred at the University of California, Santa Barbara campus, but it didn't. The term 'gun violence' appears throughout, but there's not a word about 'knife violence' nor any mention of the fact that the killer bought three firearms, all legally with background checks and waiting periods.

"We're all for preventing violent crimes and tragedies such as suicide," he added, "but there are genuine civil rights and due process concerns related to the use of such orders to disarm someone, following a court hearing they may not even be aware of, before they have a chance to defend against any allegations. This guide asserts guns are 'temporarily' removed, but that is not really the case in some instances."

The ERPO document calls itself a "toolkit" for saving lives, but it talks more about taking guns from people than protecting their rights and means of self-defense. So far as I can tell, this is just another gun-control strategy guide aimed at preventing gun ownership — infringing, you might say — rather than preventing tragedies. **GT**

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A Top Youth-Shotgun Pick

Reader Teri inquires about a light-kicking shotgun for her granddaughter to use in high-school trap-and-skeet leagues. Reader Anthony inquires about ratings of single-shots for bug-out bags.

Women and Youth Girls: Which Shotguns and Which Loads?

Hi, here in Minnesota, there exists a very successful State High School Trap and Skeet League. Grades 6-12, 300+ schools and last I read 8000+ students. Was wondering if you've ever thought about evaluations of shotguns and loads for the slightly built kids. I know some use a 20 gauge and ⅞-ounce loads. It's a lighter gun, but I'm thinking the recoil might be about the same as a 12 gauge shooting ⅞-ounce loads. My granddaughter is now 12 and is getting her Minnesota firearms-safety training certificate, and I'd like to buy her a shotgun. Both for trap/skeet/duck. Any recommendations? I haven't found any yet on the MNClayTarget.com site, but I'll be emailing them, too. Thanks very much! **— Teri**

Hey, Teri, thanks for asking. We've tested several shotguns that might be worth considering, depending on exactly how "slight" your granddaughter is. One of the best is likely the CZ 720 Reduced Length Shotgun No. 06039 20 Gauge. It is a gas-operated semi-automatic built on an alloy receiver with Turkish walnut forend and stock. It is the product of the Huglu plant in Turkey. The 720's 24-inch barrel was chrome lined with a black, hard-chrome finish on the outside. The barrel was topped with a vent rib that was scored laterally with fine lines to diffuse glare. Our 720 was fit with a rubber buttpad that was only about 0.4 inches thick at its center and the heel, or top of the pad, was fit with a hard cap. This is often referred to as a Sporting Clays design. Pachmayr sells a similar pad and calls this feature



the Speed Mount Heel because its smooth surface helps the pad slide into position rather than catch on clothing. Nevertheless, we can report that the 6.2-pound CZ shotgun seemed to shoot with the least amount of recoil when compared to our other shotguns. Our junior shooter preferred the CZ 720 Reduced Length shotgun because it "kicked" the least and seemed to offer the most natural flow. Also, the Mossberg 505 Youth Pump-Action Shotgun 57110 20 Gauge is an overlooked gem. Another version of the shotgun

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.

has an adjustable synthetic stock with inserts at $406. The fit wasn't bad for most raters, and the pump action with the EZ Reach forearm is very fast. The rib, dual beads, and choke tubes were pluses. When capacity, reliability, and versatility are considered, the Mossberg is a winner. Also, we'd just ask around. Other shooters will likely offer recommendations that have proven themselves, and maybe even let your granddaughter try them out. Hope this helps.

— Todd Woodard



Single-Shot Shotguns

I am interested in single-shot 12-gauge shotguns for bug-out guns. There are a number out there. I discovered the $99 deal that Wal-Mart sells. I have read some good reviews about it. Then I discovered the Midland Backpack single shot [*shown above*], which seems to me to be a better buy. For $149, you get all the things you would probably add to the Wallymart gun. Now Classic Arms and others are selling an $89 version made by ATI. These are all imports because the American Savage and other brands are gone. Have you reviewed these single-shot guns? If so, could I obtain a copy of the review? If not, would you consider doing a side-by-side test?I think it would be interesting. Not all of us can afford (or now legally keep) an AR-15-type weapon, but there is great utility in a 12-gauge single shot for hunting and limited self defense. **— Anthony**

We have tested single shots in the past, but not for this specific use. Thank you for the idea. — tw

Re "Electronic Hearing Protection: We Test Four Units Ear to Ear," Nov. 2019

As an Ear, Nose, & Throat physician, I see patients daily who suffer life-altering sensorineural hearing loss (SNHL) from shooting with no hearing protection or with inadequate hearing protection. So thank you for publishing this very applicable article! The last statement, however, is cringe-worthy: "We'd recommend using ear plugs in indoor ranges when shooting an AR-15 or magnum revolver." I would implore all the readers of this excellent magazine to always use both plugs and muffs. The combination is much more effective at preventing SNHL, and even the most expensive combination one could afford is thousands of dollars cheaper than hearing aids. A brief explanation follows for those interested.

In the beginning of your article you accurately write that one-time impulse sounds of 140dB or more can permanently damage hearing. Additionally, prolonged exposure to sounds over just 85dB can cause hearing loss. You also wrote that loud gunshots can easily be over 160dB. The test performed on the effectiveness of the test electronic ear muffs used 15dB as the minimum level of protection. That would give a best-case scenario of 145dB of noise, which is enough to cause permanent hearing loss with just one exposure! Surprisingly to some of us, the meager 22 LR pistol has a report of about 140dB! Realistically, most of the muffs tested have a Noise Reduction Ratio (NRR) of at least 23dB, yielding an exposure level around 140dB with louder firearms. (This is overly simplified math, as the amount of decibel reduction doesn't really equal the difference, but for illustration sake, we'll skip the logarithmic math that I forgot years ago.)

The highest NRR available in muffs is 31, while the highest NRR in plugs is 33. Combining them does not yield an NRR of 64, but more like mid-30s to 40. While my audiology friends will say that still doesn't yield enough protection to prevent hearing loss with long-term exposure, the combination is certainly more effective than either by itself. Your choice of electronic



muffs is excellent, as they allow communication with plugs in. In summary, instead of an apple a day to keep the doctor away, please always use both plugs and muffs to keep the hearing aids away, even when outdoors shooting "quieter" guns. I love your magazine. Please keep up the good work. **— Justin**

Thank you very much for the insights. A word to the wise is valuable, if the recipient can hear it. — tw

Paper Tears

Hello, first I love your magazine! I have been a subscriber for many years now and always love reading it. My problem is, some time back you changed the paper GUN TESTS is printed on. Since that change, I don't think I have received one copy that is not damaged. They're usually torn or part of covers are gone. I didn't have a issue with this before the change. I don't know if anyone else is having this problem, but I wouldn't be surprised if they were. Maybe shipping in some type



of envelope would help. Anything you can do would be greatly appreciated because I keep all my copies in binders for future reference. **— Jonathan**

Hey Jonathan: Sorry this keeps happening. The paper has been glossy for several years, so it displays color better, but I can't think of a reason for it to be less durable as a result. But any time you have a problem like this, call customer service at 1-800-829-9084, or email Customer_Service@GunTests.info, and we'll get a new one on its way. — tw

Re "Tips For The Older Shooter," March 2020

I see in your article you noted that a red-dot sight may help with



visual acuity. Last year I attended a seminar for older shooters at the NRA Annual Meetings. Dr. Joe Logar pointed out that for older eyes, green lasers are preferred over red lasers. The red lasers tend to disappear in bright light as compared to green lasers, and the green spectrum is easier for older eyes to acquire than red. After the seminar I bought a green laser to replace the red laser on my carry gun. **— John**

Re "40 S&W Compacts: Taurus, Kahr, S&W, Springfield, & SIG," September 2019

Thoroughly enjoyed the small 40 S&W article. I had suggested it long ago. Very pleased to see that the Springfield was your pistol of the year also! I had to go buy one, especially since this was the gun I was most interested in.

In regards to your electronic earmuff comparison article, I enjoyed it, and I ended up buying both a Walker's Razor Slim and a Howard Leight Impact Sport pair. I wanted to give you my 2 cents worth. My H-L muffs had some hiss in the left ear even at low volumes, whereas the Walker's did not. The Howard Leight pair seemed to give me a little better sense of where a sound was coming from, and from what angle, which could be very advantageous in hunting.

My chief findings are related to me being more of an audiophile. I played MP3s through both of the headset inputs, which was not mentioned in your review. Observations: The Walker's had a much clearer sound, with rich bass and fuller dynamic sound than the H-L. In addition, the Walker's played using only the power of the player, thus saving battery power of the muffs themselves (it appears). The H-L, on the other hand, enables the volume to be controlled by the headset, but it does use batteries. As for me, I'd recommend the Walker's for the better sound quality and possibly better battery life. **— Frank**

Yes, thank you for the 40 S&W article idea back in May 2018. We really do create line-ups based on readers' interests, though it may seem to take forever to appear. We also appreciate the follow-ups on hearing protection. — tw

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

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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 other than your first name, but we may need to contact you about material in your letter.* **GT**

308 Bolt-Action Rifles: We Compare Four Head to Head

We looked at hunting-suitable choices from Tikka, Remington, Ruger, and Winchester to find out what shot, and what did not. We found a strong Best Buy, and one rifle looked fabulous and shot pretty well.

Many associate the 7.62x51mm cartridge with the American M-14, Belgian FN-FAL, and German G3 rifles. It was, indeed, developed with a military application in mind. Being approximately one-half inch shorter, as well as lighter, than the venerable 30-06 Springfield round, troops could carry more ammunition for the same weight and the bullet was only about 100 feet per second (fps) slower than the 30-06. Good energy in a cartridge that would fit in a short-action receiver — what's not to like? Winchester thought so, too, so, in 1951, years before it was ever adopted in a military rifle, the company introduced it as the 308 Winchester, and it has been one of the top-selling cartridges in the free world ever since.



Here's Our Pick of the four rifles at the range: the Winchester Model 70 Featherweight Stainless chambered in 308 Winchester shot great and looked great. Gear used included a LabRadar chronograph (mylabradar.com), a Caldwell Tack Driver front bag from MidwayUSA.com (product 1015049090), and a T.A.B. Gear Rear Bag V2 with heavy fill, available from TABGear.com. The range was American Shooting Centers in Houston.

The military not only liked the space and weight savings the cartridge provided, they found out it could be very accurate. When the Marines formally added sniper units to their TO&E (Table of Organization and Equipment) in 1977, they armed their snipers with the M40A1 rifle chambered in 308. The Army followed suit in 1985 and provided the M24 rifle system chambered in 308 for its soldiers. Both are outstanding weapons that have done a great job for their users. These two models and many of the other sniper rifles utilizing the 308 round tend to be heavy firearms with long, thick barrels. Heavy is great when you are trying to reduce recoil and, thus, speed up a follow up shot or spot misses. It can be problematic when carried up a mountain by a hunter who is not a world-class athlete.

Recently, one of our readers contacted us and asked about a comparison of 308-caliber hunting rifles — lightweight hunting rifles — and specifically asked that we include the Tikka T3x Lite. We thought that sounded like a great idea. So, we rounded up a quartet of smaller, thinner, easier-to-carry 308s. We wanted to see if they could hold a candle to those heavy-barreled monsters everyone loves to shoot but few love to tote. Our test 308 Winchester rifles included the *Tikka T3x Lite Stainless JRTXB316, $748; Remington's Model 7 CDL 26423, $798; Ruger's*



Tikka T3x Lite Stainless JRTXB316



Remington Model 7 CDL 26423



Ruger Hawkeye Compact 37139



Winchester Model 70 Featherweight Stainless 535234220

Hawkeye Compact 37139, $691; and the *Winchester Model 70 Featherweight Stainless 535234220, $951.*

How We Tested

All shooting was done at American Shooting Centers in west Houston. Barrels on these lightweight rifles are a bit thin and tend to heat up quickly, so we used multiple three-shot groups instead of our normal five-shot tests. Barrels were allowed to cool between strings. All groups were shot at 100 yards from a solid bench using a Caldwell TackDriver front rest ($43 from MidwayUSA.com) and a T.A.B. Gear large rear bag ($30 from TABGear.com) with the heavy fill. Muzzle velocity was determined using a LabRadar chronograph. Group size, muzzle velocity and muzzle energy were tabulated and are found in the Range Data table.

For glass, we chose a Vortex PST II 2-10x32 scope with an EBR-4 reticle in MOA. Vortex is well known for the quality and durability of its optics, and deservedly so. This model is one of the company's "compact" line. Though not exactly compact in the truest sense, it has a smaller 32mm objective lens which, we felt, still transmitted more than enough light for hunting situations. Clarity was outstanding, and the reticle had 2-minute-of-angle (moa) tick marks on both the horizontal and vertical crosshairs, making holdover adjustments on shots very easy. On a first-focal-plane scope such as this, the size of the reticle, and thus the usability, diminishes quickly as the magnification is decreased. We found that we could see and use the reticle properly with the power ring set as low as 4X. This model also provides precisely-adjustable external windage and elevation turrets. These may be lightweight rifles, but that doesn't mean they are all close-range rifles, and we wanted optics that would make it easier for us to reach out to substantially more distant targets. We were very pleased with the scope and would give it an "A" grade.

Ammunition included a range of common hunting-bullet weights, such as Hornady's CustomLite 125-grain SSTs, the SIG Sauer Elite 150-grain solid-copper HTs, and Black Hills' 168-grain boat-tail hollow points. Here's how they functioned in our rifles.

Tikka T3x Lite Stainless JRTXB316 308 Winchester, $748

Sako rifles, made in Finland and imported by Beretta USA, are world renowned for their quality and accuracy. Tikka rifles are made by Sako, and, while they are a bit more of a price brand, they sacrifice little of the quality and accuracy with which the Sako's are built. Receivers basically come in one length, so a 308 and a 30-06 will use the same action — the usable length of the magazine is just shortened or lengthened as necessary. The barrels are produced

308 WINCHESTER RANGE DATA

Hornady 308 125-grain SST Reduced	**Tikka T3x Lite**	**Ruger Hawkeye**	**Remington Model 7 CDL**	**Winchester Featherweight**
Average Velocity	2498 fps	2338 fps	2462 fps	2530 fps
Muzzle Energy	1733 ft.-lbs.	1518 ft.-lbs.	1682 ft.-lbs.	1777 ft.-lbs.
Best Group	0.92 in.	0.95 in.	0.52 in.	0.45 in.
Average Group	1.18 in.	1.03 in.	0.72 in.	0.71 in.
SIG Sauer 150-grain HT	**Tikka T3x Lite**	**Ruger Hawkeye**	**Remington Model 7 CDL**	**Winchester Featherweight**
Average Velocity	2839 fps	2692 fps	2781 fps	2827 fps
Muzzle Energy	2684 ft.-lbs.	2414 ft.-lbs.	2577 ft.-lbs.	2662 ft.-lbs.
Best Group	1.44 in.	1.16 in.	0.42 in.	0.64 in.
Average Group	1.59 in.	1.42 in.	1.32 in.	1.04 in.
Black Hills 168-grain BTHP	**Tikka T3x Lite**	**Ruger Hawkeye**	**Remington Model 7 CDL**	**Winchester Featherweight**
Average Velocity	1100 fps	1101 fps	1098 fps	1139 fps
Muzzle Energy	334 ft.-lbs.	307 ft.-lbs.	332 ft.-lbs.	328 ft.-lbs.
Average Group	1.46 in.	1.95 in.	1.93 in.	1.19 in.

All groups were shot at 100 yards from a solid bench using a Caldwell TackDriver front rest ($43 at MidwayUSA.com) and a T.A.B. Gear large rear bag ($30 at TABGear.com) with the heavy fill. Muzzle velocity was determined using a LabRadar chronograph. Our 308 Winchester ammunition included Hornady CustomLite 125-grain SSTs (MidwayUSA.com 187296, $29.99/20); SIG Sauer Elite HT 150-grain rounds (BudsGunShop.com 23485, $33.15/20); and Black Hills 168-grain Boat-Tail Hollow Point (MidwayUSA.com 280175 $30.69/20).

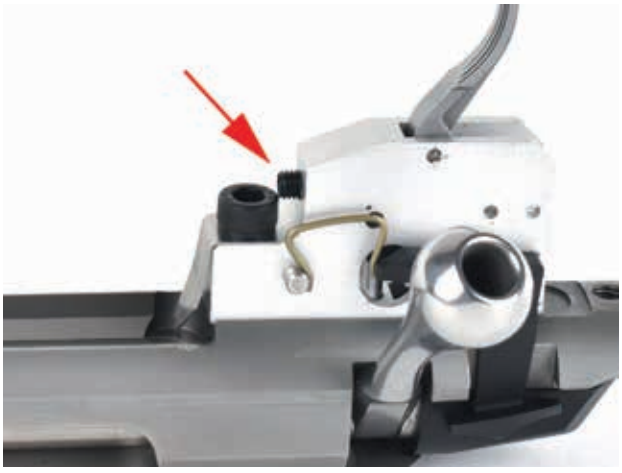
TIKKA T3X LITE STAINLESS JRTXB316 308 WINCHESTER, $748

GUN TESTS GRADE: A- (BEST BUY)

With a very functional polymer stock, the smoothest bolt in the group of test rifles, and the best out-of-the-box trigger, we really liked this rifle.



Action Type	Bolt, 2 Lugs
Overall Length	42.5 in.
Barrel Length/Twist	22 in., 1:11 in.
Overall Height w/o Scope Mount	6.5 in.
Weight Unloaded	6.25 lbs.
Weight Loaded	6.5 lbs.
Sight Radius	NA
Action Finish	Matte Stainless
Barrel Finish	Matte Stainless
Magazine Capacity	3 Rounds
Magazine Type	Detachable Box
Stock	Polymer
Drop at Comb	1.4 in.
Drop at Heel	1.6 in.
Bedding	None
Buttplate	Rubber
Length of Pull	13.2 in.
Receiver Scope-Base Pattern	Tikka
Trigger Pull Weight	2.5 lbs.
Safety	2-Position Rocker
Warranty	2 Year
Telephone	(800) 237-3882
Website	Tikka.fi
Made In	Finland



The Tikka T3x had the best out-of-the-box trigger and is easily adjustable to user preference via the set screw in front of the trigger blade.



Even though it is made of polymer, the Tikka stock is well reinforced and foam filled, making it very sturdy and quiet.



The Tikka T3x is a "one-size-fits-all" receiver that is illustrated by using a blocked magazine in a full-length action with a short-action cartridge.



The new T3x variant offers many options for scope mounting.

to the same standards, whether they are going on a Sako or a Tikka. Think about the Acura versus Honda concept. Quality is very comparable, but options are fewer, so price is better on the Honda.

The Tikka T3x, introduced in 2016, is an updated version of the T3. This newer model includes some very nice upgrades, such as a larger ejection port, a metal bolt shroud instead of the previous model's plastic piece, an improved scope rail attachment, and a steel recoil lug to replace the T3's aluminum lug.

The stainless-steel version of the T3x Lite raises the price a bit versus the blued-steel rifles in our test. The barrel is 22.5 inches long, has a 1:11-inch twist, and tapers to a 0.63-inch diameter at the muzzle. This is not a varmint barrel, but it isn't pencil thin either.

The barrel attaches to a receiver that has been redesigned to allow easier attachment of optical devices. The top of the action is still grooved for

REMINGTON MODEL 7 CDL 26423 308 WINCHESTER, $798

GUN TESTS GRADE: A

A nice piece of wood, a good trigger and a compact 20-inch barrel on a rifle that could really shoot.



Action Type	Bolt, 2 Lugs
Overall Length	39.1 in.
Barrel Length/Twist	20 in., 1:10 in.
Overall Height w/o Scope Mount	6.6 in.
Weight Unloaded	6.75 lbs.
Weight Loaded	6.9 lbs.
Sight Radius	NA
Action Finish	Matte Blue
Barrel Finish	Matte Blue
Magazine Capacity	4 Rounds
Magazine Type	Internal Box
Stock	Walnut
Drop at Comb	1.2 in.
Drop at Heel	1.5 in.
Bedding	None
Buttplate	Remington SuperCell
Length of Pull	13.75 in.
Receiver Scope-Base Pattern	Remington Model 7
Trigger Pull Weight	2.7 lbs.
Safety	2 Position Rocker
Warranty	Limited Lifetime
Telephone	(877) 387-6691
Website	Remington.com
Made In	USA



The adjustment screw (right arrow) for the trigger and the magazine release (left arrow) are both inside the trigger guard on the Remington Model 7 CDL. At right is the trigger out of the gun.







The SuperCell recoil pad on the Remington is substantial and effective.



The Remington Model 7 CDL forend cradles the barrel.

Left: The push-feed bolt moved smoothly when we worked it at the bench but wanted to bind a little when we worked it from the shoulder.

standard Tikka rings, and it has been drilled and tapped to allow easy mounting of a Picatinny rail. We used a 20-MOA rail from Mountain Tactical (Tikkaperformance.com).

The bolt can be removed by pressing a pivoting bar on the left side of the receiver. Bolt lift and throw on this rifle was the smoothest of any in this test. Our two-lug push-feed bolt sports a Sako-style extractor and a plunger-type ejector. It showed a 90-degree lift, but the shape of the bolt handle was such that it stayed well clear of mounted optics.

The rifle mounts to the stock via two action screws, and Tikka does a very good job of supplying torque settings (and other important data) for their rifles in the provided manual. When the two screws are removed, the action can be lifted from the stock, and the trigger is then accessible. Our rifle came to us with the trigger set at 2.5 pounds. Trigger compression was smooth

and light with no creep or overtravel. The trigger can be further lightened or made heavier by rotating out an Allen screw mounted right in front of the trigger. This is a very simple thing to do, and there is another screw right in front of the trigger adjustment to keep the shooter from backing it out too far.

The safety is a two-position rocker type on the right side of the receiver, just behind the bolt. The stock, though polymer, is foam filled and doesn't make that hollow sound created when many plastic stocks are bumped. A three-round polymer magazine protrudes slightly from the bottom of the stock, though not enough to affect how the shooter needs to carry the rifle. The magazine latch was at the front of the mag, but it was well recessed and we were not concerned about it being released inadvertently. Weight was a bit farther toward the muzzle than normal, perhaps, with the rifle balancing, for us, about an inch forward of the magazine release. The stock also allows interchangeable grips so the shooter can choose a more vertical style if desired. The T3x fed perfectly from the magazine but could balk just a little when the flat-nosed SIG HT rounds were single fed. Two sling-swivel studs are provided, and there is a way to add a flat beavertail piece on the forend available from Beretta USA.

This rifle shot everything well, with two of the three types of ammunition providing average groups just longer than 1 inch in diameter. This group of testers, however, has considerable experience with Tikkas and found those numbers a bit disappointing based on experience specifically with Tikka 308s.

Our Team Said: We have found Tikka rifles to respond well to handloads but graded this rifle down a half letter because of its accuracy. Maybe that is not fair. Perhaps it is only an indication of the excellence we have come to expect from Tikkas.

Remington Model 7 CDL 26423 308 Winchester, $798

According to the Remington website, the Model 700 was introduced in 1962. By our count from that same website, the Model 700 has been factory produced in 49 different calibers and 81 different models. One would think that Remington believes they have a winner on their hands with the Model 7 CDL, and they would be right. Beauty is in the eyes of the beholder, and this group of testers think that hunting rifles should look like hunting rifles. While they can indeed be gorgeous, we are not into high-gloss stocks and metal finishes you can see to shave with on a rifle we are going to beat around with in the woods. Our Model 7, basically a compact version of the Remington Model 700, in the CDL variant epitomizes that look. This rifle has a matte-blue finish on the barrel, action, and bottom metal. The stock is a nicely grained, dark walnut with an ebony forend and an oil-rubbed look to the finish. The stock shows well-executed checkering on the grip, and more checkering wraps



The bolts themselves show a lot of variation in size and configuration. Left to right in both photos above are the Remington, Ruger, Tikka, and Winchester bolts. The bolt head on the Remington Model 700/7 encloses the head of the cartridge and has a small claw extractor mounted inside, as well as a plunger-type ejector. The Ruger bolt is a classic Mauser style with the expected controlled-feed bolt. The bolt has a massive extractor claw that keeps control of the cartridge from the instant it pops out of the magazine until it rests safely in the chamber. Bolt lift and throw on the Tikka was the smoothest in this test. The two-lug push-feed bolt sports a Sako-style extractor and a plunger-type ejector. On the Winchester, the nicely jeweled, two-lug bolt has a non-rotating claw extractor. There is a spring-loaded blade ejector pinned inside the bolt raceway that levers up through a slot in the bolt body when the bolt is drawn to the rear. Controlled-round feed on the Winchester means that all rounds headed for the chamber should first be loaded into the magazine.



The barreled bolt actions from top to bottom are Winchester, Ruger, Tikka, and Remington. The Ruger's metal package was lighter than the others due to its shorter barrel length

RUGER HAWKEYE COMPACT 37139 308 WINCHESTER, $691

GUN TESTS GRADE: B+

This rifle has a short length of pull and a 16.5-inch barrel, this could be a great truck gun or an outstanding rifle for a smaller shooter.



Action Type.....Bolt, 2 Lugs
Overall Length.....35.5 in.
Barrel Length, Twist.....16.5 in., 1:10
Overall Height w/o Scope Mount.....5.9 in.
Weight Unloaded.....5.5 lbs.
Weight Loaded.....6.0 lbs.
Sight Radius.....NA
Action Finish.....Polished Blue
Barrel Finish.....Polished Blue
Magazine Capacity.....4 Rounds
Magazine Type.....Internal Box
Stock.....Walnut
Drop at Comb.....1.5 in.
Drop at Heel.....1.75 in.
Bedding.....None
Buttplate.....Rubber
Length of Pull.....12.5 in.
Receiver Scope-Base Pattern.....Ruger
Trigger Pull Weight.....3.8 lbs.
Safety.....3 Position
Warranty.....None written
Telephone.....(336) 949-5200
Website.....Ruger.com
Made In.....USA





Above: There is a third action screw (left arrow) on the Ruger Hawkeye that draws the action back and down into the stock, aiding accuracy. Right: The third screw inserts at an angle into the stock (arrow) and, when tightened, draws the action more firmly down into contact with the stock.



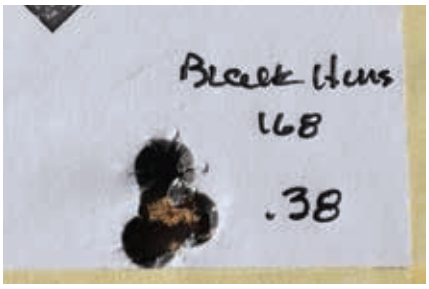
Above: Bolt throw was 90 degrees, but a concave bolt handle kept it well clear of optics. The receiver and the barrel are both blued steel and nicely polished. The bolt body and handle are stainless steel with a matte finish.



The Ruger Hawkeye safety must be placed in the forward or middle position before the bolt can be released.



The Hawkeye Compact's trigger broke at a very acceptable 3.8 pounds, the heaviest of the four rifles in the test. We didn't feel any overtravel, but our shooters occasionally detected a little creep. Also, there was no provision to adjust the trigger ourselves, as was available on some of the other rifles in the test. Adjustable aftermarket triggers are available for this rifle.



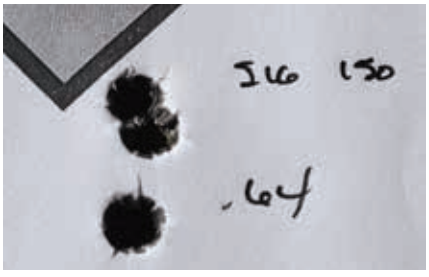
The Remington Model 7 CDL really liked the Black Hills 168-grain ammo.

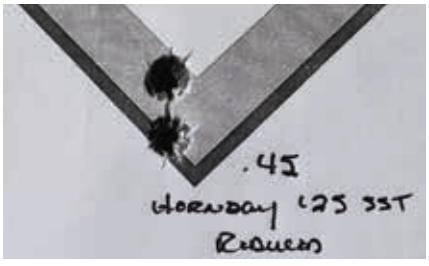


The Ruger Compact liked the Hornady 125-grain SST reduced loads. These would be great for an inexperienced shooter who was sensitive to recoil.



These groups with the SIG 150 grain are representative of the Tikka's performance.







The Winchester Featherweight shot everything well. From top are groups from the SIG 150-grain rounds, then Hornady's 125-grain SST reduced recoil, and the Black Hills 168-grain boat-tail at bottom.

the forend. There are two sling-swivel studs and an inch-thick-plus Remington SuperCell recoil pad that noticeably reduces felt recoil. Wood-to-metal finish is very good. The stock is in firm contact with the barrel for its entire length. The inside of the barrel channel is even dished out a bit right in front of the recoil lug, where it looks almost like it is bedded to the action.

The carbon-steel barrel is 20 inches long with a 1:10 twist. It has a slender profile that narrows to approximately 0.56 inch at the muzzle. The bolt head on a Remington Model 700/7 completely encloses the head of the cartridge, which is then surrounded by the barrel which, in turn, is wrapped by the action. Three rings of steel, as Remington calls it. The bolt head has a small claw extractor mounted inside as well as a plunger type ejector.

The push-feed bolt moved smoothly when we worked it at the bench but wanted to bind a little when we worked it from the shoulder. The safety is a two-position rocker switch on the right side of the receiver. The bolt release is a small tab just behind the front edge of the trigger guard that releases the bolt when pushed toward the action. This rifle brings a four-round internal-box magazine. The bottom metal is really metal. The magazine floorplate is easily released, but not too easily.

We have a bit of a love/hate relationship with the X-Mark Pro trigger, and we are not really sure why. We really liked the old Remington 700 trigger but, given current propensity to litigation, we understand the change. We are not sure if it is the width of the trigger, how smooth it is, how rounded it is, or what. We just always felt like our finger was trying to slide off the trigger. Not to fret. Timney Triggers (TimneyTriggers.com) makes a marvelous aftermarket trigger for a Remington, and they are very easy to replace. We do acknowledge that the X-Mark Pro is a very usable trigger with the second-lightest pull measured in our tests. And it can be adjusted lighter. We, however, freely admit we are trigger snobs. Our only gripe is about feel, not function.

Our Team Said: The Model 7 shot very, very well. It won our accuracy contest for this batch of rifles, shooting several sub-half-inch groups. We shot it, we worked with it, we thought about it and we debated about it. While this is not our top overall pick, it came really close.

Ruger Hawkeye Compact 37139
308 Winchester, $691

There are any number of ways to make a rifle lighter. One of them is to make everything smaller, and that is what Ruger did with the Hawkeye Compact. The barrel is thin, with a diameter at the muzzle we measured at less than 0.53 inches, and the barrel is only 16.5 inches long. That makes it very easy to get in and out of a vehicle at the ranch or in a deer blind. Shorter barrels also tend to provide less velocity. The Ruger, for example, showed velocity drops of 10% to

WINCHESTER MODEL 70 FEATHERWEIGHT STAINLESS 535234220
308 WINCHESTER, $951

GUN TESTS GRADE: A (OUR PICK)

Smooth handling, very good accuracy and classical styling.



Action Type	Bolt, 2 Lugs
Overall Length	42.25 in.
Barrel Length, Twist	22.0 in. ,1:12 in.
Overall Height w/o Scope Mount	6.8 in.
Weight Unloaded	6.9 lbs.
Weight Loaded	7.25 lbs.
Sight Radius	NA
Action Finish	Matte Stainless
Barrel Finish	Matte Stainless
Magazine Capacity	5 Rounds
Magazine Type	Internal Box
Stock	Walnut
Drop at Comb	0.5 in.
Drop at Heel	0.75 in.
Bedding	None
Buttplate	Pachmayr Decelerator
Length of Pull	13.75 in.
Receiver Scope-Base Pattern	Winchester Short Action
Trigger Pull Weight	3.1 lbs.
Safety	3 Position
Warranty	None written
Telephone	(800) 333-3288
Website	Winchester.com
Made In	Portugal





Left and Above: The Winchester Featherweight had several extra touches designed to improve accuracy, including bedding the lug cut in the stock and rear action screw (arrows above) and the Model 70's recoil lugs are machined as part of the receiver to ensure that everything is aligned properly in the stock (arrow at left).





Above: Wood grain and checkering on the Winchester were outstanding. The stock is a darker Grade 1 walnut. Checkering is sharp, but not too sharp, and includes a graceful design on both the wrist and the Schnable forend. The stock shows a great deal of figure. The buttstock ends with a perfectly fitted Pachmayr Decelerator pad.

14% versus the Winchester Model 70 Featherweight and its 22-inch barrel. The shooter has to decide what is most important; energy, range, or ease of handling. All three are important considerations.

The Ruger's receiver and the barrel are both blued steel, showing a nicely polished finish. The bolt body and handle are stainless steel with a matte finish. The bolt shroud is also blued. The action is a classic Mauser style with the expected controlled-feed bolt. The bolt has a massive extractor claw that keeps control of the cartridge from the instant it pops out of the magazine until it rests safely in the chamber. We measured bolt throw at 90 degrees, but a concave bolt handle kept it well clear of optics. Actual bolt throw was somewhat rough, especially while standing and running the bolt from the shoulder, but the bolt smoothed out some.

Feeding was very positive, but that also meant that all feeding had to be done via the magazine. The shooter should not try to single feed this rifle by laying a round on top of the follower and then closing the bolt. That places undue stress on and can actually damage the extractor. The bolt release is on the left side of the receiver, and the safety must be

VALUE GUIDE: BOLT-ACTION RIFLE SCORES			
GUN NAME	**ISSUE**	**GRADE**	**COMMENTS**
Browning X-Bolt Micro Midas 22-250 Rem., $879	Dec. 2019	A	Our Pick. This is a trim rifle made for the small-statured or still-developing hunter.
Howa Model 1500 Youth 22-250 Rem., $529	Dec. 2019	A	Best Buy. With youth- and adult-length stocks available, this is a great rifle.
Bergara B-14 B14S104 22-250 Rem., $879	Dec. 2019	A	Designed with the full-sized hunter in mind, this would be a great companion on a coyote hunt.
Browning X-Bolt 035395291 6mm CM, $2400	Aug. 2019	A	A superior varminter that could shoot in competition.
Howa 1500 H-S Precision HHS62203 6mm CM, $1220	Aug. 2019	A	This is a great all-around rifle at a reasonable price.
Barrett Fieldcraft Rifle Threaded 6mm CM, $1929	Aug. 2019	A-	This is a super-lightweight precision build you'll want to take everywhere.
Savage 110 Scout 57139 450 Bushmaster, $829	July 2019	A-	Best Buy. The Savage Axis proved accurate, reliable, and fast handling. Adjustable LOP.
Ruger Scout Rifle 6830 7.62 NATO, $1139	July 2019	B+	The Ruger Scout comes closest to the original Scout rifle concept, but it falls short due to weight.
Mossberg MVP Scout Combo 7.62 NATO, $780	July 2019	B	Not a true interpretation of the Scout Rifle concept. Accurate, well-handling short rifle at a good price.
Savage 110 Apex Storm XP 57344 6.5 CM, $605	June 2019	A-	Best Buy. The Savage Axis proved accurate, reliable, and fast handling. Adjustable LOP.
Mauser M18 M18065P 6.5 PRC, $628	June 2019	A-	Accurate and reliable. Expensive compared to the others.
Savage Axis II XP Rifle 57289 6.5 CM, $400	June 2019	B+	A credible and accurate rifle for hunting. Superior stock treatment.
Ruger 77/44 Model 7401 44 Remington Mag., $754	May 2019	A-	The 77/44 offers accuracy and power in a lightweight rifle. We disliked the magazine.
Ruger American Rifle 6903 Standard 308 Win. $382	Dec. 2018	A	Light enough, accurate enough, and inexpensive enough for us to want to keep it.
Savage Axis II XP 57095 308 Win. $411	Dec. 2018	A-	Best Buy. It works well, is accurate enough for hunting, and it is affordable.
Savage Model 12FV 18393 308 Win., $420	Dec. 2018	A-	Most accurate rifle tested. Modest recoil. The rifle never failed to impress us.
Mossberg Trophy Hunter 308 Win., $240	Dec. 2018	C	Overall, the rifle was worth the modest price, but there are better choices.
Uintah UPR-10 Bolt AR-10 Upper 6.5 CM, $1295	June 2018	B+	Capable of very good accuracy, this was a dream upper in need of a little refinement.
Ruger American Rifle Ranch 06968 300 Blackout, $420	May 2018	A-	Shot well both suppressed and unsuppressed. Short length would make it handy.
Remington M700 SPS-T 84205 300 Blackout, $680	May 2018	A-	Shot well in 300 BLK supersonic and subsonic.

VALUE GUIDE: BOLT-ACTION RIFLE SCORES

GUN NAME	ISSUE	GRADE	COMMENTS
Savage Arms 10PT-SR 22356 308 Win., $550	May 2018	B+	Good build. It did shoot sub-MOA with one round. We loved the handle and AccuTrigger.
CZ-USA CZ 527 Youth 03050 7.62x39mm, $650	March 2018	A-/B+	Grade A- for adults; Grade B+ for youths. We would trust it to work for a lifetime.
Browning A-Bolt Micro Hunter 7mm-08 Rem., $578	March 2018	A-/C+	Grade A- for adults; Grade C+ for youths. Too much rifle and recoil for younger shooters.
Savage Axis II Compact 22230 243 Win. $490	March 2018	B/A	Grade B for adults; Grade A for youths. Clear winner as a youth rifle.
Desert Tech SRS-A1 6.5 Creedmoor, $4495	Nov. 2017	A	Test results proved the SRS-A1 is at the top of the rifle-quality pyramid.
Ruger Hawkeye Mark IV VT 17980 6.5 CM, $1139	Nov. 2017	B+	Rough bolt action, but in terms of accuracy, the Hawkeye deserved an A.
Legacy Sports Howa HCR 6.5 Creedmoor, $1450	Nov. 2017	C	The HCR should grade higher based on its ergonomics and simplicity.
Remington M700 SPS 85538 308 Win., $600	Oct. 2017	B+	This short rifle isn't the most accurate, but the overall handling is superb.
Remington Model 700 SPS 84218 308 Win., $606	Oct. 2017	B+	Hard to find a production rifle that is capable of greater practical accuracy.
Savage Axis 19223 308 Win, $240	Oct. 2017	C	Accuracy wasn't the best. The rifle was dogged by a heavy trigger that we fixed.
Remington 783 85847 308 Win., $340	March 2017	A	Best Buy. This was the most accurate rifle tested, and there were no demerits.
Remington 700 SPS 85538 308 Win. $655	March 2017	A-	There are few rifles that are as handy as this one.
Savage Axis XP 19231 308 Win., $390	March 2017	B	Accuracy wasn't the best, but accuracy was acceptable with the provided riflescope.
Mossberg 100 All-Terrain Rifle 27230 308 Win., $200 (Used)	March 2017	C	The rifle did not misfeed. We liked the cheek rest. The primary problem was accuracy.
Thompson Center Compass 10071 22-250 Rem., $399	Feb. 2017	A	Simple, straightforward, and inexpensive. Delivered sub-MOA groups with all rounds.
Browning X-Bolt Micro Midas 22-250 Rem., $860	Feb. 2017	B+	This is a super-handy rifle for the whole family, and it can fit just about anywhere.
CZ USA 557 Sporter 04806 243 Win., $792	Feb. 2017	B+	The 557's refined looks belied its rugged durability. Heavier weight did not tame recoil.
Legacy Sports Howa Mini Action 6.5 Grendel, $855	Feb. 2017	C	This otherwise top-grade rifle was spoiled by weak magazine retention.
Ruger Precision Rifle 18008 6.5 Creedmoor, $1599	Nov. 2016	A	Ruger took an already good gun and made it a touch better.

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

moved to the forward or middle position to remove the bolt. The safety is the three-position style with forward being Fire, the middle being Safe with the bolt unlocked, and the rearmost being Safe with the bolt locked. The ejector is pinned in the action and hinges up into play through a slot in the bolt as the bolt is moved to the rear.

The internal box magazine sports a solid-steel follower and alloy bottom metal. The floorplate release is accessible but well recessed. Of the rifles tested, the Hawkeye Compact's trigger was the heaviest, a still very acceptable 3.8 pounds. We did not experience any overtravel, but our shooters occasionally detected just a hair of creep. The action has scope bases machined into the top of the receiver, and the rifle ships with a set of sturdy 1-inch rings, which saves the shooter quite a few dollars.

The stock is a pleasing piece of straight-grained walnut with checkering sharp enough to be usable wrapping around the forend and the grip. Wood-to-metal fit is good, and the barrel came in firm contact with the forend for the entire length. Modern Hawkeye rifles also add in an extra action screw (for a total of three). The third screw inserts at an angle and, when tightened, draws the action even more firmly down into contact with the stock.

There is a thin recoil pad that provides a modicum of recoil reduction. This is not the pad you would want on a 300 Winchester Magnum, but this isn't a 300 Win. Mag., is it? Still, we liked the Remington's pad better. Length of pull on this rifle is only 12.5 inches and overall length is a short 35.5 inches, making this a very good rifle for smaller people or smaller spaces. Ruger fits the stock with a pair of sling-swivel studs, along with a nicely engraved floorplate.

Our Team Said: The Hawkeye Compact functioned perfectly with all rounds tested, but shot the largest groups of the four rifles we tested. That being said, average group was a very acceptable 1.37 inch for all groups shot, and the Hawkeye Compact definitely showed a liking for the reduced-recoil Hornady SST. Average group with that round was almost exactly 1 inch. This little rifle just begs for a compact 2-7x32 scope, a truck or a horse to ride in/on, or a new shooter to teach.

Winchester Model 70 Featherweight Stainless 535234220 308 Winchester, $951

We require two things from our firearms: they have to go Bang! when they are supposed to, and they have to hit what they are pointed at. After that, everything else is gravy. In our opinion, the elegant lines on the Winchester Model 70 Featherweight we tested provided an entire breakfast, not just the gravy. The stock is a darker Grade 1 walnut with a Schnabel forend and a satin finish. Checkering is sharp, but not too sharp, and includes a graceful design on both the forend and the wrist. Wood-to-metal fit is outstanding, and the stock shows a great deal of figure. The buttstock ends with a perfectly fitted Pachmayr Decelerator pad. The stock also provides the almost obligatory pair of sling-swivel studs. The forend is free-floated for the barrel, at least the width of a business card, all the way to the receiver. The hinged metal floorplate was also matte finished. The release is accessible but required an intentional action to activate. Balance was very good, with the weight centering on the middle of the floorplate.

The barreled action starts with a 22-inch satin-stainless-steel tube and has a somewhat slow 1:12-inch twist rate. The barrel is finished with a target crown and tapers to approximately 0.55 inch at the muzzle. Many rifles have some type of recoil lug that is added in some way during assembly. The Winchester Model 70's recoil lugs are machined as part of the receiver to better make sure that everything is aligned properly in the stock. When we removed the action from the stock, we noticed that the recoil lug and the rear action screw had both been glass-bedded — another nice touch to help accuracy.

Even though this is a current production firearm, the action is a pre-64 style (that's good) with a three-position safety and controlled-round feed. Forward position is Fire, the middle is Safe with the bolt unlocked, and fully to the rear is Safe with a locked bolt. The bolt release is a vertical tab on the left rear of the receiver that is depressed to allow the bolt to be removed. This can be done with the safety in the forward or middle positions. The nicely jeweled, two-lug bolt has a non-rotating claw extractor. There is a spring-loaded blade ejector pinned inside the bolt raceway that levers up through a slot in the bolt body when the bolt is drawn to the rear. Controlled round feed means that all rounds headed for the chamber should first be loaded into the magazine. Do not single feed by laying a round on top of the follower and then closing the bolt. The magazine was very smooth to load and fed anything we put in it. The bolt handle is knurled and created a very positive grip. The M.O.A. trigger provided a consistent break at just over 3 pounds with virtually no creep or overtravel. Bolt lift and throw was very smooth, whether the rifle was on the bench or shouldered standing.

Our Team Said: Because our rifles did not weigh 16 pounds and cost $12,000, we did not expect them to shoot 0.3-inch groups every time we tried. We did not expect perfection, so we were very pleased with very good accuracy. Sub-1-inch groups used to be the exception. Now they are expected, and we were not disappointed. We really prefer the concept of an 8-pound-total rifle/scope package when we are about to step into the field. This Winchester chambered and fired everything we tried. It was second overall in accuracy testing, only losing that contest by an average of 0.05-inch per group and was one of the smoothest rifles we tested. Add to that the beauty of the wood and the traditional styling. Hence, it is Our Pick.

Written and photographed by Joe Woolley, using evaluations from Gun Tests *team testers.* **GT**

22-Caliber Double Actions From Ruger, S&W, and Taurus

These rimfire revolvers offer a lot of plinking fun and inexpensive training. We'd buy the S&W if cost were not a factor, the Ruger if we wanted a light kit gun, or the Taurus for its swappable cylinders.

Rimfire revolvers offer a lot of plinking fun. They can also be great training guns to perfect revolver technique without the added cost and recoil of a centerfire revolver. We took a look at three revolvers, all of which have centerfire counterparts. Our test revolvers included an *S&W Model 617-6* built on an L-Frame, *a Ruger LCRx* built on the compact LCR/LCRx frame, and a *Taurus 992 Tracker*, which is built on Taurus' medium-size frame. We were mostly looking for accuracy and ease of use. If we could use it as a small-caliber training gun or a trail gun, those would be pluses. What we found in general were accurate revolvers when shooting in single-action (SA) mode, but change to double-action (DA) mode, and we soon realized our trigger finger needed to start weight training. The DA trigger pull weights were very heavy on these revolvers, and that is part of the design. Heavy pull weights ensure the hammer fires rimfire ammo.

How We Tested

We tested at 15 yards with a variety of 22 LR rimfire ammo. With the Taurus we also fired an assortment of 22 WMR ammo. The 22 Long Rifle cartridges consisted of hunting ammo and target ammo velocities that ranged from fast to slow, respectively. Mild PMC Target ammunition is loaded with a 40-grain lead round nose (LRN) bullet. Hot Aguila Interceptors are loaded with a 40-grain round-nose solid (RNS) projectile. The Winchester Power-Point with a 42-grain hollow



The revolvers tested either used a a compact frame like the Ruger LCRx (left) or a medium frame like the Taurus 992 Tracker (middle) and Smith & Wesson Model 617-6 (right). We think the best value is the Tracker 992 because it offers good accuracy and the ability to fire both 22 LR and 22 WMR ammo. We also liked the lightweight LCRx, but the DA trigger is so heavy only a liability lawyer would like it. The Model 617-6 is a beautiful revolver with all the right lines combined with accuracy, but at a hefty price.

point (HP) had a velocity just below the Aguila. The 22 WMR cartridges consisted of two loads from CCI, both 40-grain bullets, but one was a solid and the other a hollow point. The third was Federal Game-Shok with a 50-grain jacketed hollow point (JHP).

Revolvers have legendary reliability, and here they went bang every time, even when we stuffed their chambers with all types of ammo. The fact is, rimfire bullets' dry lubricant, lead shavings from the bullets, and powder residue tends to gunk up a wheelgun's works, and in some extreme situations can impede the rotation of the cylinder or clog the frame-mounted firing pin. This is why rimfire revolvers are more sensitive to dirt than centerfire revolvers. We love a challenge, so we fired these revolvers until they were dirty and had fun shooting them. Best of all, we did not experience any issues with any of the guns tested. All the prices reflect current amounts from BudsGunShop.com. In the end, we did settle on one we liked the best. Here are the details.

Smith & Wesson Model 617-6
160584 22 LR, $725

The Model 617, this in its 6th design iteration, hence the "-6" in the model number, is an expensive rimfire revolver. As we studied and fired it, we found it to be a great choice, especially if you have a centerfire L-frame and want to train with less cost and recoil. This is a serious revolver for the wheelgun aficionado. This would also be a good choice for small-game hunting.

Our sample featured a bright stainless finish typically found on S&W's other stainless revolvers. We like this finish, and it is easy to clean. The hammer, trigger, and sights are black and contrast nicely. Did we mention this is a beautiful gun? The 4-inch barrel uses a full underlug, so the 617 is a hefty revolver. At 39 ounces unloaded, this is not a lightweight 22 LR handgun.

The cylinder is fluted for all 10 chambers, making it easy to identify it as a rimfire revolver even though it looks a lot like a S&W Model 686. That's because they use the same frame. The ejector fully dumps 22 LR cases when depressed. We had no issues dumping empties even after extended firing. All the chambers are countersunk. The front lock on the cylinder is located in the end of the ejector rod. A pin in the underlug snaps in place when the cylinder is closed.

The top side of the barrel is bead blasted for a matte, non-glare finish. It also wears decorative grooves on the top side. The front sight is a plain black post pinned in place, which we like. The rear sight is adjustable for windage and elevation, and if you are not familiar with S&W revolver sights, you will need to look at





Above: It's easy to see why the Taurus (middle) and S&W (right) are hefty revolvers; the underlug and big barrels contribute to weight. The Ruger (left) uses a steel barrel sleeve inside an aluminum housing to save weight.

Left: The grips varied in size from the largest on the S&W (left) to midsize on the Ruger (right) and midsize on the Taurus (middle).

SMITH & WESSON MODEL 617-6 160584 22 LR, $725

GUN TESTS GRADE: A (OUR PICK)

The 617-6 had a good trigger in both SA and DA and a large, full-size grip. It was tight and offered good accuracy. This revolver is heavy, so don't think of it as a lightweight trail gun.



Action	Revolver, Double Action
Overall Length	9.1 in.
Barrel Length	4.0 in.
Sight Radius	5.3 in.
Overall Height	5.5 in.
Maximum Width	1.4 in.
Weight Unloaded	39.0 oz.
Weight Loaded	45.0 oz.
Cylinder Gap	0.010 in.
Capacity	10
Frame Finish	Stainless Steel
Barrel/Cylinder Finish	Stainless Steel
Frame Front Strap Height	2.5 in.
Frame Back Strap Height	3.5 in.
Grip	Textured Finger Groove Rubber
Grip Thickness (max)	1.1 in.
Grip Circumference (max)	5.0 in.
Front Sight	Ramped and Pinned
Rear Sight	Adjustable U-notch
Trigger Pull Weight (DA)	13.0 lbs.
Trigger Pull Weight (SA)	4.9 lbs.
Trigger Span (DA)	3.6 in.
Trigger Span (SA)	3.0 in.
Safety	Hammer Block
Warranty	None Written
Telephone	(800) 331-0852
Website	Smith-Wesson.com
Made In	USA



The 617-6 has a 10-round capacity and chambers are countersunk to accept the 22 LR rims.



Crane-to-frame fit was very tight.





Left: The hammer spur had plenty of texture for a sure grip. Note that half of the rear sight is serrated. We prefer a fully serrated sight. Above: The long ejection rod stroke shows how well S&W fully ejected spent 22 LR cases. Gravity could help ejection, but it wasn't necessary.

the manual since there is no indication for up/down nor left/right adjustment. The back bottom edge is serrated to kill glare. We would have preferred the entire shooter-facing side of the sight be serrated, not just the bottom portion.

The trigger face is smooth, and that is fine for speed shooting, except the DA trigger pull was 13 pounds. We would have liked it to be less, but it was quite serviceable. SA pull weight was just under 5 pounds, and again, we would have liked it lighter. The DA trigger pull was exceptionally smooth with no stacking. In SA mode there was no creep. This is a really good trigger, even if it is a bit on the heavy side.

The grip is S&W's newer textured rubber with finger grooves and slight palm swell and flat butt. We like this grip. It fits average and full-size hands equally well.

Going hot, we found the 617-6 offers great accuracy. At 15 yards our best five-shot groups measured 0.78 inches with the hotter Aguila and Winchester Power-Point ammo. The milder PMC Target ammo had a best group of 0.83 inches. On average, the 617-6 shot well under one inch. This is the kind of accuracy needed for humane small-game hunting. Moving to speed shooting in DA mode, our groups opened up, and we attribute this to the heavy trigger. We did encounter a bit of splatter with the S&W, and we did note the cylinder gap measured 0.010 inches. The gap for the Ruger and Taurus measured 0.008 and 0.009, respectively.

Our Team Said: The 617-6 is a hefty, medium-sized revolver with a good trigger in both SA and DA and a large, full-size grip. It was tight and offered good accuracy. This revolver is a must-have if you own a 686 or other L-frame 4-incher. We also think this would make a great small-game hunting revolver. The cost is high, but so is the quality and performance. It's Our Pick of the three tested here.

Taurus 992 Tracker 2-992049 22 LR/22 WMR

The 992 Tracker debuted in 2011 and offers a unique feature for a DA/SA revolver. It has a quick-swap cylinder, allowing the user to fire either 22 LR in one cylinder and 22 WMR in another. While this is a common feature in SAA revolvers, it is novel in a DA/SA revolver. A button, located on the right side of the frame near the top front of trigger guard, allows

22 LR AND 22 WMR RANGE DATA

Aguila Interceptor 22 Long Rifle 40-gr. RNS	**Ruger LCRx**	**S&W 617-6**	**Taurus 922 Tracker**
Average Velocity	1042 fps	1079 fps	1079 fps
Muzzle Energy	96 ft.-lbs.	103 ft.-lbs.	63 ft.-lbs.
Smallest Group	1.49 in.	0.78 in.	0.52 in.
Average Group	1.69 in.	0.83 in.	0.81 in.
PMC Target 22 Long Rifle 40-gr. RNS	**Ruger LCRx**	**S&W 617-6**	**Taurus 922 Tracker**
Average Velocity	804 fps	840 fps	834 fps
Muzzle Energy	57 ft.-lbs.	63 ft.-lbs.	62 ft.-lbs.
Smallest Group	0.86 in.	0.83 in.	0.40 in.
Average Group	1.34 in.	0.89 in.	0.69 in.
Winchester Power-Point 22 Long Rifle 42-gr. HP	**Ruger LCRx**	**S&W 617-6**	**Taurus 922 Tracker**
Average Velocity	1026 fps	1028 fps	1079 fps
Muzzle Energy	98 ft.-lbs.	99 ft.-lbs.	63 ft.-lbs.
Smallest Group	0.92 in.	0.78 in.	0.74 in.
Average Group	1.30 in.	0.96 in.	0.94 in.
Taurus 922 Tracker	**CCI Maxi-Mag 22 Magnum 40-gr. JHP**	**CCI Maxi-Mag 22 Magnum 40-gr. TMJ**	**Federal Game Shok 22 Magnum 50-gr. JHP**
Average Velocity	1149 fps	1160 fps	995 fps
Muzzle Energy	117 ft.-lbs.	120 ft.-lbs.	110 ft.-lbs.
Smallest Group	1.18 in.	0.64 in.	1.16 in.
Average Group	1.56 in.	0.73 in.	1.23 in.

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

TAURUS 992 TRACKER 2-992049 22 LR/22 WMR, $489

GUN TESTS GRADE: A (BEST BUY)

The 992 offers a lot of versatility with the extra cylinder assembly. We thought the trigger pull was too heavy in both DA and SA modes. It is heavy. Sights are good. The price is reasonable.



Action	Revolver, Double Action
Overall Length	8.8 in.
Barrel Length	4.0 in.
Sight Radius	5.6 in.
Overall Height	5.2 in.
Maximum Width	1.5 in.
Weight Unloaded	40.0 oz.
Weight Loaded	45.4 oz.
Cylinder Gap	0.009 in.
Capacity	9
Frame Finish	Matte Stainless
Barrel/Cylinder Finish	Matte Stainless
Frame Front Strap Height	2.5 in.
Frame Back Strap Height	3.3 in.
Grip	Serrated Rubber
Grip Thickness (max)	1.2 in.
Grip Circumference (max)	5.7 in.
Front Sight	Ramp, Pinned
Rear Sight	Adjustable U-Notch
Trigger Pull Weight (DA)	15.0 lbs.
Trigger Pull Weight (SA)	6.7 lbs.
Trigger Span (DA)	3.5 in.
Trigger Span (SA)	3.1 in.
Safety	Internal Hammer Block
Warranty	Unlimited Lifetime
Telephone	(305) 624-1115
Website	TaurusUSA.com
Made In	Brazil



The 992 has a 9-round capacity. The entire rear of cylinder is countersunk, in contrast to the chambers being treated that way individually on the S&W 617-6.



That round chrome button (arrow) allows the user to easily swap cylinders on the 992.

Below: There's plenty of texture on the hammer spur, so there's no fear of losing a thumb grip. We would have liked the rear face of the rear sight serrated to reduce glare.





The 992 fully ejected spent 22 LR cases. The crane-to-frame lock up was tight. We would have liked a fluted 22 LR cylinder to distinguish it from the 22 WMR cylinder. The Taurus locks in the front via a detent in the crane.

RUGER LCRX 5435 22 LR, $470

GUN TESTS GRADE: B+

The LCRx is lightweight and would make a nice kit gun if that were the only consideration. Accuracy was only okay due to the heavy trigger-pull weights in both DA and SA. We think the cost is too high for this revolver, and even though it grades out acceptably, we probably wouldn't buy this gun.



Action	Revolver, Double Action
Overall Length	7.5 in.
Barrel Length	3.0 in.
Sight Radius	4.2 in.
Overall Height	5.5 in.
Maximum Width	1.2 in.

Weight Unloaded	17.3 oz.
Weight Loaded	22.1 oz.
Cylinder Gap	0.008 in.
Capacity	8
Frame Finish	Matte Black
Barrel/Cylinder Finish	Matte Black
Frame Front Strap Height	2.2 in.
Frame Back Strap Height	3.5 in.
Grip	Textured Rubber
Grip Thickness (max)	1.2 in.
Grip Circumference (max)	4.7 in.
Front Sight	Ramped, Pinned
Rear Sight	Adjustable U-notch
Trigger Pull Weight (DA)	16.0 lbs.
Trigger Pull Weight (SA)	6.3 lbs.
Trigger Span (DA)	2.9 in.
Trigger Span (SA)	2.5 in.
Safety	Transfer Bar
Warranty	None Written
Telephone	(928) 541-8892
Website	Ruger.com
Made In	USA



Above: Hammer texture and size were small on the LCRx. We would have liked serrations on the rear sight and adjustment directions.



The cylinder is radically fluted to save weight. Lock up at the frame was tight (arrow).





Top: The LCRx has an 8-round capacity. Note the countersunk chambers. Bottom: The Ruger shucked empties easily and fully.

fast and easy removal of the cylinder assembly. The cylinder-release button engages a groove cut in the axle for the crane. To change cylinder assemblies, push the cylinder latch forward, swing out the cylinder, depress the button, and pull forward on the cylinder. Each cylinder assembly includes the crane and ejector rod. Both cylinders are unfluted, but clearly rollmarked with the caliber. We would have liked the 22 LR cylinder to be fluted and the 22 WMR unfluted, similar to how Ruger differentiates cylinders on its Single-Six convertible SAA revolvers. The front lock on the cylinder is located in the crane. A detent locks into the frame when the cylinder is closed. This was tight with very little wiggle.

Built on Taurus' medium-size frame and with a full underlug barrel means this is a hefty rimfire revolver. It weighs 40 ounces unloaded. If we had a wish, we would like Taurus to make this revolver with a titanium frame and aluminum barrel sleeve to reduce the weight. The frame and barrel have a matte stainless finish, while the cylinder latch, cylinder button, trigger, and hammer have a chrome finish. It is a smart-looking revolver. The front ramp sight is black and pinned in place, which we like. The ramp has a red insert, which makes it easier for the front sight to stand out and be acquired. The rear sight is fully adjustable and indicates up and right directions. The shooter-facing side of the rear sight is smooth. We would like it better if it were serrated to cut glare.

The trigger face is smooth and the hammer has a wide, checkered spur for sure cocking. The DA trigger pull is a hefty 15 pounds, and we could feel a bit of stacking. In SA mode, the weight was also a hefty 6.7 pounds, but it did break cleanly. This trigger came in third place to the fine S&W trigger, which came in first, and Ruger's trigger, which came in second. The 992 incorporates the Taurus transfer-safety bar so the handgun can be carried fully loaded without fear of accidently discharge if dropped. Like the S&W, the Taurus also incorporates a hammer lock, which requires a key. We would use this feature when storing the gun.

The grip is compact and shorter than the Ruger and the S&W. It features Taurus' ribbed rubber grip that flexes to accommodate the user's hand size and grip. Our team liked these grips. Large-handed users may need to curl their small fingers under the butt.

At the range, we found the 992 offered the best accuracy of the three revolvers tested. With hot Aguila ammo, our best five-shot group at 15 yards measured 0.52 inches. With the mild PMC Target, our best measured 0.40 inches. On average, the 22 LR grouped under an inch.

Swapping cylinder assemblies was super simple, and with each, we noted the cylinders positively clicked into place with little play. We assumed the 22 WMR would not shoot to the 22 LR's point of aim, and we were correct. It shot about an inch higher.



In hand, the Taurus' ribbed rubber grip was comfortable and flexed to conform to the user's hand. Large-handed users may need to curl their small finger under the butt.



The Hogue grip on the Ruger lacks finger grooves. The grip on the LCRx is long, so it is comfortable to hold for folks of various hand sizes.



In hand, the S&W 617-6 had a full grip that offered plenty of texture and comfort. Note the smooth trigger which helps in speed shooting

Our best group with the 22 WMR was with the CCI 40-grain TMJ ammo, which measured 0.64 inches. On average, the 22 WMR ammo grouped from under an inch to 1.5 inches. We did not experience any splatter, and we swapped cylinders as easily as if they were magazines for a semi-automatic pistol. Even with fouling, the swap was easy to perform.

Our Team Said: For the price, the 992 offers a lot of versatility

with the extra cylinder. We felt the DA and SA trigger pulls were too heavy. It is also awfully heavy for a kit gun, but for the price, we'll disregard the heftiness. We think this is a Best Buy.

Ruger LCRx 5435 22 LR, $470

The LCRx has a distinct modern look to it. The LCRx is lighter and has less capacity than the other revolvers tested. On weight alone — 17.3 ounces unloaded — the LCRx would make a nice, modern interpretation of a kit gun. This revolver has an 8-round capacity and uses the LCR's monolithic aluminum frame. The "x" designates an external hammer for SA mode. The LCR is a DAO revolver. It is a good thing the LCRx has SA mode because the DA trigger pull is a heavy 16 pounds. The friction-reducing trigger cam helps achieve a smooth, non-stacking trigger pull. The pull reminded some testers of a compound bow draw. The initial pull back on the bow and press on the LCRx trigger requires more pressure and effort. As you get to full draw with the compound bow or full press of the trigger, there is a reduction in pressure/effort. The trigger is not as smooth as the S&W trigger, but the cost to manufacture the LCRx trigger is significantly less, and that is reflected in the price of each revolver. In the past, we have tested 38 Special, 357 Magnum, and 9mm LCR variants and found the triggers to be just as smooth, but lighter.

This revolver has an aluminum sleeve over a 3-inch steel barrel. The finish of the frame and barrel is matte black. The smooth trigger and hammer are stainless, and the radically fluted cylinder is blued. The chambers are countersunk. The hammer spur is wide and checkered enough for a sure grip when thumbing back the hammer. The firing mechanism uses Ruger's safety transfer-bar system, so you can safely carry the LCRx fully loaded.

The grip is a Hogue Tamer Monogrip with a pebbled texture, slight palm swell, and length that allows a solid grip. Large-handed users may need to curl the little finger under the flat butt. We liked the grip because it allowed us a higher grip on the revolver, which helps control recoil. Not that a 22 LR provides a lot of recoil, but it also helps control when shooting in DA mode.

The front ramp sight is pinned in place and has a white insert, so it is easier to pick up on a dark-colored target. The rear sight is fully adjustable, but get out the manual to determine which direction to turn the screw. Ruger does not label the directions. For those of you who hate manuals, clockwise is down on the elevation screw and clockwise is left on the windage screw.

We found these sights wide enough to be easily acquired. The white ramp also helps sight alignment. Would we keep these sights if we owned this gun? Probably not, and that's the convenient thing about pinned front sights. They can easily be changed out for an aftermarket sight like one from HiViz or XS Sights. Same goes for the S&W and Taurus.



The red insert in the Tracker's front-ramp sight popped on a dark-colored target.



The sight picture on the S&W was good, but the black post was easy to lose on a dark target.



The front ramp on the Ruger featured a white insert so it was easier to aim at a dark-colored target.

Once we started shooting it, we found the LCRx had a definite like and dislike for some ammo. The smallest five-shot group was with the PMC target ammo, which measured 0.86 inches. The best we could shoot with the Winchester and Aguila cartridges was 0.92 and 1.49 inches, respectively. On average, groups measured 1.3 to 1.6 inches. Remember, all accuracy testing was done in SA mode. Moving to DA mode separated the shooters from the hacks, and unfortunately, most of us ended up in the hack category. The trigger pull on the LCRx is exceptionally smooth, as mentioned, but due to the revolver's light weight and heavy trigger-pull, shooting tight groups in DA mode is not easy. Dare we say not possible. At spitting distance, use DA mode and at anything farther away use SA mode.

The ejector rod pushes cases all the way out. A pin in the underlug snaps in place when the cylinder is closed, locking up the front of the cylinder, similar to the S&W. We had no issues with the LCRx's performance except for the DA trigger pull.

Our Team Said: What the LCRx offers is light weight, high grip hold, and reliability. Accuracy was acceptable, and that has a lot to do with the trigger. The DA trigger pull is not this revolver's strong point. Thank goodness it has a SA mode. It would make good a kit gun if you can live with heavy DA trigger pull, but for the price, we might just pass on this revolver.

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

Shoulder Holsters Compared

In this extensive test, we examine several nicely appointed rigs that make toting even a heavy gun more comfortable. But there are quirks to notice with this specialty carry mode.

A few months ago, a reader remarked favorably on our ongoing holster tests. The reader said that his orthopedic doctor opined that those carrying concealed handguns are best served with a shoulder holster. This load-bearing harness takes the weight of a handgun off the belt and puts it on the shoulders, so that the weight is better balanced over a wider area. And, like the cowboy's rig or a cop's duty belt, a properly-designed shoulder holster will carry a handgun, spare magazines, and even a knife on one rig.

Okay, all good. But here are some quirks to balance the scales. The shoulder holster is only viable when a covering garment may be worn. Also, there are issues with the draw that must be addressed. The shoulder holster demands more practice and training than a strong-side holster. The shoulder holster is more difficult to adjust, and a quality shoulder holster is more expensive than a strong-side holster, in most cases. Also, many trainers disparage shoulder holsters, and for one very good reason. The raters who are also trainers, as examples, cannot allow shoulder holsters during classes, but only in carefully supervised individual training. This is because the draw allows the muzzle to sweep others to the side and behind the wearer.



Some prefer a high ride, with the shoulder holster tucked tightly under the armpit.



The horizontal shoulder holster offers a smooth draw, but some trainers won't allow them because the muzzle covers other people.

History

It is difficult to trace the development of the shoulder holster, but it is a type that was in general use in the American Civil War. The crossdraw developed first, we believe, but the shoulder holster became popular when laws against open carry and carrying handguns were passed in the Old West. A concealable rig was needed. The shoulder holster was simple at first, but eventually developed into a holster that typically featured a loop over the left shoulder (for right-handed holsters) and a stabilizing component of some type running across the chest, but later running across the back and meeting another loop on the opposite side. While the shoulder holster is associated with gamblers, many peace officers also wore the type. At one time, it was not allowed for peace officers in many northern cities to carry the handgun exposed. Most carried a small 32 or 38 revolver in the pocket of their uniform tunic. Others carried more serious armament in a shoulder holster. One of our raters remembers officers carrying a 38 Special revolver by regulation, but there were no regulations against a second firearm. Many officers carried a 357 Magnum, 44 Magnum, or 45 Colt revolver in a shoulder holster. This type of demand resulted in excellent designs. Of course, there were cheap ones as well.

Is the Shoulder Holster a Real World Option?

Just the same, in real-world use the shoulder holster is useful. Don't let a training-range mentality confuse the issue and knock out some very practical holsters.

In terms of everyday carry use, some say the shoulder holster is difficult to adjust properly. This is more true of cheap examples, but even the good examples require time to get the "ride" correctly adjusted. Once properly adjusted — and having a helper goes a long way — an advantage is that the handgun and the spare ammunition are carried in one unit. Simply don the rig and go about your business. Female shooters find the shoulder holster works well for them. People spending much of their time driving or seated will find shoulder holsters offer an efficient draw. The handgun is well concealed but accessible.

Speed and safety are constant concerns with any system. The strong-side draw is faster and more natural: the elbow shoots to the rear and the handgun is scooped from the holster. The shoulder holster demands reaching across the body and drawing the handgun. When the handgun is carried in a horizontal

shoulder holster, the muzzle covers everyone that is in the area behind the shooter. One of our raters is a major in the service with much experience. He mentioned that shoulder holsters were often worn by back-area officers, and they swept the whole dining hall with their muzzle at dinner. The draw covers anyone on the firing line during practice, which is why the shoulder holster isn't allowed in training. The proper draw, which we used during the testing, is to stand angled to the target. The right side foot moves to the rear as the body is bladed to the target. The handgun is drawn as the left side (or non dominant side) hand is raised to avoid the muzzle covering the shooter's weak-side arm. The hands then meet and the pistol is pressed toward the target. This is much faster than awkwardly reaching across the chest without a practiced technique.

Types of Shoulder Holsters

The types of shoulder holsters are defined by the way they carry the handgun. Vertical, horizontal, and upside down are among the choices.

- The chest holster isn't easily concealed and is generally used for military duty and hunting.
- The upside-down shoulder holster hangs the handgun with the muzzle directly into the armpit. It is useful for small revolvers. The handgun is retained by a strong steel spring.
- The vertical rig retains the handgun with the muzzle pointed down.
- The horizontal shoulder holster demands the handgun is carried with the muzzle to the rear and butt forward.

All offer a hidden draw. The arms may be crossed and the hand placed on the gun under the garment, yet the draw isn't obvious until it begins.

The upside-down holster is limited by the armpit as to the length of the handgun. The muzzle-into-the-armpit carry is disconcerting to some shooters. They offer good concealment, but only for a small-frame handgun, such as a 2-inch-barrel revolver. It is difficult to get a good firing grip quickly.

The vertical holster with the muzzle down allows the carry of relatively large and heavy handguns. Since they attach to the belt, they sacrifice some concealment. While a shorter covering garment may conceal a horizontal holster, this isn't the case with the vertical type. The horizontal holster places the gun butt in a position to be grasped quickly during the draw. But then the handgun used is limited in size to the user's build. The muzzle may print on the coat if the slide or barrel is long enough. A final difference in shoulder holsters is that some demand the holster and support webbing be attached to the belt. Others are free standing.

When you choose a holster, there are several important considerations. The handgun should be chosen first, but a realistic appraisal of appropriate garments and our body size must be part of the equation as well. Let's face it, older shooters to whom the shoulder holster is well suited have a different fashion sense and may wear oversized shirts and windbreakers and not look out of place. The mass and weight of the gun affect holster selection and how the handgun may be concealed. Of all the concealment systems, the shoulder holster represents the smallest penalty for carrying a heavy handgun. A reasonably comfortable shoulder holster is better than a bearable holster and is superior to a chafing pain in the side.

Adapting to the shoulder holster demands a longer acclimation period. It is worthwhile. Another consideration is that the shoulder holster is basically a crossdraw holster. This draw is a little slower than a true crossdraw in most instances and slower than the strong-side holster. But it is superior as weight-bearing ability goes.

With these general observations in mind, we obtained several holsters for testing and evaluation. The goal was for a rater to wear the holster for at least one week, while going about daily chores and commuting, and to execute at least 100 presentations. The first few draws were for familiarization; the next would have to be from concealed carry. We rated the holsters on draw speed, comfort, and level of adjustment. We turned them upside down and shook them to test retention. What follows is how the holsters stacked up according to the experiences of our test-team members.

Viper Holsters Shoulder Rig, $159

This was available from ViperHolsters.com. The Viper is a combination of leather and Kydex. The rater ordered this holster for his personal Glock 17. In general, we like to order holsters for service-grade



The Viper shoulder holster is relatively compact and lightweight. The Viper features a sturdy Kydex holster. Viper's tabs and harness are well made and work as designed.

full-size handguns for testing. The added size and weight are more likely to show a defect or difficulty in carrying the handgun than if we were to test a holster for the Glock 43 or a snubnose 38 Special.

Our Team Said: This is a vertical holster. The holster component itself is Kydex. As such, it is rugged and impervious to oil and solvent. The fit is excellent. The handgun snaps smartly into place and is held securely by the long bearing surfaces. The holster harness is of quality leather. While thin so as not to print on covering garments, the leather is strong and did a good job of supporting the Glock pistol. The straps and catches offer good adjustment. The draw was sharp. The angle is slightly butt forward, making for good access. We like the single angled magazine pouch. We went a bit beyond the design parameters in one test by not using the belt snaps and donning a light windbreaker, so the rig hung loosely. This isn't ideal, but we found the handgun hung well and the draw remained reasonably good. Not recommended, but possible. This Viper system is a good one.

GUN TESTS GRADE: A

Wright Leather Works Maverick, $254

You can find this at WrightLeatherworks.com. The Maverick may be purchased as a holster harness, the holster and magazine may be purchased separately, and the holster may be ordered without a magazine carrier. The Maverick is a horizontal-type shoulder holster. The leather work and stitching are excellent. The holster itself features a good tight fit and excellent stitching, with a holstering welt at the holster mouth. The spine is thicker on the bottom than the top. The leather weight-bearing harness attaches to the strong spine. (The spine is the leather support around the holster.) The holster is molded to the individual handgun well. As an example, the holster tested is for a 1911 handgun, while the SIG 1911, with its unique slide design setting it apart from other 1911 handguns, will not fit. The thumb break is reinforced and positive in operation. The harness is held together by Chicago screws. There is a great deal of adjustment in the Maverick.



The Wright Maverick is a true custom grade shoulder holster.



Excellent molding to the individual handgun, a well designed harness, and a reinforced thumb break are good features of the Wright Maverick. The Maverick harness is well designed and proved easy to adjust.



The dual magazine carrier of the Wright Maverick is quite secure.

The Maverick features security straps for both the holster and the magazine carrier that attach to the belt. While theoretically you could deploy the holster without these stabilizing straps, we really like the security they afford. Horizontal shoulder holsters such as this one may work without these straps in place, but the vertical shoulder holster will not. The dual magazine carrier accepts two 1911 magazines. This carrier doesn't have flaps to hold the magazines in place. Rather, the horizontal carrier features tension adjustment to maintain retention. The user may adjust the tension screws to maintain the magazines in place as tightly as he or she desires. We recommend maintaining tension that amounts to a strong tug. With the stabilizing strap in place, the tug released the magazine readily. With the magazine carrier less stabilized without the strap attached to the belt, a draw required the carrier be brought out to the end of its travel against the shoulder strap with the preferred adjustment. The holster is designed to be worn with stabilizing straps, and they really do the business.

Our Team Said: After several raters took turns wearing this holster, we found it to be a good choice. We especially like the X hook up for the shoulder straps that lays across the back of the shooter. The leather was stiff for the first few days, as expected. The magazine-carrier design is especially useful.

GUN TESTS GRADE: A

Galco Jackass, $152

We found the holster at Botach.com for about $50 off MSRP, so be certain to shop around. Some places asked $100 more than average. This holster has a certain amount of pop-culture appeal because it was worn by actor Don Johnson in the majority of *Miami Vice* episodes. While this was a shot in the arm for Galco marketing, the holster prospered based on its own merits.

This is a horizontal design. The user may purchase other holsters to change out on the weight-bearing harness. The range of adjustment is good. The current holster is an improved version of the earlier Jackass. Without an original to place side by side with it, we

cannot comment on the exact differences, but the current Jackass is a mature design with a respectable lineage.

We like the use of heavy steerhide in the holster because this makes for a rig that will last for many years. The holster is easily adjusted. and once adjusted, is unlikely to get out of whack. The Chicago screws used in construction are robust and a good system to work with. The holster is a thumb-break design properly sized for cocked and locked carry. Because the back of the holster body is open, the Jackass may be used for Officer's Model, Commander, and Government Model 1911 handguns. The magazine carrier accommodates two magazines.

We used several 1911 handguns during the test. The smallest was a Citadel 9mm Officer's Model and the largest a Colt Government Model. All worked well with this holster. The magazine pouch features security snaps that allow the magazine to simply slide into the user's hand when the snap is opened. The security straps feature two separate snaps. This allows carrying the pouch with short Officer's Model magazines or Government Model magazines with good retention. The Jackass allows real speed when properly adjusted. Draws were sharp. As shoulder holsters of this quality go, the price is fair.

Our Team Said: We did not test accessories; however, you may order the shoulder harness from Galco as a separate component with 1-, 1.5-, and 2.75-inch shoulder harnesses. We would recommend the larger the gun, the larger the harness. The shoulder-holster knife attachment is $75, while a quad attachment that holds four magazines is $155. Tie down sets are $45. The Galco Jackass shoulder holster has plenty of support from the manufacturer, including speedloader carriers and revolver holsters. It is more expensive to order the holster piece by piece, but you will have exactly what you want or need.

GUN TESTS GRADE: A



Most of the raters put the Galco Jackass near the top in ratings, in part because of the fit and finish of the decade-old Jackass. Below: We really like the Jackass holster's mag set up.





Right: The Galco Jackass offers good concealment if the handgun slide is short enough.

Sam Andrews Monarch $455, as tested

The base price for the Monarch was $275 at AndrewsLeather.com. We added a Knife pouch, $55, and a triple magazine pouch, $125, for the total price as listed above. The Andrews holster is called the Monarch because of the Monarch butterfly–like harness. The Monarch is a classic holster in some ways, but in other ways it is unique. The Monarch is exceptionally well put together. The holster body is lined. While this is critical in protecting the gun's finish, a holster with a lined interior will wear longer as well. With modern handgun finishes or even older blued-steel handguns, handgun wear isn't a big issue. Just the same, this is a nice touch. Some of the raters felt that the lined holster made for greater speed.

The holster is also double stitched in certain areas. The blocking and stitching are excellent. Andrews re-designed the shoulder holster to offer greater comfort and less restrictive movement. The Monarch features swivels attached to a wider portion of the leather plate at the top. This subtly different position of the straps helps fight chafing. (Andrews also offers a more traditional Y-strap design.) This holster builds on the shoulder holster concept of spreading the weight of the handgun and the magazines around the body. The shoulder holster must have some means of stabilizing the load. Some inexpensive shoulder holsters require the wearer pull the holster out to maximum extension, or that the weak hand grasp the holster to stabilize it on the draw. This is unacceptable.

Andrews designed a mid-back strap that runs around the lower back and attaches to the magazine carrier and holster components of the harness. This stabilizes the holster well and allows for a rapid, sharp draw. But this system also allows wearing a shorter covering garment as opposed to the belt attachment that demands a long garment. Shoulder holsters are notorious for sagging forward when the user bends over. The holster and magazine pouch of this rig are well stabilized. This holster affords the user a great deal of movement without concern for the holster being exposed. The rear attachment is highly adjustable. We were impressed by the sliding adjustment in the magazine carrier. The holster also features a tunnel loop that allows wearing as a belt holster.

When executing speed draws, we discovered the directional thumb snap and rigid security made for a very sharp draw. The problem with shoulder holsters





The Sam Andrews rig is well thought out with good features. One of the raters called the Sam Andrews rig "pure class."

is comfort on the one side, but on the other side, the holsters do not ride close and secure to the body, which affects concealment. In this case, each problem is neatly solved. We really like the Monarch.

As a side test, we also ordered the three-magazine carrier from Andrews Leather. (Galco offers similar accessories for the Jackass and other should holsters.) We felt that a dual carrier is nice for the 1911. If we were a federal agent or an investigator ranging on long patrols, we might opt for a three- or four-magazine carrier. The Sam Andrews magazine sheath is a good accessory. When adjusting the magazine pouch, we learned that when you don't need belt attachments and tie downs, the spare magazine carrier may be worn higher under the arm.

Our Team Said: After testing the Andrews rig extensively, we find a good holster, and in some ways a unique interpretation.

GUN TESTS GRADE: A+

DM Bullard Shoulder Holster, $225

DM Bullard is a true custom shop. Basket-weave and exotic leather patterns may be more expensive, but the holster should perform as well as the one tested. The harness itself lists for $100 and the holster is $125. This allows a shooter to order separate holsters for an outdoors handgun, as one example, or for a concealed carry handgun as another. One of the raters owns a small shop just outside Appalachia and travels a good bit in search of collectibles, antiques, and interesting people. Some of the places get a little too interesting. There is also the chance of meeting a feral dog or even one of the big cats on a trail when he is hiking. His ever-present handgun is a 4.75-inch barrel Ruger New Vaquero in 45 Colt or a Colt SAA 45. He admits the piece is getting a bit heavy in its high-ride holster, so we ordered the DM Bullard rig for this handgun. The logic is if the holster works well with this hogleg, it should work well with any other revolver, and we decided to include at least one revolver holster to see how the cylinder bulge worked out under the arm. This Ruger is a 41-ounce revolver, so the weight is similar to a loaded 1911 steel-frame handgun. The DM Bullard rig is a vertical-type shoulder holster.

The first thing we do with any of the holsters is to lay it out on a work bench, table, or long pattern board. (Pattern boards, either dress or holster, are excellent for comparing measurements.) The overwhelming impression is of quality. Other holsters also have this, too, but the DM Bullard (BullardLeather.com) has certain traits that are unique. As an example, the loops are not plain flat shoulder loops, but instead have the center raised, forming two parallel sections that lay on the shoulder. This is accomplished with a creasing machine. This allows easier changing of the Chicago screws and adjustment. The effect is difficult to describe, but it makes for greater comfort as well. The adjustments are simple and effective. Extra Chicago screws are included to allow the user to make multiple adjustments and as a hedge against losing a set. The holster itself may be worn on the belt if desired, and works okay in that role. There's double stitching on the edges and single stitching on the holster mouth. The fit to the handgun is excellent. A retention strap is included, but it may be removed. We did not feel it was needed for the majority of the uses the should holster would be put to. If hiking, where there is a chance of a spill, it is a good option, or when using an ATV perhaps. For normal driving and walking, it isn't needed in this vertical design. A vertical shoulder holster requires the holster be fastened to the belt. The belt fastener works well for this task.

While the handgun is secure when worn under the coat, the draw is fast enough for most of us. The handgun hangs a bit lower than the armpit, preventing the holster from sitting in a hollow and tilting. The main component of the holster is steel lined, making for a rigid platform. The overall hang of the holster is ideal for a heavy revolver. The rater ordering the holster and another rater each wore the holster for the proscribed period, and the primary rater interested in the holster kept it and will use it during the winter. He added a belt loop for 45 Colt cartridges that simply slid onto the shoulder loop,

We wanted to test at least one revolver holster. The DM Bullard holster was also ordered in natural finish. The offside straps of the DM Bullard shoulder holster are not very wide but they are strong, a good point in its favor.









The Lobo Gunleather holster is well made. For those who may be involved in a tussle, the Lobo design offers real security.

but after wearing it for a time went back to belt carry of the cartridges, just in front of the belt attachment.

Our Team Said: The DM Bullard holster stands out from the crowd in many ways and is the best combination for both field/hunting and concealed carry of a heavy revolver. The rater made a good point — older people often wear a covering garment even during warmer weather. This sartorial choice works out well for a shoulder holster.

GUN TESTS GRADE: A

Lobo Gunleather Deputy, $215

You can find this holster at LoboGunleather.com. Lobo offers a standard shoulder holster and also a vertical shoulder holster. The Deputy is designed for use by law enforcement and anyone needing a holster that will not lose its handgun or magazine payload in rigorous action. The Deputy succeeds in the design goal. The Lobo holster features a well-made carrier that meets in the back, high between the shoulders, for comfort. The loops are wide for comfort and spread the weight of the Government Model 45 pistol out well. The loops are attached to the holster by a ring in a loop set up. This allows a lot of flex in the attachment during movement, but the holster hangs at the correct draw angle when the user is standing. The belt attachments follow the same design and offer plenty of adjustment. We were impressed by the level of adjustment and also by the keeper system found on the shoulder loops. This system, similar to a high-grade target rifle sling, makes for easier adjustment than some without resorting to moving the Chicago screws. This is a good touch that we all liked.

Our Team Said: Our law-enforcement veteran noted the chromed components and keepers just looked like something a cop would wear. Perhaps, but they are sturdy and make for both good adjustment and a bit of flex as the owner moves. We like this set up. The primary difference between this holster and the Wright Leather Works, as an example, is the speed of which spare magazines may be drawn. One is faster, the Wright, one more secure, the Lobo, and the user must make his mind up about which is the better choice.

GUN TESTS GRADE: A





Galco's vertical holster received high marks. We used the optional belt attachment (arrow) for the Galco horizontal holster. Right: The Galco Vertical shoulder holster uses plastic tabs for adjustment. It is a simple system.

Galco Vertical Shoulder Holster, $190

We got this unit from OpticsPlanet.com. We felt that a direct comparison of a vertical shoulder holster and a horizontal type from the same maker would make sense. The Galco vertical shoulder holster arrived in a blister pack and must be assembled. This is a good thing because, with care, the proper adjustment may be had more quickly than taking the holster apart and then reassembling it. After assembling the holster and adjusting it a handful of times, we had a good fit. Then one rater passed it to the other and it was tight, and he also adjusted the holster. The holster doesn't use Chicago screws, but instead employs plastic tabs that slip into one tab and through and then into the next strap. This is faster and easier than unscrewing the Chicago screws with each adjustment. Is it as secure? We had no problems in our testing.

The vertical holster has a different feel. It must attach to the belt, and the gun handle is presented in the same manner as a crossdraw, save much higher. The fit and finish of the Galco holster are excellent. The holster could not use a thumb break due to its design, so a snap that runs across the gun between the trigger guard and the muzzle is used. This is good for security. However, a speedier draw for most body types is to draw the handgun straight up out of the holster. If you use the snap, the third finger may unsnap the security strap and the handgun may be angled out of the holster. This isn't as fast as a horizontal holster for most of us, although for some raters it was faster when seated.

The overall comfort level is good with this holster. We simply prefer the horizontal holster for concealed carry. We like the Jackass type better. Just the same, for those who prefer a vertical holster, the Galco design works well and the quality of the leather and straps are excellent. We also felt that the horizontal

holsters generally were more comfortable at the end of the day, and that when you have a holster that must be attached to the belt, concealment is lessened. Other raters felt that security was better with the horizontal holster and some preferred the draw. While the holster is a first-rate vertical type, we rated it down a half grade on speed compared to the horizontal shoulder holster. On a final note, more than half the raters said that a great advantage of the Galco Vertical shoulder holster is that when the handgun is carried, the muzzle does not sweep others near the gun carrier. That makes designs like the Galco Vertical holster a top choice for shooters uncomfortable with the horizontal holster. Also, we are all familiar with solid *thunk* sometimes heard when a gun carrier sits heavily at a table. It isn't the best thing to do in a restaurant. On a couple of occasions the raters, when sitting down, leaned over as they sat and the gun butt *thunked* the table. And these are very well designed horizontal shoulder holsters! This did not occur with the vertical holsters.

Our Team Said: The lower rating of this holster is a result of the majority of the raters in agreement, but a minority was vocal in support of this type for top choice.

GUN TESTS GRADE: A-

Nightingale Sandpiper, $375

Available from NightingaleLeather.com, the Sandpiper is a modular holster that allows the user to add different holsters and magazine carriers at a later date. This is a popular selling point of the high-end holster. The holster features an adjustable harness and "butterfly" plate. Important features include a reinforced thumb-break retention strap, a well-defined sight channel, and tension screws on the magazine holder. There are touches on the Sandpiper that we really like, but they also add to the time and effort involved in crafting the holster, so only the end user will answer the question of value versus expense. The holster is secured to the harness



Above, Nightingale's Sandpiper is shown with the Nighthawk Custom Government Model–size 45 ACP. We liked the attention to detail and workmanship of the Sandpiper. Below, on the Nightingale, the harness and the web on the back are as important as the holster.



in a solid fashion. There is some play as the wearer moves, and there must be for the holster to fit properly. This is a challenge when crafting the shoulder holster. It isn't designed to fit as tightly as possible in the manner of a strong-side Avenger holster, as an example. The shoulder holster must be tight against the body for concealment, but at the same time it must flex some because this is the nature of the load-bearing harness.

The molding of the holster to the handgun is excellent. A thumb break demands reinforcement or it will fold against the body when manipulated to release the handgun. The Sandpiper features a separate leather piece sewn to reinforce the thumb break. We feel that this is an elegant solution compared to the more common plastic or metal reinforcement. While quite strong, there is plenty of flex as well. The holster is double stitched and the blocks that end stitching are well done. We liked the combination of retention straps and tension screws with the magazine carrier. This is

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more attention to detail, and it is the type of detail that results in a very advanced rig that has left nothing to chance. This also adds to the total price. The Sandpiper also features a hanging strap that runs over the back to stabilize the holster. While this is a great design feature we appreciated, we also tested the Sandpiper without this component.

Our Team Said: The holster still worked well. It worked better for most body types with the strap attached. This is a good design well worth its price.

Which is superior, the Viper, DM Bullard, or Galco Vertical holster, or the Wright Maverick, Galco Jackass, Sam Andrews Monarch, Lobo, or Nightingale Sandpiper horizontal shoulder holster? Well, it isn't that easy to answer. The vertical holster is possibly the most concealable, even with the consideration that they may need to be anchored to the belt, but they are more difficult to use quickly and achieve a good grip on the draw. The horizontal holster features the gun butt tilted and fairly forward. For most of us, concealment is good with a relatively short-barrel handgun. The raters voted 75% for the horizontal holster, but the minority favoring the vertical holster were convinced their choice was correct.

In the end, we think this comparison wound up more as a critique of shoulder-holster orientation than a comparison of high-end shoulder holsters themselves. There were none that gave a problem, so you'll have to try them on to see what works best for you. But we recommend you include the Sandpiper in your choices.

GUN TESTS GRADE: A

Written and photographed by GUN TESTS *staff.* **GT**

COMING UP IN GUN TESTS

- Lightweight 9mm 1911s: the Taurus 1911 Commander (1-191101COM-9MM $470), a Colt Lightweight Commander (04842XE $895), the Ruger SR1911 LW Commander Stainless (06722 $775) and the Springfield Armory 1911 Range Officer LW Compact (P19125L $730). All used barrels 4 to 4.25 inches long and had some type of steel slide. Three of the pistols used alloy frames and one had a steel frame. Three of those frames were full length and one had a shorter Officer's Model–length grip.

- Single-Action Rimfire Revolver Shoot-out: Tested are the Chiappa 1873, Heritage Rough Rider, Ruger Wrangler, and Traditions Rawhide Rancher.

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