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January 2020/Vol. XXXII, No. 1



SINGLE-STACK 9MMS

We graded four smaller 9mms
after rigorous side-by-side
shooting. What would our team
find out about Springfield's XDE
and Hellcat pistols, the
Smith & Wesson Shield M2.0, and
the SIG Sauer P365XL?

Page 6

SURVIVAL GUNS

If your bomber gets shot down over a remote wilderness, what firearm should you be carrying to help you make it out? Perhaps one of these 22 LR/.410-bore combination guns from Rossi, Savage, or TPS?

Page 17



PORTABLE HANDGUN SAFES

We look hard at a quartet of boxes from Boyt, GunVault, Liberty Safe, and Hornady to find safe storage and access control.

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PERHAPS TRUMP SLUMP IS OVER?

ccording to the FBI, more than 200,000 background-check requests associated with the purchase of a firearm were submitted to the agency on Black Friday 2019, marking the second-highest gun-sales day ever. The previous record was set on the day after Thanksgiving in 2016. In all, the bureau posted 202,465 checks Friday, an 11% increase from last year and falling just short of the single-day record of 203,086 in 2017. This year's rising monthly volumes are approaching the one-year record of 27.5 million in 2016. While background checks



Todd Woodard

are not a measure of actual gun sales, the National Instant Criminal Background Check System is a way to gauge market demand. The number of firearms sold is likely higher because multiple firearms can be included in one transaction by a single buyer.

Underwater bullet? A new line of specialized bullets could allow U.S. special forces personnel to shoot their weapons submerged, engaging other divers and their underwater vehicles. While traditional bullets are ineffective underwater, the new bullets work by forming a bubble of air around a bullet, allowing the bullet to travel with fewer physical restrictions.

DefenseOne.com reported, "How does it work? The tungstentipped CAV-X bullet from Virginia's DSG Technologies has a nose that creates a small air bubble as it moves through the water. The bubble greatly reduces drag on the bullet, a supercavitation effect that has been part of torpedo design since World War II and is now a feature on some types of boats."

According to DSG's website, its "Multi Environment Ammunition projectile is effective against submerged targets and targets in the air. Depending on the weapon and the used loading variant, this ammunition is suitable for use in partial or fully submerged weapons, regardless if the target is in water or on the surface."

The Norwegian company's projectiles may be offered in two loading variants, A2 and X2, where both enable swimming capabilities. The A2 load is shot from the air and is suitable for patrol boats, machine guns, coastal guards, and dedicated marksmen that would engage multi-environment threats. The X2 load is designed for combat swimmers and SOF personnel who operate submerged.

I have seen plenty of videos online that show regular bullets being fired into water and being fired underwater, and it is vastly amusing to see the bullets spend themselves and fall to the bottom of a pool. That may change now — no more harpoons, Mr. Bond!

GUN TESTS CREDO

REMEMBER: FIREARMS SAFETY AND SECURITY BEGINS WITH YOU

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

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

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Ranking Guns by Groupings

Reader Don comes up with an interesting idea: Listing the top five or ten firearms by smallest grouping. Several readers also say, 'Thanks, but no thanks' and oppose universal background checks.

Re December 2019 Issue

Dear Mr. Woodard, I have to compliment you and your staff on another great year. The bigger photos really are much better. Your articles seem better too, all year long. In the December issue, the article on the 22-250s was beyond splendid. The explanation of barrel twist was worth the yearly subscription alone, and that article was tremendous all through. And so was the big magnum handgun article in the same issue. I really appreciate the ear muffs test. Several of us here also use Gordon Leight muffs, and in the wind hunting squirrels and rock chucks, they do cancel a lot of that noise. I could go on about other articles. Just know we appreciate your magazine.

One request: In your year-end summary, how about listing the best five or ten rifles that have the smallest groups in your testing, and this would be all time, best five or ten handguns with smallest groups all time, and best five or ten shotguns with best patterns all time. You would not need much text, just list the gun and the group size. I would appreciate that, and I bet others would as well. I very much look forward to next year. Thanks so much for all the info and for how good it is. — **Don**

Hey Don: The all-time best groups idea is great. I see the value, too. I'll figure out how to package this data and where it can live on the website. Thank you. — Todd Woodard

Re "Thanks, But No Thanks," December 2019

The only way "universal background checks" can be enforced is if all firearms are registered. That alone is reason enough to oppose it.

— JamTins @GunTests.com

You missed the point about universal background checks. Some commenters have mentioned it in a very roundabout way. For UBC to work, every gun and every gun owner must be in a government database.

- KLGalloway @GunTests.com

When universal background checks are required for all legal transfers, then eventually a Form 4473 will exist for every legal transfer. When enough 4473s exist, eventually "common sense" requires that all the information on every transfer form be digitized. When digitized, eventually every

legal gun owner and every firearm they own will be in the transfer database.

— David @GunTests.com

The purpose of universal background check (UBC) laws are to deter or make it increasingly difficult for honest citizens to acquire and posses firearms, participate in shooting sports, and defend themselves. Those who promote these laws know the regulations will not prevent crimes committed with firearms. UBC promoters know that if criminals obeyed the law, they wouldn't be criminals. UBC promoters know that a person bent on committing mass murder is not deterred by the fact that he didn't acquire or does not possess his weapon legally.

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.

FIRING LINE

UBC promoters also know that those who support these proposed laws aren't critical thinkers. That's why we have restrictive gun laws. They are justified by emotion, not logic. Emotional voters can be led to believe that restrictive gun laws will deter felonies. Logical voters know better. UBC promoters rely on the emotional votes. They don't want folks realizing that some people already own firearms, first-time murderers might pass background checks, and others can easily get their weapons by other than legal means. The reason we prosecute felons in possession of firearms is because they are in possession of firearms illegally. Logical folks realize the law didn't prevent them from carrying firearm; it only prevented them from carrying them legally.

Illegal firearms are just as effective as legal firearms. Whether or not a shooter can pass a background check isn't relevant to the gun he is shooting.

— Jack @GunTests.com

I saw a recent pre-session Virginia gun bill that will not only make AR-15s and other semi-autos illegal to transact, it will also make them illegal to possess. No grandfathering. How is such a thing going to pass Constitutional muster? In the face of such a law (likely) passing in The Old Dominion in just a few weeks, I normally would advise my Virginia readers to go buy all the ARs/AKs/M1As/they can afford, right now — that is, put this magazine down on the coffee table, stand up, and get thee to a Virginia gun store extra pronto. But if possession of already-owned semi-autos will be criminalized after the fact, what good would that do? It is always a bad legal strategy to be the one who's a test case. — Todd

How would the folks who want "universal background checks" like the same thing for cars? More people are killed in car wrecks

every year in the U.S. than in all gun-related deaths (including suicides, "righteous" killings by law-enforcement officers, and justifiable defense shootings by civilians). Would these people like to have to complete mountains of paperwork every time they let one of their kids drive the family car? I don't think they would stand for that — and we shouldn't stand for universal background checks for firearms, either.

— Crash @GunTests.com

Registration is always followed by confiscation, 100% of the time. UBCs = registration. QED. Better to insist and require that current UBC databases be kept up to date by all states. Some states grudgingly participate, with lack of funding a reason often mentioned.

— Podkayne @GunTests.com

Right on. I think U.S. Attorney General Bill Barr's focus on enforcing existing gun laws is the right way to proceed. There are only 10,000 or so gun laws already on the books, so that should keep them busy for a while. — Todd

The passage of any local "universal background check" or dinance is abusive and unnecessary. We already have sufficient laws (both state and federal) that deal with background checks. In addition, criminals will not abide with any gun-restriction law; therefore, such laws significantly take away gunownership rights from law-abiding citizens.

— Jayalan12 @GunTests.com

Re "Big-Bore Hunting Revolvers From Smith & Wesson, Taurus," December 2019

I enjoyed reading the write-up on the big-bore hunting revolvers. I have two editing suggestions to propose. On page 17 on line seven, you reference a Grizzly 460-grain WLNGC, when it is actually 360 grains in weight. Also, weights in line one on page 17 reads "... from



200 to 360 grains...." but Cor-Bon offers a 390-grain WLNGC for the 460 Smith &Wesson cartridge.

— Jeffrey

Thanks for passing these along. I'll correct the digital version of the issue to fix the text mention of the Grizzly 360-grain bullet. I double-checked the tabular description and energy figures for the round, and they were correct. — Todd

Re "So Many Good Guns," September 2019

As always, I disagree with the premise that guns are overall getting better." They are certainly getting cheaper — more cheaply built of plastic and cheap to buy — but certainly not "better." You probably think that Kel-Tec makes good stuff. I just got my hands on a new-production Walther PPK/S, and it almost makes me sad when I compare it to a modern-design piece-of-junk plastic gun like a Glock, M&P, or many other guns made by Walther besides my PPK/S. Designs change, but quality and class never do. Polymer guns (pistols or rifles) are nothing but disposable junk. They're no more than tools. They would inspire in me about as much pride of ownership as a toilet plunger.

— Greg @GunTests.com

Yes, I agree guns are tools. That's also how we evaluate them here, mostly, so when I write they are overall "better," that largely means more functional. I owned a PPK/S back in the day, and I sold that little hand-biter with its horrible sights and heavy weight for the capacity. Perhaps the new production is better. I do own a Kel-Tec PMR-30. Love it. Light

weight, good sights, massive capacity for the size. I also own other former test guns that are polymer, including an FN FNX-45 and an HK HK45. But all my revolvers are steel and aluminum, as well as a couple of other pistols. I get that you don't like polymer; a lot of folks don't. — Todd

Todd, I enjoy your unbiased GUN TESTS. Regarding the quality of guns manufactured nowadays compared to years ago, the arms manufactured back in the 80s and 90s did not have a suggested "breakin period," in which the owner runs X amount of rounds through the gun. Some manufacturers, as you know, suggest this now on new firearms, specifically handguns. My opinion only, the guns 30 years ago were better manufactured to tolerances then they are now. I'd take a gun from then over the ones being made today, especially the wheelguns. Guess I'm just an oldschool guy. — Texas Law Man

Re "More on the Bond Arms Bullpup," December 2019

My father had a Beretta 22 Short with a tip-up barrel, and it seemed

like a great idea. When Beretta came out with the 380 Cheetah, I snapped one up because I thought it was such a niche item that it wouldn't be around forever. It's a great pistol, though it is as large as many 9mm pistols. So, perhaps, Beretta should design a 9mm with a tip-up barrel. — **Jeffery**

Awesome idea. — Todd

King Cobra Coming

Dear Todd: Did you, or have you planned, to do any gun tests on the new Colt King Cobra in 357 Magnum? Our family plans to buy a couple if it passes muster. — **Joe**

Hey Joe: Robert Sadowski has a new Colt Cobra in house, and it is queued up for the next range visit. — Todd

Re "Guns of the Year," December 2019

You called the Springfield Armory XD-S 3.3-Inch XDS93340BE 40 S&W "Best In Class Pistol '19." In the information box about the pistol you state, "Including a useful trigger action..."

I recently purchased a new

Springfield XD-S 45 Mod.2 3.3. I find the trigger to be absolutely horrible. It has a mushy feeling during take-up, with a lot of creep, and it doesn't have a noticeable "wall." All of my other handguns have a noticeable wall before the trigger breaks. I thought it might be defective, so I returned it to Springfield to have them check it out. They said the trigger was within factory specs. They replaced the trigger anyway with another trigger assembly and noted that the new trigger was within factory specs. The trigger is still horrible!

What do you mean in your review that the XD-S 40 has a "useful trigger action?" — **Jeff**

The trigger in the September 2019 issue had a break weight of 6.5 pounds. In combat firing, the Springfield gave excellent results, beating the other polymer-frame pistols and giving the SIG a run for the money. It was faster to an accurate first shot than the SIG, and while the SIG gave good, tight groups in rapid fire in the singleaction mode, we did not have to work the long double-action SIG trigger with the XD-S. — Todd

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Single-Stack Carry Pistols from Springfield, Smith, & SIG Sauer

We put four smaller 9mm pistols through rigorous side-by-side testing and grading. What would our shooters find out about the XDE and Hellcat pistols, the Shield M2.0, and the much-ballyhooed P365XL?

he modern concealed-carry movement started in Florida in 1987 and has expanded across the country since then. The culture has matured and morphed as have the people in it. In the "good old days," it was "go big or go home" with your carry selection. We wondered what percentage of licensees just knew they had to have a 1911 in 45 ACP. If you really wanted to go small, there was always the Smith & Wesson J-frame revolver, a worthy carry pistol in its own right. Those are two excellent firearms, but they don't give you much in the way of options.

A 39-ounce 1911 isn't that bad to carry when you are young and in shape. But, just like the carry movement has matured, so have many licensees, and that same 45 is getting a bit heavy to tote all day. We also wonder if younger licensees haven't learned a bit more quickly than we did because there has been a definite trend toward smaller and lighter carry pistols. Witness the Ruger LCP in 380 ACP. According to our sources, it sold over 1.5 million units in its first ten years, and now the improved version is out and still pushing

sales. As a whole, self-defense firearms are driving the market, and, accordingly, what the manufacturers decide to research then produce. The most recent trend we are seeing seems to be going back the other way — to somewhat larger pistols. The new generation of carry pistols is coming with

From top are the Springfield Armory XDE, the SIG Sauer P365XL, Smith & Wesson Shield M2.0, and Springfield Armory's new Hellcat #2. The story details what happened to Hellcat #1.

slightly longer slides and/or a little more grip to hold onto, along with a few more bullets in the magazine. Good idea? Bad idea? Let's go test some.

We recently reviewed (July 2019 Gun Tests) the Glock 43X and the Glock 48. Now we are going to add the Smith & Wesson M2.0 Performance Center Shield 11787 with a 4-inch barrel (\$430), the new SIG Sauer P365XL P365XL-9-BXR3 with a 3.7-inch barrel (\$580), and the Springfield Armory XDE9 XDE9389B with a 3.8-inch barrel (\$460). Last, we received a sample of the even-newer Springfield Armory Hellcat 3-inch Micro-Compact pistol (\$500, HC9319B) to add to the mix. Prices shown are recent listings at PalmettoStateArmory.com. We needed to find out what advantages these slightly larger micro-compact pistols convey — if they did indeed provide an edge to the concealed-carry defender.

How We Tested

Testing was done at American Shooting Centers on the west side of Houston. We chronographed each load with a LabRadar device and shot each for groups



9MM LUGER RANGE DATA				
Black Hills Honey Badger 100-grain Scalloped FMJ	SIG Sauer P365XL	S&W Shield M2.0	Springfield XDE	Springfield Hellcat
Average Velocity	1176 fps	1177 fps	1214 fps	1150 fps
Muzzle Energy	307 ftlbs.	307 ftlbs.	327 ftlbs.	293 ftlbs.
Small Group	1.84 in.	1.44 in.	1.84 in.	1.76 in.
Average Group	2.04 in.	1.74 in.	2.10 in.	2.01 in.
SIG Sauer V-Crown	SIG Sauer	S&W	Springfield	Springfield
115-grain JHP	P365XL	Shield M2.0	XDE	Hellcat
Average Velocity	1135 fps	1139 fps	1148 fps	1105 fps
Muzzle Energy	326 ftlbs.	329 ftlbs.	334 ftlbs.	309 ftlbs.
Small Group	1.29 in.	1.44 in.	1.88 in.	1.38 in.
Average Group	1.73 in.	1.84 in.	2.15 in.	1.65 in.
Speer Gold Dot 124-grain JHP	SIG Sauer P365XL	S&W Shield M2.0	Springfield XDE	Springfield Hellcat
Average Velocity	1109 fps	1097 fps	1124 fps	1077 fps
Muzzle Energy	334 ftlbs.	331 ftlbs.	348 ftlbs.	320 ftlbs.
Small Group	1.19 in.	1.31 in.	1.39 in.	0.89 in.
Average Group	1.46 in.	1.95 in.	1.93 in.	1.19 in.
Federal HST 147-grain JHP	SIG Sauer P365XL	S&W Shield M2.0	Springfield XDE	Springfield Hellcat

We chronographed each load (LabRadar) and shot each for groups at 15 yards from a well-sandbagged Caldwell Pistol Rest, using multiple types of practice and defensive ammunition. For self-defense ammo, we tested Black Hills 100-grain Honey Badger (Brownells.com \$29.95/20 105-001-753WB), 115-grain SIG Sauer JHP (MidwayUSA.com \$12.79/20, 966280), and 125-grain Speer Gold Dot (MidwayUSA.com \$16.49/20, 23618GD), as well as 147-grain Federal HST P9HST2S (BudsGunShop.com \$18.29/20, 32110). We used Winchester White Box (MidwayUSA.com \$13.99/50, 825232) for most of the action shooting.

972 fps

308 ft.-lbs.

1.86 in.

2.08 in.

958 fps

300 ft.-lbs.

1.02 in.

1.33 in.

at 15 yards from a well-sandbagged Caldwell Pistol Rest, using multiple types of practice and defensive ammunition. Then we shot drills looking for speed advantages. We did three five-shot groups to test accuracy and fired two different kinds of five-shot drills to measure speed, and then shot offhand, slowfire accuracy drills. More on how we did the drills later. Distances varied between 5, 7, 15, to more than 30 yards. We even snuck in a SIG P365 with the 3.1-inch barrel we had laying around to look for differences caused by the shorter length and lighter weight. For self-defense ammo, we tested Black Hills 100-grain Honey Badger, 115-grain SIG Sauer JHP, 125-grain Speer Gold Dot, as well as Federal's 147-grain HST JHPs. We used Winchester White Box for most of the action shooting.

Average Velocity

Muzzle Energy

Average Group

Small Group

We don't necessarily expect brand new pistols to work the first time, every time. With the notable exception of the first Hellcat (more on that later), these did. Testing required a total of about 150 rounds per pistol. We shot them slowly, quickly, at close range and at distance. We didn't intentionally make them malfunction, but we gave them every opportunity to do so. They were shot support hand/limp wristed, strong hand/gangsta style, support hand rolled over to 135 degrees from vertical and upside down using the little finger as a trigger finger. We also shot them correctly – a lot. We've already mentioned the first Hellcat; otherwise, including the second Hellcat, we did not have a single malfunction in the entire session.

993 fps

322 ft.-lbs.

1.82 in.

2.47 in.

950 fps

295 ft.-lbs.

1.61 in.

1.64 in.

All that said, the portion of the test with the two Hellcats provided us with what instructors call a teachable moment. Firearms are mechanical devices. Mechanical devices can break. Do not bet your life on an untested firearm working perfectly. Anyone's. Perform your own inspection on any new firearm and, regularly, on your EDC. Make sure they are lubed. Test them. We suggest at least a couple of hundred

HANDGUN COMPARISON

rounds of practice ammunition — think Winchester White Box, Remington Green Box, etc. Then clean them again. Do a second practice session using a selection of good, hollow-point ammunition (where legal) you might like to carry in that pistol. Find out if the pistol likes the same ammo you do. If it doesn't, it will let you know. Then, practice regularly with the pistol, and you should be good to go. Of course, all of this assumes you have had some good training.

If you have a problem with a firearm, call the manufacturer. Part of their organization exists just to take care of you and your problems. They want you to be happy. They want you to be safe. In this case, we had a failure with our first Hellcat, and Springfield's customer service responded very fast to rectify our problem. Kudos to them.

As an overall comment about the quartet, with the possible exception of the Hellcat, we believe these pistols are getting too big to use for pocket carry. But they should easily be carried and concealed on a belt, either IWB or OWB. In our tests, we used holsters from International Handgun Leather (who does not seem to be taking orders at this point) and Tucker Gun Leather (TuckerGunLeather.com). Members of our staff have been using Tucker's leather for more than 30 years. His holsters are designed and produced in Texas, demonstrate outstanding quality at a competitive price, and are available with a reasonable delivery time — words that you don't often see used together regarding custom leather.

In more detail, here's what we found out about each gun individually:

Springfield Armory Hellcat 3-Inch Micro-Compact HC9319 9mm Luger, \$500

The Springfield Armory Hellcat was a tale of two pistols. The first failed, but the second was excellent.



An excellent item at a competitive price, the Tucker Gunleather Pancake holster provides great concealment while allowing for the quick presentation of a carry firearm.

Thus its dual grade in the accompanying specifications module, opposite.

The XD series (XD, XDM, XDE, XDS) has been a long-term success for its importer, Springfield Armory, and deservedly so. We wondered if the new Hellcat model would be another just spin-off from that line and were very pleasantly surprised to see that was not the case at all. This micro-compact 9mm will stand on its own as it brings a number of new features from the engineers at Springfield.

Perhaps the first thing we noticed was the redesigned grip frame. We could actually see the way the light reflects off the grip texture change as we turned the pistol in our hands for initial inspection. We could see and feel what Springfield Armory has labeled their "adaptive grip texture." There are two layers to the grip texture. The first provides a moderate grip, but not to the point where it should prove overly abrasive to the skin next to your holster. The second, deeper layer, is designed to provide a much more secure purchase, but only when the shooter really tightens his hand on the grip. Our testers could easily feel the difference of the security of our grip on the pistol as we increased pressure with our hand. The grip has a beavertail designed to prevent hammer bite and is cut behind the trigger guard to allow the pistol to sit lower in the hand as an aid to recoil control. We won't say the front strap has grooves on it, but there is a very small bump that matched up well with several different-sized hands.

The magazine well has been beveled to aid in magazine changes. The sides of the grip frame have been relieved at the bottom, and those cuts match up with the magazine floorplate, allowing additional purchase in the event a stuck magazine needs to be removed. There are textured index pads for the thumbs near the forward end of the grip frame. This frame, though only 1.07 inches wide, still sports a regulation-sized Picatinny rail.

The magazine release was easy and positive to activate and is reversible. The trigger has the customary Springfield blade safety in the middle of the trigger. The trigger safety was easy to operate but did not protrude to the point where we felt an immediate need to get out a needle file and smooth it off. The trigger blade itself is flat and is designed to break the sear as the trigger comes vertical — a desirable feature, much like the trigger on the SIG P365XL. The trigger also had an overtravel stop to limit trigger travel and shorten the distance required to reset the trigger.

Everything else being equal, the higher the hand can get on a pistol and, the closer to the axis of the bore, the less leverage the recoiling pistol will have over the hand. All that means less felt recoil. We have noted for years that the Springfield Armory XD series has a somewhat taller slide and sits higher in the hand than most of its contemporaries. With the

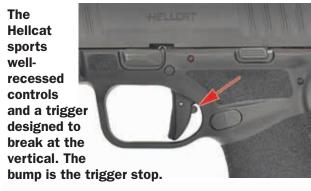
SPRINGFIELD ARMORY HELLCAT 3-INCH MICRO-COMPACT HC9319 9MM LUGER, \$500 GUN TESTS GRADE: F/A

Hellcat #1 failed when the trigger wouldn't reset, so we returned it. Thus the F grade. Hellcat #2 worked perfectly. Thus the A grade. Hellcat #2 had the most muzzle flip, but it won the 5x5x5 drill and gave us some of the best accuracy in the test. Hellcat #2 redeemed this new pistol's credibility, in our opinion.



Action Type	Semi auto, striker fired
Overall Length	6.0 in.
	4.625 in. with flush mag,
	4.75 in. with finger extension
Maximum Width	1.06 in. at slide stop
	18.1 oz., no mag
Weight Loaded	23.4 oz., w/12 rounds 124 grain

Slide Material Forged steel, Melonite finish Receiver Material.....Polymer Finish......Black Front Strap Height......1.625 in. Back Strap Height2.5 in. Barrel Length......3.0 in. Grip Thickness (Maximum)......1.06 in. Magazine.....(1) 11 round and (1) 13 round extended Rear Sight......Drift adjustable w/white outline U-shaped notch Front Sight......Tritium lamp outlined w/high-visibility green circle Sight Radius5.1 in. Trigger Pull Weight5.75 lbs. Safety Trigger blade, hammer block Warranty Limited warranty Telephone.....(800) 680-6866 Made In Croatia





A standard field strip on the Hellcat shows the nested recoil springs.



This is Hellcat #2, which has a beautifully polished ramp and throat — a nice touch to help your Springfield feed just about anything.



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Hellcat, the grip not only sits lower in the hand, so does the slide. Our calipers measured the height of the Hellcat slide to be only .001 inch taller than the SIG P365XL. The redesigned slide has grasping grooves fore and aft, with rear grooves cut over the top of the slide as well as the sides, providing a very secure grip for racking the slide or a simple press check. The barrel hood has a notch through which the shooter can make a visual check for a loaded chamber. The sights are outstanding. Again, like the SIG P365XL, the front sight has a very visible insert surrounding a tritium lamp. The rear sight is a semi-circular notch with a white outline. The rear sight also has the flat front to allow for one-handed slide manipulation.

Once again, disassembly is very simple; point the pistol in a safe direction, drop the magazine, lock the slide to the rear, verify manually and visually that the pistol is unloaded, rotate the takedown latch clockwise just a bit more than 90 degrees. Then, while holding the slide, press the trigger to release the slide and ease the assembled top end off the frame. Remove the spring, slide out the barrel, and disassembly is complete. The owner's manual notes that, at this point, the trigger will not release or re-set, but will remain in the most rearward position. Do not move the trigger forward, or you will not be able to reassemble the pistol. Upon disassembly, we were pleased to find that the barrel had been ramped and throated. This is a process in which the feed ramp leading to the chamber is polished to almost a mirror finish. Then the edges of the chamber are lightly chamfered and then polished as well. These extra touches make sure your pistol feeds when it has to.

The springs on the Hellcat deserve some attention. Magazine springs were pretty stiff to load but should loosen up with use. The pistol ships with a single 11-round magazine that comes with both a flush-fit floorplate and a grip extension for the pinky, as well as one 13-round mag. Be aware, if you go to change out the floorplate, that the magazine does not have any kind of internal floorplate and the spring has nothing to keep it in the magazine when the extension is removed. The spring on our sample insisted on coming out of the magazine when the floorplate was removed and required three hands, along with some

choice words, to reassemble. Just sayin'. The recoil spring reminded us of a 1911 recoil spring assembly, with a captured spring both inside and outside of the recoil spring plug. This fixed-length recoil spring guide rod also serves as a standoff device to help prevent a bad guy from pushing on the muzzle and taking the slide out of battery, preventing a shot.

Standard operating procedure for this group of testers is to do a basic field strip on every pistol, strictly per the owner's manual, inspect, lube with SLIP 2000, and reassemble. Initially, all rounds shot are slow fire and the pistol is checked periodically. As we proceed, shooting speed increases, as does the round count. Hellcat #1 started out perfectly. Speed was good. Accuracy was fine. After firing round number 57, we noticed that the trigger did not reset. We wondered if we could have ridden the slide with our thumb and caused the malfunction, so we did a slow, careful, administrative malfunction clearance and tried to dry-fire the pistol. The trigger still did not reset. We racked the slide several more times in an attempt to reset the trigger, to no avail. Before long, we noticed a small spring protruding from the rear of the slide. We took some photos, put the pistol back in the box and called Springfield Armory. The company rushed us a new pistol.

Our Team Said: Hellcat #2 worked perfectly through 192 rounds of testing, where we gave it a little extra chance to malfunction if it wanted to. The only 3-inch-barreled pistol in this test, the Hellcat had, in our opinion, the most muzzle flip. That did not prevent it from winning the 5x5x5 drill, where accuracy and speed are required. The Hellcat even gave us some of the best accuracy in the test with a five-shot 15-yard 0.89-inch group using 124-grain Speer Gold Dot. The Hellcat actually won the overall accuracy score, beating out the SIG P365XL by a miniscule .02 inches on the average group size. All in all, Hellcat #2 completely redeemed these new pistols in our eyes.

Smith & Wesson M2.0 Performance Center Shield 11787 9mm Luger, \$430

Smith & Wesson ran a 4-inch Shield through their Performance Center, adding several desirable improvements and left the pistol at a price where it is still our Best Buy.

Smith & Wesson introduced the subcompact M&P









From left are the sight pictures for the SIG P365XL, S&W Shield, Springfield Hellcat, and Springfield XDE. All four pistols give great daytime visibility. The SIG P365XL and the Hellcat also have tritium lamps.

SMITH & WESSON M2.0 PERFORMANCE CENTER SHIELD 11787 9MM LUGER, \$430 GUN TESTS GRADE: A (BEST BUY)

Smooth and accurate, great sights and trigger. Costs a lot less than the SIG.



Action Type	Semi auto, striker fired
Overall Length	7.1 in.
	4.7 in.
Maximum Width	1.04 in.
Weight Unloaded	19.7 oz., no magazine
Weight Loaded	25.1 oz. w/8 rounds 124 grain

Slide Material	Stainless steel, Armornite finish
Slide Retraction Effor	t13.7 lbs.
Receiver Material	Polymer
Finish	Black
Front Strap Height	1.8 in.
	3.0 in.
	4.0 in.
Grip Thickness (Maxir	mum)0.95 in.
Grip Circumference	5.2 in.
Magazine	(1) 7 round & (1) extended 8 round
Rear Sight	Fiber optic in drift adjustable dovetail
Front Sight	Fiber optic in dovetail
Sight Radius	5.9 in.
Trigger Pull Weight	4.3 lbs.
Trigger Span	2.1 in.
Safety	Trigger safety, hammer block
	nith & Wesson Lifetime Service Policy
Telephone	(800) 331-0852
	Smith-Wesson.com
Made In	U.S.A.



Both the SIG P365XL and this model of the Performance Center Shield come with slides milled for a red-dot sight.







Sight cages for the front and rear sights on the Shield have been engineered to provide great lightgathering potential while still providing excellent protection for the fiber-optic tubes.

Left: The Shield ships with two magazines, a flush-fitting 7-round stick, top, and an extended 8-round mag. The extended mag has a sleeve (arrow) to prevent overinsertion and to serve as a rest for the little finger. The PC Shield's grip texture is aggressive enough to do a great job in controlling the pistol.

HANDGUN COMPARISON

Shield in 2012. The company announced later that they had produced and shipped more than 1 million of the popular carry pistols in only three years, making this one of the most popular pistols in firearms history. It is light enough, small enough, and thin enough to conceal while still large enough to shoot and inexpensive enough to own. The 2.0 version came out in 2017 with some very nice upgrades in the way of improvements to the trigger and grip texture. Now we have the 4-inch Smith & Wesson Shield M2.0 from the renowned Performance Center with even more new features.

As a rule, this group of testers really likes sights that help draw the shooter's eyes to them without confusing the shooter as to what sight they are seeing and where. This PC Shield comes with fiber optics all around. The rear sight has the now in-vogue flat front shelf for one-handed slide manipulation. It also has two red fiber-optic tubes in a mount designed to protect them from hard use while still allowing it to collect light and be highly visible to the shooter. The rear-sight mount is in a dovetail and is drift adjustable. The front sight is constructed similarly but has a green optic tube, helping the shooter differentiate which sight is which. Some versions of the PC Shield (like this one) come with the slide already milled to receive a red-dot sight. A cover is provided that blends in with the curves of the slide and is held in place by two easily accessed screws. The slide is stainless steel with an Armornite finish. The rear of the slide has grasping grooves that, perhaps, can best be described more as scallops than serrations. A small strip on the front of the slide has a similar arrangement, once again allowing a press check while the shooter's hand is still well clear of the muzzle.

This group of testers likes pistols that don't shift easily in the hand, and the PC Shield tends to stay where you put it. The raised bumps, projections, stippling, whatever you want to call them, are aggressive enough to do a great job. They are not overly abrasive, but you might want to wear some kind of garment between this concealment pistol and your skin. All of the controls are on the left side. The magazine release is easily reached and very positive in ejecting the magazine. The pistol ships

with two magazines; one flush-fitting 7-rounder and an extended 8-round mag. The extended mag has a sleeve to prevent overinsertion and to serve as a rest for the little finger.

Takedown is a little different, and the shooter should check the owner's manual first. Drop the magazine. Retract the slide and lock it to the rear. Visually and manually verify that the pistol is unloaded. Locate the ejector at the top of the magazine well. The sear-release lever is just under that and needs to be rotated down to release the slide. Rotate the takedown lever on the side of the frame clockwise and the upper assembly will slide off.

The lower half of the trigger face pivots, and in doing so, acts as a safety to prevent lateral discharge. The trigger also gets some extra attention on a Performance Center Shield. This sample only required 4.3 pounds of pressure to activate. The pull was very consistent, with only an average of 2 ounces of variation in compression required. There is a bump molded into the frame behind the trigger acting as a trigger stop. This decreases the movement of the trigger after the sear is released. Including initial take up, total movement required to release the sear was just under half an inch. Reset only required about a quarter-inch of movement. The other two pistols tested had good triggers in their own right, but the PC Shield wins the trigger contest for this group.

Shooting results at the range showed the PC Shield has just a bit more grip angle (18 degrees) than the others, and it took us a few reps to get used to how it pointed. After that, it was off to the races with the Shield. It was the overall winner of our speed drills. The Performance Center trigger and sights really helped here.

Our Team Said: The Shield M2.0 is smooth and accurate, with outstanding sights and a great trigger. It costs a lot less than the SIG, so we like it as our Best Buy.

Springfield Armory XDE9 XDE9389B 9mm Luger, \$460

The largest of the four pistols tested, the Springfield XDE brings its own advantages to the concealed carry arena.

Though not as predictably as new automobiles,

From left are the grip textures for the SIG P365XL, S&W Shield, Springfield Hellcat, and Springfield XDE. All four of our test pistols display a similar concept on the grip texture, with the Shield being the most aggressive. You might want to wear an undergarment with it.









SPRINGFIELD ARMORY XDE9 XDE9389B 9MM LUGER, \$460 GUN TESTS GRADE: A

Shooters who need a slide that is easier to retract, who want a hammer-fired pistol, or who prefer a good DA/SA trigger might choose the XDE.



Action Type	Semi auto, external hammer fired
Overall Length	7.0 in.
	5 in. w/flush magazine,
	5.25 in. with extended mag
Maximum Width	1.12 in.
Weight Unloaded	23.9 oz., no mag
Weight Loaded	30.1 oz. w/9 rounds 124 grain



This thumb safety allows the shooter to carry the Springfield XDE "cocked and locked," or it can be used as a decocker.





The Springfield XDE can also be carried with the hammer down in the traditional double-action/single-action mode.

firearms manufacturers frequently introduce new models and makeovers to give the marketing departments something to talk about and, sometimes, to fix issues. The Springfield Armory XD has been a noteworthy success but, like almost everything, had room for improvement. One of the major areas that needed to be addressed, we believed, was the aggressiveness of the grip surface on the early models. We commented on that as recently as the September 2019 edition of Gun Tests. Several years ago, Springfield introduced the XD Mod 2 and with it, "Grip Zone" texturing — a huge improvement, in our

eyes. Many new additions to the Springfield Armory line of pistols have adopted most of the desirable Mod 2 features. A great example is the relatively new XDE (introduced April 2017), with the "E" signifying an External hammer.

The vast majority of new pistols introduced in the last 20 years or so have been polymer-framed striker-fired models. Springfield decided it was time to add a new double action/single action pistol to the line. It seems like they may be a little late to the table, but Springfield will tell you they don't care if they are first or not to the market with a concept

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— they just want to make sure it is right.

But why a DA/SA? You wind up with a heavy trigger pull on your first shot and a different amount of compression needed on subsequent shots. Some folks are willing to train for that and some aren't. But some really like that heavy first pull (our tests showed 10.9 pounds average DA pull weight). The opportunity for a negligent discharge in the heat of the moment is reduced with this type of trigger. Follow-up shots are quick and light (ours required an average 4.5 pounds compression).

Elsewhere, there is an ambidextrous manual thumb safety that disengages the trigger and allows the pistol to be carried "cocked and locked" à la the 1911. The thumb safety also serves as a decocker, allowing the cocked hammer to be mechanically lowered in a safe manner. That same hammer, pulled all the way to the rear, can be visually or digitally checked and serves as absolute confirmation that the pistol is cocked and ready to fire. There are at least two situations when we believe we really want to have a manual safety: first is when carrying off body, such as in a brief case or a purse, and the second is when carrying AIWB — Appendix Inside the Waistband. We think a little extra care, maybe even a hint of paranoia, is fully justified in these cases.

Those acquainted with the Springfield XD Mod 2 series will find most of the features on the XDE very familiar. The slide is forged steel with a Melonite coating. Grasping grooves have been cut on the rear of the slide only. The rear sight has two white dots and is drift adjustable. The front sight is mounted in a dovetail and has a red-fiber-optic pipe in it. A lever, to the rear of the chamber, lifts up at an angle, serving as a visual and tactile loaded-chamber indicator. Springfield Armory claims that, through their engineering, the effort required the retract the slide is 27% lighter than industry average. A quick look through the specs tables show the exact differences between our four test pistols on the strength required. As well, we can tell you that, subjectively, the Springfield Armory XDE did indeed require less effort to retract



As shown in the 5x5x5 drill, all the pistols were fast, accurate, and controllable. This is the SIG.

the slide than the SIG, the Springfield Hellcat, or the S&W — something that could be lightened even further by first cocking the hammer, then retracting the slide. This could be very important to a user with diminished hand strength.

The grip module, just like the other two pistols tested here, does not have inserts or any other way to change the shape or circumference of the grip. It does, however, feature different levels of aggressiveness in the texturing Springfield Armory calls the "Grip Zone." This allows the shooter to maintain a solid grip on the pistol without some of the potential discomfort of previous models. The magazine release is positive and ambidextrous, as is the thumb safety. The takedown lever and slide release are left side only. The dust cover has a section of Picatinny rail.

The magazine well is slightly beveled. Mag changes are smooth and easy. The pistol ships with two magazines. The first is an 8-rounder and comes with a flush-fitting floorplate as well as a floorplate with an extension for a pinky finger. The other magazine is an extended 9-rounder that also allows room for the pinky on the grip. Be careful of your hand position on this one while doing a fast reload. It can pinch your palm — ask us how we know.

At the range, as we expected, the DA/SA trigger took a bit more time to get used to. Our first shots were normally a bit slower than with the other three pistols. Once we did get in the zone with the XDE, the short, light single action came into its own and actually shot some of the best split times of the session. We know that these are to be concealment pistols and that width is a huge factor in how concealable a pistol is. Still, we would like the thumb safety to protrude a bit more from the side of the pistol, making it easier to engage or disengage.

Our Team Said: The Springfield Armory XDE could be an excellent choice for many shooters, especially for those who need a slide that is easier to retract or a good DA/SA trigger for off-body carry.

SIG Sauer P365XL P365XL-9-BXR3 9mm Luger, \$630

With a little more weight up front, a better trigger, and a slide already milled for a slide-mounted optic, what is perhaps the hottest-selling pistol in the country just got a bit better.

The SIG P365 (marketing talk for you can carry it 365 days a year) was introduced to the public at the 2018 S.H.O.T. (Shooting Hunting and Outdoor Trade) SHOW in Las Vegas. After working through some initial teething problems, the shooting world and SIG Sauer realized they had a real winner on their hands. Several sources show this to be one of, if not the best-selling pistol in the U.S. as of mid-2019.

SIG Sauer staffers did things out of the norm in their research and development process on this pistol. They designed a small, but higher-capacity,

SIG SAUER P365XL P365XL-9-BXR3 9MM LUGER, \$580 GUN TESTS GRADE: A (OUR PICK)

The SIG P365XL was the most accurate of the four pistols tested and the second-fastest in the speed-shooting drills. The magazine capacity of the SIG P365XL, its trigger, and its longer-range accuracy make it Our Pick of these handguns.



Action Type	Semi auto, striker fired
Overall Length	6.6 in.
	4.8 in.
Maximum Width	1.1 in. at magwell only;
1.0 in. max width	n elsewhere, including slide stop
Weight Unloaded	18.0 oz., no magazine

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The empty case is barely out of the ejection port of the P365XL, and the muzzle is almost back down after recoil. Enclosing a tritium lamp for night-time use, the SIG P365XL front sight is also very visible in the daylight.

Weight Loaded26.1 oz	. w/13 124-gr. Speer Gold Dots
Slide Material	Stainless steel, nitron finish
Slide Retraction Effort	14.7 lbs.
Receiver Material	Polymer
	Black
	2.1 in.
	2.75 in.
	3.7 in.
	1.17 in.
Grip Circumference	5.1 in.
	o 12-round flush-fit magazines
Rear Sight	Fixed with tritium inserts
Front SightDrif	t adjustable with tritium insert
	5.5 in.
Trigger Pull Weight	4.9 lbs.
Trigger Span	2.7 in.
	Firing pin block
Warranty	Limited lifetime
Telephone	(603) 610-3000
Website	SIGSauer.com
Made In	Newington, NH



Sporting a generous magwell on a small pistol, reloads on the SIG P365XL were easy and fast.

magazine (10-round flush-fit magazine) and then built a pistol to go around it. They also required that it be no larger than their primary competition, such as S&W, Springfield, Glock, etc. They offer a 12-round magazine with a small sleeve on the base that matches with the bottom of the grip frame. They even have a 15-round magazine now. It protrudes from the base a good bit, but it can give the shooter something extra to hold onto.

This summer, SIG upped the ante by bringing out a

slightly larger version of the SIG P365. They named it the SIG P365XL, and it brings a number of desirable features with it. The barrel is now 3.7 inches long instead of 3.1 inches. The shooter gets a little more velocity than he would from the shorter barrel. There is also a little more beef out on the business end of the slide that can help dampen recoil, and the sight picture is just that much longer, allowing a more precise sight picture and, maybe, a bit more accuracy. The grip frame is just enough longer to allow the

HANDGUN COMPARISON

12-round magazines to fit flush with the base of the grip. Please note that the 12-round magazines from the P365XL will fit in the smaller P365 just fine, but that the sleeved 12-round mags from the P365 will not fit in the XL model. The sleeve gets in the way. As of this writing, we have not found any replacement base pads that would make the original 12-round mags fit the XL. We have also not found any additional 12-round mags for the P365XL. It looks like the only additional or replacement magazines available for the moment are the SIG 15-round extended magazines. Still, the pistol comes with two 12-round flush-fit magazines, and the 15-round mags work well, so the shooter will have to decide if that is an issue or not.

The slide has still more changes. The top of the slide, extending from the rear of the slide for almost 1.7 inches, has been milled out and set up for an optical sight. Just remove two screws, accessible from the inside of the slide, to remove the cover plate, which also includes the rear sight. We understand that a new reflex sight from SIG called the Romeo Zero has been designed specifically to fit the SIG P365XL, and, hopefully, will be available soon. That should provide a slide-mounted red-dot optic in a very small carry package. We shall see.

Not only is the slide set up for the red dot, this version comes with the X-Ray 3 Day/Night sights installed. The rear sight has two tritium lamps that glow in low light but aren't really visible in daylight, and our testers liked that. The forward edge of the rear sight is flat and can be used to manipulate the slide single-handedly. The front sight also has a small tritium lamp that is circled by a round, green insert that makes the front sight more visible in bright light. We liked this arrangement better than several dots of the same color that be mistaken for a different dot as the shooter looked at the sights. The slide has grasping grooves front and rear that are aggressive enough to allow a firm grip on the slide without cutting the hand. The front grasping grooves are just far enough to the rear to allow a quick press check and still keep the hand well clear of the muzzle. All of the edges are rounded and beveled to allow smooth reholstering.

Take down is very simple; point the pistol in a safe direction, drop the magazine, lock the slide to the rear, verify manually and visually that the pistol is unloaded, rotate the takedown latch clockwise just a bit more than 90 degrees, and slide the assembled top end off the frame. Remove the spring, slide out the barrel and disassembly is complete. To reassemble, perform the same moves in reverse.

The polymer grip module has also been updated. The grip is slightly longer and incorporates an integral, beveled magwell for faster reloads. It now seems to be just long enough to lessen the chance the shooter will pinch the palm of the hand during that reload. Most of the grip is covered with a surface that has



We ran seven different types of ammunition through these test pistols, including five different hollow-point profiles, without a single malfunction — outside the failure of the first Hellcat.

enough texture on it to allow a solid hold on the pistol without feeling overly abrasive. The trigger guard has been undercut, allowing the shooter's hand to move higher on the grip and reduce muzzle flip a bit. The dust cover still has the same proprietary accessory rail as of the P365. The trigger has been changed to the flat-faced X Model style. Our testers liked the leverage and the feel of the flat trigger during slow or rapid fire.

At the range, the P365XL shot very well, coming in second place in our accuracy tests, with average groups just over 1.6 inches. It is slightly smaller than the Shield or the XDE and seemed to have a bit more muzzle flip. That being said, it was very controllable and normally finished second in the speed drills, with total times only 0.1 second behind the winning S&W Shield. The trigger, while not the lightest of the three, seemed to be the easiest to learn and helped the P365XL win the long-range drill by a decent margin. We tried the 3.1-inch-barreled SIG P365 (to be reviewed next month) in the drill making five shots at 5 yards in a 5-inch target from the draw. Once we remembered that we had to hold onto the little pistol hard, the times weren't much behind its larger cousin, which surprised us a bit.

Our Team Said: By a small margin, the SIG P365XL was the most accurate of the four pistols tested. It wasn't the fastest in the tests, but it shot to a very close second place. The magazines hold 12 or 15 rounds, depending on your state and your tastes. We would hate to have to live on the difference between the capabilities of these four pistols. Each has their own set of advantages. The magazine capacity of the SIG P365XL, its trigger, and its longer-range accuracy take it over the top on our vote for a winner.

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

Survival Guns: TPS, Savage, And Rossi Go Head to Head

Yes, we realize your B-52 probably won't get shot down over remote wilderness where you'll need a firearm to help you make it out. But these 22 LR/.410 Bore combination guns have other uses as well.

characteristics: light weight, packability, and reliability. After all, the purpose of a survival rifle is to do actually that, to help you survive and live off the land when stranded in the wilderness. A secondary purpose of a survival gun is defense against four-legged and two-legged predators. Traditionally, survival rifles, like the U.S. Military's M6, combined a 22-caliber rifle with a .410-bore barrel. That makes a lot of sense because you can pack a lot of ammunition in a small space, and it doesn't weigh a lot.

The original M6 survival weapon was issued to bomber crews who, in the event of a bail out, would land in the wilderness, where rescue would be long in coming, if ever. There was a need to hunt game and live off the land, and since weight and space are at a premium on a bomber, the small M6 fit the requirements.

With that in mind, we procured three firearms chambered for 22 Long Rifle and 410 bore:

- The Rossi Matched Pair 410/22 MP4111813Y22OD 22 LR/410 bore, \$182, is not a true combination gun like the TPS M6 or Savage 42 because it has two separate barrels, but it can serve the same purpose of lightweight, packable survival equipment.
- The Savage Model 42 Takedown 22440 22 LR/410 Bore, \$425, a new variation of Savage's combination designs produced since the 1930s.
 - The TPS M6 M6-100 22 LR/410 Bore, \$487, is



Top is the Rossi Matched Pair 410/22 MP4111813Y220D 22 LR/410 bore, shown here with its shotgun barrel. It also comes with a 22 LR barrel. Center is the Savage Model 42 Takedown 22440 22 LR/410 Bore, a new variation of Savage's 90-year-old combination designs. Bottom is the TPS M6 M6-100.

an enhanced version of the Military's M6 Aircrew Survival Weapon first issued in 1952.

How We Tested

We fired these rifles using open sights, though a scope or red dot could be mounted on the TPS and

Rossi. We ran through boxes of 22 LR ammo with various bullet weights and styles at targets set to 25 yards. We also tested 410 shot,

This is the TPS M6 M6-100 22 LR/410 Bore, an enhanced version of the Military's M6 Aircrew Survival Weapon first issued in 1952. The original M6 survival weapon was issued to bomber crews who needed to hunt game and live off the land while they waited for rescue. We think this version of the M6 is better than the original, and it's Our Pick in this match up.

SPECIALTY FIREARMS

slug, and self-defense loads at 25 yards, though 25 yards is pushing the effectiveness of the 410 shot load and that of the shooter. We also fired at hand-tossed clay pigeons to see how well the guns work on moving targets.

Overall, we think these three rifle/shot combination guns are capable, the TPS moreso than the Rossi and the Savage, of providing a weapon capable of living off the land. We don't think you need to be a bush pilot to own one of these guns. Those of us who camp, hike, or take canoe trips might consider one of these guns in the unlikely event something goes sideways in the wilderness and dialing 911 is not an option. As you can tell, we found one of these guns to be very capable. Read on to find which one survived to be the fittest firearm if you're all on your own.

Rossi Matched Pair 410/22 MP4111813Y22OD 22 LR/410 bore, \$182

Though not a combination gun like the TPS and Savage, the Rossi does provide a small, lightweight firearm chambered in both 22 LR and 410 bore. The Rossi comes with a separate barrel for each cartridge, and the gun is quite easy to disassemble and reassemble. The polymer forend unscrews from either barrel via the front sling swivel. The screw is held captive in the forend so it won't get lost. The user can then attach either barrel to the receiver, attach the forend, and tighten it up. The entire process takes little time.

The 22 LR barrel is outfitted with fiber-optic adjustable sights. The rear sight is fully adjustable for windage and elevation. We had to zero the sight for testing. The front sight uses a hood with a hole in the top side to allow light to hit the fiber optic. We



The Rossi has three sights. On the rifle barrel, the front sight (above left) has a removable hood with cut outs so light can get to the red fiber optic. Above right is the rear iron sight with green fiber-optic

tubes. Right, the shotgun barrel has a plain brassbead front sight. We thought the combination offered good visibility and sighting quality.



In the Rossi Match Pair stock, shotshells can be stored in the right side of the stock, top, and 22 LR cartridges in the left-hand side.

thought these sights were serviceable and liked them the best of all three guns. There were not, however, as rugged as those on the other guns. The barrel was also drilled and tapped for mounting a scope or red dot. The 410 barrel used a brass-bead front sight. The finish on the receiver and barrels was a well-executed matte blue. By no means fancy, but serviceable.

The forend and thumbhole stock are polymer with a coarse texture. The length of pull is short, so this would make a good training rifle for a child or small-statured shooter. The short stock is also a feature of survival rifles like the TPS M6. The stock has a rubber recoil pad and allows the user to store four 410 shells on one side of the stock and seven 22 LR cartridges on the other side. We liked this feature. Though the stock is small, adult-sized shooters found it relatively easy to shoulder and shoot.

This break-action locates the opening lever on the right side of the hammer. It is a good location for either a right- or left-handed user. Depress the opening lever and the action opens for loading. To fire the Rossi, thumb back the hammer and press the trigger. A manual safety is located on the left side of the receiver. When the red dot is exposed, the rifle is ready to fire. The safety lever can be rotated counterclockwise to the safe position, covering the red dot, when the hammer is cocked or uncocked. In this position, the the action can be opened and closed.

At the bench and using a rest, we found the Rossi

22 I R	AND	410	RORE	RANGE	DATA
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Aguila Super Maximum	TPS	Rossi	Savage
22 Long Rifle 30-gr. LRN	M6	Matched Pair	42 Takedown
Average Velocity	1700 fps	1698 fps	1720 fps
Muzzle Energy	193 ftlbs.	192 ftlbs.	197 ftlbs.
Smallest Group	0.75 in.	0.83 in.	1.00 in.
Average Group	0.97 in.	1.33 in.	1.25 in.
PMC Target	TPS	Rossi	Savage
22 Long Rifle 40-gr. RNS	M6	Matched Pair	42 Takedown
Average Velocity	1000 fps	989 fps	990 fps
Muzzle Energy	89 ftlbs.	87 ftlbs.	87 ftlbs.
Smallest Group	0.88 in.	1.6 in.	0.35 in.
Average Group	0.98 in.	1.9 in.	0.62 in.
CCI Mini-Mag	TPS	Rossi	Savage
22 Long Rifle 36-gr. HP	M6	Matched Pair	42 Takedown
Average Velocity	1255 fps	1245 fps	1250 fps
Muzzle Energy	126 ftlbs.		125 ftlbs.
Smallest Group	0.87 in.	0.28 in.	0.60 in.
Average Group	1.0 in.	1.13 in.	0.94 in.
Remington Thunderbolt	TPS	Rossi	Savage
22 Long Rifle 40-gr. LRN	M6	Matched Pair	42 Takedown
Average Velocity	1250 fps	1246 fps	1239 fps
Muzzle Energy	139 ftlbs.	138 ftlbs.	136 ftlbs.
Smallest Group	0.75 in.	0.73 in.	0.72 in.
Average Group	0.97 in.	1.10 in.	1.36 in.
Winchester Super X	TPS	Rossi	Savage
410 2.5-in. rifled slug	M6	Matched Pair	42 Takedown
Average Group	2.2 in.	2.0 in.	3.3 in.
Winchester PDX1	TPS	Rossi	Savage
410 2.5-in. 3 discs/BB shot	M6	Matched Pair	42 Takedown
Average Pattern	5.2 in.	6.6 in.	5.1 in.
Hornady Critical Defense	TPS	Rossi	Savage
410 2.5-in. (2) 35-cal/(1) 41-cal	M6	Matched Pair	42 Takedown
Average Pattern	2.1 in.	4.3 in.	2.4 in.
Federal Steel Game & Target	TPS	Rossi	Savage
410 3" #6 shot	M6	Matched Pair	42 Takedown
Average Pattern	18.0 in.	23.0 in.	17.4 in.
Aguila High Velocity	TPS	Rossi	Savage
410 2.5-in. #7.5 shot	M6	Matched Pair	42 Takedown
Average Pattern	20.0 in.	26.0 in.	20.1 in.

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

to be user friendly. Loading either a 22 LR cartridge the hammer was easy for an adult, but a child may or a 410 shell was easy, and there was plenty of room, need assistance. The trigger had no creep and broke even for sausage-fingered testers. Thumbing back cleanly at 6.2 pounds. If it was a few pounds lighter,

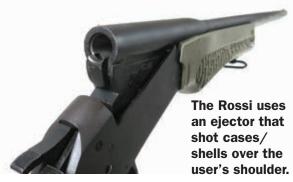
ROSSI MATCHED PAIR 410/22 MP4111813Y22OD 22 LR/410 BORE, \$182 GUN TESTS GRADE: A

This Matched Pair 410/22 is lightweight and simple to operate. We liked the sights, the ease of disassembly, and handling of this gun. You get a lot of gun for the price.



	Textured synthetic, Olive Drab, id rubber recoil pad, sling swivel
	11.5 in.
	ynthetic, Olive Drab, sling swivel
Sights Shotgun Barrel	Brass bead
Sights Rifle Barrel	Adjustable rear fiber optic;
-	hooded fiber optic front
Trigger Pull Weight	6.2 lbs.
Safety Ma	anual hammer block, transfer bar
Warranty	1-Year
Telephone	(800) 948-8029
	RossiUSA.com
Made In	Brazil









The rear sight used green fiber optics and is adjustable for windage and elevation. The rifle barrel is also drilled and tapped for an optic.

SAVAGE MODEL 42 TAKEDOWN 22440 22 LR/410 BORE, \$425 GUN TESTS GRADE: B+

The Model 42 follows Savage's tradition of combo guns, and this gun has some fine attributes: accuracy and simple disassembly/reassembly. Where it falls down is ease of use and price.



Action Type	Break action,
, , , , , , , , , , , , , , , , , , ,	22 LR barrel over 410 bore barrel,
	manual hammer, single-shot
Chamber Size	3.0 in.
Overall Length	35.75 in.
Disassembled Length	21.5 in.
Capacity	2
Weight Unloaded	6.1 lbs.
Weight Loaded	6.18 lbs.
Barrel Length	20.0 in.
Barrel	Blued steel
Receiver	Rlued steel

	Fixed Cylinder choke Black textured synthetic,
	ventilated rubber recoil pad, sling stud
Buttstock LOP	13.5 in.
Forend	Black textured synthetic, sling stud
Sights	Plastic front post, adjustable notch rear
Trigger Pull Weight	4.6 lbs.
Safety	Manual hammer block
Warranty	1-year limited
Telephone	(800) 370-0708
Website	SavageArms.com
Made In	Canada



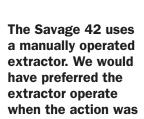


The opening lever was uncomfortable to operate. We think a flat surface, in lieu of the pointed surface, would make this lever user friendly.

Top barrel is the 22 LR; bottom the .410 bore. The thin metal extractor did not work 100 percent when ejecting 22 LR cases.



Top, arrow: A button on the underside of the forend is pressed to slide it toward the muzzle to start the takedown process; the forend is permanently attached to the barrels.



opened.





The Savage Model 42 breaks down quickly and into two small packages. It comes with a soft Uncle Mike's Bug Out case.

SPECIALTY FIREARMS

we think our groups would have been better. We did get some nice five-shot groups, with CCI Mini-Mag ammo providing the tightest group, which measured 0.28 inches at 25 yards. Average groups measured 1 to 2 inches, depending on the ammo. The opening lever required about the same amount of effort, and the action opened with ease, though it did require two hands to open the action. Empties are ejected over the user's shoulder a foot or so away. The grip angle was straight, so it was very comfortable to shoot at the bench and off hand.

Moving to the shotgun's barrel, we found the Rossi grouped slugs and defense loads quite well. We also noticed increased recoil. The Hornady Critical Defense load measured 4.2 inches at 25 yards. We recommend waiting until you see the whites of their eyes before firing in self defense because distance shooting is really not part of the Rossi's lexicon. Nor is it with the other rifles tested.

Firing birdshot at clay pigeons was a bit difficult due to the short LOP and the abbreviated barrel. But we did get in the swing of things and dusted clays. Patterns measured 23 to 26 inches at 25 yards, depending on the load. Empty shells ejected similarly to empty 22 LR cases.

Our Team Said: The Rossi is a good, inexpensive survival gun that is also fun to shoot. We would buy a case to hold the Rossi disassembled, then it could easily travel to the campsite or take to the trail in a backpack.

Savage Model 42 Takedown 22440 22 LR/410 Bore, \$425

Savage has a long history of combination rifle/shotguns. There is a cult-like following for the Model 24. This new Model 42 Takedown follows that heritage, to certain extent. The 42 incorporates polymer through out. It comes with an Uncle Mike's bug-out bag that stores the disassembled gun.

This break action uses an opening lever located in front of the trigger guard. This lever is a stamped piece of steel with a thin, pointed edge that is pressed rearward to open the action. We found pressing the lever rearward was uncomfortable, so some of us resorted to pinching it between our fingers and pulling back. This was the first miss with the 42. We think the lever should be redesigned to make the lever more comfortable and easier to use. When pressed, the action opened with ease, proving plenty of room to load the gun.

The 42 uses a manual extractor, which means the user needs to grasp the extractor bar from both sides and pull rearward to expose the rim of the shell/cartridge, and then pull them out with your fingers. A thin, flexible piece of metal acts as the ejector. During live-fire testing, we noticed the extractor would not catch on the rim of some of the 22 LR cases, which required us to push the extractor bar fully forward to catch the rim and then pull back to extract. We

found this to be annoying and a second miss on this gun. We would have preferred a manual extractor, like the TPS, that extracts the cartridge/shell when the action is opened.

The action closed with ease and confidence. The barrel selector is located on the top of the exposed hammer. Rotate it down to fire the lower shotgun barrel. Rotate it up to fire the upper rifle barrel. All this can easily be done when thumbing back the hammer. The hammer has a long spur and plenty of serration for a sure grip. There is a manual cross-bolt hammer-block safety through the receiver. If the crossbolt safety sticks out the left side of the receiver exposing the red band, the gun is ready to fire.

The stock is polymer with texture at the pistol grip and covers the outside of the receiver. The trigger and hammer mechanism are housed in steel that is inset into the polymer stock. The rubber recoil pad is ventilated, and we noticed a tab in the comb of the stock. We thought Savage incorporated a storage compartment in the butt. We found out we needed to unscrew the sling swivel to remove the butt. We thought this was deceiving. In our opinion, Savage lost an opportunity to create a shell/cartridge storage space in the stock.

The forend is polymer with a groove and texture to better grasp the front of the gun. The forend acts like a tube and completely surrounds the two barrels. It has a sling stud and a button on the under side. Press the button and slide the forend toward the muzzle to start disassembly. We thought this was clever and well done, but we did notice there was some play when the forend was snapped back into position.

The front sight is polymer and forms a band to separate the two barrels at the muzzle. We would have liked a fiber-optic front sight in lieu of the black post. The rear sight was made of plastic and sported a plain and tiny U-notch. The rear sight is adjustable for windage and elevation.

Going hot with the 42, we found it shot circles around the Rossi and the TPS. The best group with PMC Target ammo measured 0.32 inches. Even inexpensive Remington Thunderbolt ammo had a best group measuring 0.72 inches. Overall, the average group size out of the 42 was much tighter even with the fine, black sights. Defense shotshell loads were darn surgical with the 42; Hornady Critical Defense measured 2.4 inches, and Winchester PDX1 measured 5.1 inches. For wing shooting, we preferred the 42 since the LOP was more adult size. It also patterned a bit tighter at 25 yards. It was fun dusting clay pigeons with the 42.

Our Team Said: The 42 had two misses: the takedown lever and the extractor. It did, however, show its stuff in accuracy and ease of shooting. Because its length of pull is longer than the other guns, this is not the gun for tiny, newbie shooters. The cost puts this rifle right in the middle of the inexpensive Rossi and expensive TPS.

TPS M6 M6-100 22 LR/410 BORE, \$487 GUN TESTS GRADE: A (OUR PICK)

The M6 follows in the footsteps of the previous M6 design and does it it better. The choke tubes, AR-15-style takedown pin, and storage compartment make this evolution of the M6 better. This is the survival rifle we'd choose if cost is not a factor.



Action Type	Break action,
	22 LR barrel over 410-bore barrel,
	manual hammer, single-shot
Chamber Size	3.0 in.
Overall Length	32.25 in.
Disassembled Length	18.875 in.
Capacity	2
Weight Unloaded	5.1 lbs.
Weight Loaded	5.18 lbs.
	18.25 in.
	Blued steel
Receiver	Blued steel

Choke	Full choke tube
Buttstock	Aluminum storage compartment,
	serrated butt, tapped for sling studs
Buttstock LOP	12.0 in.
Forend	None
Sights	Steel front post, flip up peep/V-notch rear
Trigger Pull Weig	ght4.2 lbs.
Safety	Manual hammer block
	Limited lifetime
	(320) 358-0230
	TPSarms.com
Made In	USA



Above: The enlarged trigger guard allows the M6 to be fired when wearing mittens. Note the trigger shape is long, and the trigger is more of a bar to squeeze than a pull.



One nit is the latch to the ammo strange compartment looks like a safety. You can stash plenty of ammo in the stock. Both shells and cartridges are easy to retrieve from the ammo storage inserts.



SPECIALTY FIREARMS

TPS M6 M6-100 22 LR/410 Bore, \$487

All prices are recent listings at BudsGunShop. com. The TPS M6 is not your daddy's original M6. TPS upgraded the design to include improvements, such as a captured takedown pin similar to an AR-15 receiver. This allows for rapid takedown and to prevent the loss of the pin. Another enhancement is the shotgun barrel, which uses interchangeable 410 choke tubes. It comes with a standard Full choke tube and choke-tube wrench. Like the original M6, the TPS is equipped with a flip-up peep sight for the 22 barrel and a V-notch sight for use with the 410 barrel. The front sight is fixed, and part of the band holds the barrels at the muzzle. It uses a steel extractor for easier removal of stuck shells. The stock assembly is also upgraded. It is made of high-quality aircraftgrade aluminum and has a textured powder-coat finish. The aluminum buttpad is wider than originals to provide more comfort when shooting 410 3-inch slugs, buckshot, and defensive loads. The buttstock is drilled and tapped to accept standard sling swivels like the original M6. There is a hole in the front-sight assembly to attach a sling. The M6 is small, with a shorter length of pull than a typical rifle, and that's due to the design's goal of being a compact weapon.

The comb of the M6 forms the hinged cover to a compartment with interchangeable shell-storage inserts. Our test rifle came with one 410 insert for six shells and one 22 insert that holds 13 rounds. The rounds can easily fall out of the insert if you accidentally invert the M6. Because there is no resistance, the rounds are easy to load and unload, but they do rattle when you shake the M6 and could fall out if you are careless. There is also a compartment in the front of the stock for accessories. The shell inserts can be removed to access additional storage space underneath the inserts. The aluminum hinged cover is rounded on the edges for more comfort when you have a solid cheek weld. Originals had a squared edge. TPS added a crossbolt safety to the M6, and it provides an added level of safety. Probably the best update is the trigger. The trigger pull has less creep. A unique feature of the TPS M6 is its ability to be folded or taken down for easy storage. We would have liked a lightweight, non-bulky nylon case to be included with the package.

Unique to the M6 is a long trigger, which was designed to be fired wearing mittens. This type of trigger is not so much a trigger, but is instead a bar that is squeezed to fire the gun.

To load the M6, you push up on the breech lock. It works a lot like a breaktop revolver. Push it up, and the barrel will pivot down, similar to an over/under shotgun. The top barrel is the rifle barrel, and the bottom barrel is the shotgun barrel. Swing the barrel up to snap the breech lock closed, and the M6 is ready to be cocked.

The M6 features a manual hammer with a knob





The plunger on the M6's hammer allows the user to select what barrel to shoot.

built in. Pull the knob up, and the top barrel will fire; push it down and the bottom barrel will fire. If you leave it in the middle, neither barrel with fire.

We shot our tightest groups when we used the curved end of the trigger. Shooting the M6 with your hand inside the trigger guard offers a different trigger-pull experience. It is more like a full-hand squeeze rather than a single trigger-finger pull or press. The peep rear sight for the 22 barrel is clearly marked on the M6, and we were surprised we could shoot five-shot groups that measured 0.75 inches with both Remington Thunderbolt and Aguila Super Maximum. On average, groups measured 1 inch.

Moving to 410 shells, there was an uptick in recoil, but it was quite tolerable. Everything from game loads to defensive loads patterned well, even with the short barrel. Game loads had a 20-inch spread at 25 yards, and that is quite capable of taking rabbits, grouse, squirrels, and other small game. The buckshot slugs and specialty loads could also get the job done at 25 yards on predators or even medium-size game such as deer, in a survival situation. At even closer ranges the M6 was surgical.

Our Team Said: The TPS M6 is a great reinterpretation of the classic M6. We liked the ammo-storage compartment and the flip-up sights to match the barrel being used. The trigger style is unique, but it can be mastered. We'd buy this one if cost is not a concern.

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

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

HANDGUNS		Glock 17 Gen5 9mm Luger	*July
American Classic ACC45B 45 ACP	*Aug.	Glock 43 Subcompact Slimline G43 PI4350201 9mm Lu	iger *July
American Classic Commander ACC45C 45 ACP	*June, *Aug.	Glock 43X Ameriglo Night Sights	
American Tactical Firepower Xtreme		PX435SL301AB 9mm Luger	July, *Oct.
GI 1911 ATIGFX45GI 45 ACP	June	Glock 45 9mm Luger	Jan., *July, *Oct., Dec.
American Tactical Imports ATIFGX45 FX1911 45 ACP	Feb., *June	Glock 48 PA485SL301AB 9mm Luger	July, *Oct.
Arex Rex Alpha REXALPHA9-01 9mm Luger	Nov.	Glock G19X G5 PX1950703 9mm Luger	*July, *Oct.
Arex Rex Zero 1 Standard FDE 9mm Luger	*July	Glock G20 Gen4 10mm	*Sept.
ATI Firepower Xtreme Hybrid FXH-45 45 ACP	*June	Glock G34 Gen 4 9mm Luger	*Nov.
Auto-Ordnance Custom Commemorative 1911 Pistols	Mar.	Glock G34 Gen5 MOS	
Beretta 92 FS JS92F300M 9mm Luger	Jan., *July, *Oct.	PA3430103MOS 9mm Luger	April, *July, *Oct., *Nov.
Beretta 92FS w/Wilson Combat Upgrades 9mm Luger	*July	Glock G35 Gen3 Pl3530103 40 S&W	*Sept., *Nov.
Beretta APX Compact JAXC921 9mm Luger	Jan., *July, *Oct.	Glock G40 Gen4 MOS 10mm Auto	Mar., *Sept.
Beretta APX Carry JAXN920 9mm Luger	Oct., Dec.	Glock Model G34 9mm Luger	*Nov.
Beretta Model 96 Vertec Inox 40 S&W	*Sept.	Honor Defense Honor Guard HG9SCF FIST 9mm Luge	r *July, *Oct.
Beretta PX4 Storm JXS4F20FC 40 S&W	*Sept.	Honor Defense Honor Guard Sub- Comp. HG9SC 9mm	ı Luger *July
Bersa BP9MCC 9mm Luger	*July, *Oct.	H&K P30L Variant 3 Long Slide M730903L-A5 9mm,	*Nov.
Bond Arms Bullpup 9 9mm Luger	*Oct.	Ithaca Gun Co. M1911-N #1911-C45G10 45 ACP	*June
Colt Bright Stainless Government		Iver Johnson Arms Polished Hawk Commander 45 ACP	Aug.
Model O1070BSTS 45 ACP	May, *June	Kahr CW40 CW4043 40 S&W	Sept.
Colt Combat Elite 08011XSE 45 ACP	*June	Kel-Tec CP33 22 Long Rifle	Mar.
Colt Delta Elite O2020XE 10mm Auto	*Sept.	Kel-Tec PF-9 9mm Luger	*July
Colt Gold Cup National Match O5870A1 45 ACP	May, *June, *Nov.	Kimber America 1911 Warrior SOC 3000253 TFS	
Colt King Cobra in 357 Magnum	Mar.	with Crimson Trace Rail Master Laser Sight 45 ACP	Feb., *June
Colt Lawman Mk III 357 Mag.	*Oct.	Kimber Custom TLE II 3200347 10mm Auto	*Sept.
Colt Mfg. Co. Commander XSE O4012XSE 45 ACP	*June, *Aug.	Kimber Gold Match II 45 ACP	*June
Colt Python (1988) 357 Mag.	*Oct.	Kimber Micro 9 Desert Tan (LG) 3300168 9mm Luger	*July
Colt Rail Gun 01070RG 45 ACP	*June	Kimber Pro Carry SLE 45 ACP	Aug.
Colt Series 70 01970A1CS 45 ACP	May, *June	Kimber Pro Custom Defense Package (CDP) II 45 ACP	*Aug.
Colt Trooper MK III 357 Mag.	*Oct.	Kimber Tactical Pro II 45 ACP	*June, *Aug.
Colt's Commander Series 80 No. 04091U 45 ACP	*Aug.	Les Baer Concept VI 45 ACP	May, *June
Colt's Mfg. Co 1991A1 No. O1991 45 ACP	*June	Lipsey's Glock 17RTF2 Vickers FDE 9mm Luger	*July
Colt's Mfg. Co. Gold Cup Trophy O5070X 45 ACP	*June	Magnum Research 500 Linebaugh BFR	Mar.
Colt's Mfg. Co Series 70 O1970A1CS 45 ACP	*June	Metro Arms Co. Bullseye M19BE45C 45 ACP	*June
CZ-USA CZ 75B 01120 40 S&W	*Sept.	Metro Arms Co. MAC 1911 Bobcut M19BC45C 45 ACP	*June, *Aug.
CZ-USA CZ P-10 C 91520 9mm Luger	*July	Mossberg MC1SC (subcompact)	Mar.
CZ-USA CZ P0-9 91620 9mm Luger	April, *July, *Oct., *Nov.	Mossberg MC1SC 89001 9mm Luger	July, *Oct.
CZ USA SP-01 Shadow Custom No. 91029 9mm Luger	*Nov.	Para-USA Expert Commander No. 96748 45 ACP	*Aug.
CZ USA 75 CTS LSP 91710 9mm Luger	*Nov	Remington 1911 R1 Enhanced	
Dan Wesson Bruin Bronze 1881 10mm Auto	*Sept.	Threaded Barrel 96339 45 ACP	Feb., *June, Dec.
Desert Eagle 1911C 45 ACP	August	Remington Model RM380 Executive 380 Auto	Feb.
EAA Tanfoglio Witness 10mm Auto	*Sept.	Remington R1 Commander 96336 45 ACP	*June, *Aug.
EAA Witness Elite 1911P Polymer 600347 45 ACP	*June	RIA Tactical 2011 w/TruDot Night sights 45 ACP	*June
FN Barracuda 357 Mag.	*Oct.	Rock Island Armory TAC Ultra FS 10mm	*Sept.
FNH FNS-9L Longslide 66725 9mm Luger	April, *July, *Oct., *Nov.	Rock Island Armory Tactical II Compact 51479 45 ACP	*Aug.
INITING 3L LUNGSING 00/23 3HIH LUNGI		· · · · · · · · · · · · · · · · · · ·	•
FNH-USA FNP-40 40 S&W No. 47832	*Sept.	Rock River Arms A4 Pistols	Feb.

Ruger EC9s 3283 9mm Luger	*July, *Oct.	Smith & Wesson Model S&W500 163500 500 S&W Magnum	Dec.
Ruger GP100 GP-141 38 Sp. +P/357 Mag.	*Oct.	Smith & Wesson Performance Center	200.
Ruger GP100 KGP-141 38 Special +P/357 Mag.	*Oct.	Model 460XVR 170262 460 S&W Magnum	Dec.
Ruger GP100 Match Champion No. 1754 357 Mag.	*Oct., *Nov.	Smith & Wesson Shield 10034 40 S&W	Sept.
Ruger GP100 No. 1705 357 Mag.	*Oct.	Smith & Wesson Shield 180020 40 S&W	Sept.
Ruger LC9S Engraved Slide 3260 9mm Luger	Oct.	Springfield Armory 7.5-inch Saint Victor Pistol	Mar.
Ruger Security Six 357 Mag.	*Oct.	Springfield Armory 1911 Range Officer Elite Operator	· · ·
Ruger SR40 3470 40 S&W	*Sept.	10mm Auto	Mar., *Sept.
Ruger SR1911CMD No. 6702 45 ACP	*Aug.	Springfield Armory 1911 Range Officer	, 55p.:
Ruger SR1911 CMD-A Model 6711 45 ACP	*June, *Aug.	PI9129LP 9mm Luger	Nov., *Nov.
Ruger SR1911 L'wt Commander 6722 9mm Luger	*July, *Oct.	Springfield Armory Loaded Target Pl9134LP 9mm Luger	*Nov.
S&W 1911 E-Series SW1911TA 108409 45 ACP	*June	Springfield Armory TRP PC9108LP 45 ACP	*June
S&W Champion Model 625-8 JM 160936 45 ACP	*Nov.	Springfield Armory XD MOD.2 4-In. Service 9mm Luger	*July
S&W M19 Combat Magnum 38 Sp. +P/357 Mag.	*Oct.	Springfield Armory XD-E 3.3 XDE9339BE 9mm Luger	*July
S&W M66 Combat Magnum 38 Sp. +P/357 Mag.	*Oct.	Springfield Armory XD-S 3.3-INCH XDS93340BE 40 S&W	Sept., Dec.
S&W Model 686 357 Mag.	*Oct.	Springfield Armory XDM 5.25 Com- petition 9mm Luger	*Nov.
S&W PC M929 170341 9mm Luger	*Nov.	Springfield Armory XDM 10mm	Mar., *Sept.
S&W Performance Center M327 170245 357 Mag.	*Oct.	Springfield Loaded PX9109LP 45 ACP	*June
S&W Performance Center M627 170133 357 Mag.	*Oct.	Springfield XD(M) 4.5 XDMT9459FDEHCE	dano
S&W Pro Series 686 SSR 178012 357 Mag.	*Oct., *Nov.		*July, *Oct., *Nov.
Shooters Arms Mf'g Commodore CIA HG1009-N 45 ACP	*June, Aug.	Stoeger STR-9 Pistol	Mar.
SIG Carry Stainless 1911CA-45-SSS 45 ACP	*Aug.	Taurus 608 Matte Stainless 2-608049 38 Special +P/357 Mag	
SIG P320-M17 320F-9-M17-MS 9mm Luger	Jan., *July, *Oct.	Taurus 709 Slim 1-709031FS 9mm Luger	*July
SIG Sauer 1911 C3 1911 CO-45-T- C3 45 ACP	*Aug.	_	*June, Aug., *Aug.
SIG Sauer 1911 TACOPS 1911R- 45TACOPS 45 ACP	*June	Taurus 1911 Officer 1-1911010FC 45 ACP	June
SIG Sauer Carry Scorpion 45 ACP	*June, *Aug.	Taurus G2C 1-G2C4031-100 40 S&W	Sept.
SIG Sauer P220-10 Match Elite 10mm	*Sept.	Taurus G2S 1-G2S931 9mm Luger	*July, *Oct.
SIG Sauer P224 SAS 224-40-SAS2B 40 S&W	Sept.	Taurus Model 66 2-660041 38 Special/357 Magnum	Oct., Dec.
SIG Sauer P225-A1 Nitron 225A- 9-BSS-C 9mm Luger	*July, *Oct.	Taurus Model 66 38 Sp. +P/357 Mag.	*Oct.
SIG Sauer P226R Factory Certified 40 S&W	*Sept.	Taurus Model 66 No. 66SS4 357 Mag.	*Oct.
SIG Sauer P320 XCompact	Mar.	Taurus Raging Hunter Model 2-440085RH 44 Magnum	Dec.
SIG Sauer P938 Emperor Scorpion 9mm Luger	*July	Taurus TX22 22 LR	Mar.
SIG Sauer SP2022 E2022-40-B 40 S&W	*Sept.	Taylor's & Company Compact 1911 51469 45 ACP	June
SIG Sauer Traditional Match Elite	оері.	Traditions 1873 Liberty Model SAT73-119LIB 357 Magnum	Mar.
1911T-45-TME 45 ACP	May. *June, *Nov.	Traditions 1873 Sheriff's Model SAT73-005 357 Magnum	Mar.
Smith & Wesson M&P9 M2.0 11537 9mm Luger	*July, *Oct.	Traditions Frontier Series 1873 Barrel Nickel/White	iviai.
Smith & Wesson M&P9 M2.0 Compact 11686 9mm Luger	July, Oct. *July	PVC SAT73-126 357 MAGNUM	Mar.
Smith & Wesson M&P9 Pro Series 178010 9mm Luger	*Nov.	Walther PPS M2 2805961 9mm Luger	*July
Smith & Wesson M&P9 Shield 180021 9mm Luger	*July	Walther Q5 Match Steel Frame 2830001 9mm Luger	Nov.
Smith & Wesson M&P9 Shield SW180021BW 9mm Luger	*July, *Oct.	Walther Q5 Match Steel Frame Competition Pistol	Mar.
Smith & Wesson M&P40c 109203 40 S&W	*Sept.	Walifier QU Mater Steel Frame Competition Fristor	iviai.
Smith & Wesson M19-4 357 Mag.	зері. *Oct.	I ONC CLING	
Smith & Wesson M60 178013 3-in. Barrel 357 Mag.	*Oct.	LONG GUNS	M
Smith & Wesson Model 27 Classic	Oct.	Adaptive Tactical Ruger 10-22 Build 22 LR	Nov.
150339 38 Special +P/357 Magnum	Oct.	Barrett Fieldcraft Lightweight Rifle Threaded 6mm Creedmoor	•
Smith & Wesson Model 686-2 357 Mag.	*Oct.	Barrett MRAD 14361 300 Win. Magnum	*June
Smith & Wesson Model 1076 10mm Auto	*Sept.	Benelli Model M4 Tactical No. 1170712 Gauge	*Mar.
OTHER A MESSORI MODEL TO A TOTALITI AUTO	၁ _Ե μι.	* Included in a Gun Tests Value Guide accompanying a	regular feature

Benelli Nova Tactical Pump 20051 12 Gauge	*Mar., *Sept.	Mossberg 590 Tactical Shotgun 50665 12 Gauge	*Mar., *Sept.
Bergara B-14 Hunter B14S104 22-250 Remington	Dec.	Mossberg 590M Mag-Fed Pump-Action 50205 12 Gauge	*Mar., *Sept.
Beretta CX4 Storm JX49220M 9mm Luger	April	Mossberg 930 Tactical 85320 12 Gauge	*Mar.
Beretta Model 1301 Tactical No. J131T18 12 Gauge	*Mar.	Mossberg 930 Tactical SP Semi-Auto 85330 12 Gauge	*Mar., *Sept.
Blaser R8 Professional 30-06 Springfield	*June	Mossberg Maverick 88 Youth Model 32202 20 Gauge	Feb., *Mar., *Sept.
Browning A-Bolt Micro Hunter 035020216 7mm-08 Rem.	*June, *July, *Aug	Mossberg Model 500 Turkey 50109 .410 Bore	Oct.
Browning X-Bolt Hell's Canyon Long Range McMillan	, ,, ,	Mossberg Model 590 Magpul 50669 Pump 12 Gauge	*Mar.
Burnt Bronze 035395291 6mm Creedmoor	Aug., Dec.	Mossberg Model 930 SPX Tactical 85360 12 Gauge	*Mar.
Browning X-Bolt Micro Midas 035346209 22-250 Rem.	*June, Dec.	Mossberg MVP Scout Rifle Combo 27793 7.62mm NATO (3	308 Win.) July
Century Arms Catamount Fury SG1874-N 12 Gauge	*Mar.	Mossberg Patriot 27894 7mm Rem. Mag.	Jan., *June
Century Arms Catamount Fury II SG1875-N 12 Gauge	*Mar.	Mossberg Retrograde Persuader 50429 12 Gauge	Sept.
Century Arms RAS47 AK Pistol 7.62x39mm	*Mar.	Mossberg Trophy Hunter 308 Winchester	*June, *July, *Aug.
Chiappa Triple Threat No. 930-032 12 Gauge	*Mar.	Remington 700 SPS 85538 308 Winchester	*June
Cimarron Firearms Co. 1860 Henry Civilian 44 WCF,		Remington 783 85847 308 Winchester	*June
1866 Yellowboy "Pawnee" Carbine	April	Remington 870 DM Hardwood 81351 12 Gauge	*Mar., *Sept.
CZ USA 557 Sporter Short Action 04806 243 Winchester	*June	Remington 870 Express Tactical Magpul 81209 12 Gauge	*Mar., *Sept.
CZ-USA CZ 527 Youth Carbine 03050 7.62x39mm	*June, *July, *Aug.	Remington 870 Express Tactical Pump 81200 12 Gauge	*Mar.
CZ-USA Model 612 HC-P 06510 12 Gauge	*Mar.	Remington 870 Modified Police 12 Gauge, M4 Stock	*Mar.
Daniel Defense Delta 5 Bolt Action	April	Remington 870 Youth Model 25561 20 Gauge Feb.	., *Mar., *Sept., Dec.
Desert Tech SRS-A1 6.5 Creedmoor	*June, *July, *Aug.	Remington 870P Standard 12 Gauge	*Mar., *Sept.
Harrington & Richardson Pardner Youth Model		Remington M870 Express Synthetic Tactical 12 Gauge	*Mar., *Sept.
NP1-2S1 20 Gauge	Feb., *Mar., *Sept.	Remington Model 700 SPS-T 84205 300 Blackout	*June, *July, *Aug.
Henry Repeating Arms American Rodeo Tribute Edition Rifle	Feb.	Remington Model 700 SPS Tactical 85538 308 Win.	*June
Howa 1500 H-S Precision HHS62203 6mm Creedmoor	Aug.	Remington Model 700 SPS Varmint 84218 308 Win.	*June
Howa M1500 HS Precision HHS63701 7mm Rem. Mag.	Jan., *June	Remington Model 870 Pump 81180 20 Gauge	*Mar.
Howa Model 1500 Youth HGR61203 22-250 Remington	Dec.	Remington Model 870 TAC-14 Model 81145 20 Gauge	Mar., *Sept.
Hunting Tactical Super Sixty HTSSA1 22 LR	Nov	Rock Island Armory M30 M5 Matte Nickel 51330 12 Gauge	Sept.
IAC (Norinco) Wild Bunch 12 Gauge	*Mar., *Sept.	Rossi R92 Model 920442093 44 Rem. Mag.	May, Dec.
IAC Imports Hawk Model 982 Defense 12 Gauge	*Mar., *Sept.		y, *June, *July, *Aug.
Iver Johnson PAS Copperhead 12 Gauge	Sept., Dec.	Ruger American Rifle Ranch 06968 300 Blackout	*June, *July, *Aug.
Just Right Carbines Gen 3 Takedown Carbine		Ruger American Rifle Standard 6903 308 Winchester	*June, *July
RC9MPTDG3TBBL 9mm Luger	April	Ruger Hawkeye Mark IV VT 17980 6.5 Creedmoor	*June, *July, *Aug.
JTS M12AK Semi-Auto Shotgun 12 Gauge	*Mar., *Sept.	Ruger Model 96/44 44 Rem. Mag.	May
Legacy Escort Gladius Magnum 20 Gauge	*Mar.	Ruger PC Carbine 19100 9mm Luger	April, Dec.
Legacy Sports Howa HCR 6.5 Creedmoor	*June	Ruger Precision Rifle 18008 6.5 Creedmoor	*June
Legacy Sports Howa Mini Action HMA90622MCC+ 6.5 Grer	ndel *June	Ruger Scout Rifle 6830 7.62mm NATO (308 Win.)	July
Marlin Model 336	Feb.	Savage 110 Apex Storm XP 57344 6.5 Creedmoor	June, *July, *Aug.
Mauser M18 M18065P 6.5 Precision Rifle Cartridge (PRC)	June, *July, *Aug.	Savage 110 BA Stealth 22639 300 Win. Magnum	*June
Mauser Model 18 6.5 PRC	April	Savage 110 Scout 57139 450 Bushmaster	July
Maxfire Speedloader	May	Savage Arms 10PT-SR 22356 308 Winchester	*June, *July, *Aug.
Mossberg 715T 37209 22 LR	Nov.	Savage Arms 110 Storm 14361 7mm Rem. Mag.	Jan., *June, Dec.
Mossberg 100 All-Terrain Rifle 27230 308 Win.	*June	Savage Arms MSR 15 Valkyrie Rifle	April
Mossberg 505 Youth Pump-Action 57110 20 Gauge	*Mar., *Sept.	Savage Axis 19223 308 Winchester	*June
Mossberg 590 Shockwave Model 50649 .410 Bore	Mar., *Sept.	Savage Axis II Compact Muddy Girl 22230 243 Winchester	
Mossberg 590 Shockwave Model 50657 20 Gauge	Mar., *Sept., Dec.	Savage Axis II XP 57095 308 Winchester	*June, *July, *Aug.
Mossberg 590 Shockwave 50659 12 Gauge	*Mar., *Sept.	Savage Axis II XP Rifle with Scope	lugo * lulu *A
* Included in a Gun Tests Value Guide accompanying	a regular feature	57289 6.5 Creedmoor	June, *July, *Aug.

^{*} Included in a Gun Tests Value Guide accompanying a regular feature

Savage Axis XP 19231 308 Winchester	*June	Keepers Concealment Errand Holster	Jan.
Savage Model 12FV 18393 308 Winchester	*June, *July, *Aug.	Keepers Concealment The Keeper AIWB Holster	Jan.
Springfield Armory SOCOM 16 CQB 7.62X51 AA9611	April	Lobo Gun Leather Base IWB Holster + Sweat Guard	Feb.
Standard Mfg. DP-12 DP01130 Pump-Action 12 Gauge	*Mar.	Lobo Leather Offset Belt Clip IWB Holster	Feb.
Stevens Model 301 Turkey Obsession 19253 .410 BORE	Oct.	Nightengale Krestel Holster	Feb.
Steyr Scout 6.5 Creedmoor	Feb.	Pachmayr Competition Speedloader	May
Steyr SSG 08 6001138 300 Win. Magnum	*June	Quest Ambidextrous Holster	Sept.
Thompson Center Compass 10071 22-250 Remington	*June	Rescue Essentials Ankle Medical Holster	July
Thompson Center T/CR22 12299 22 LR	Nov.	Safariland Six-Shot Speedloader	May, Dec.
Tristar TEC-12 No. 25120 Pump/Auto 12 Gauge	*Mar., *Sept.	Sideguard Dual Clip Holster	Feb.
Tristar Viper G2 Bronze 24181 .410 Bore	Oct.	Speedbeez Speedloaders	May
Uintah Precision UPR-10 Bolt AR-10 Upper 6.5 CM	*June, *July, *Aug.	Swap Rig Holsters Cargo Pack2	Sept.
Weatherby Limited Edition Mark V Wyoming Commemorat		Uncle Mike's Sidekick Hip Holster 81152	Sept.
Weatherby PA-459 TR No. PA4591219PGM 12 Gauge	*Mar.	Urban Carry Revo Holsters Shell (Black Plate, IWB, Appendix)	Feb.
		Venture Gear Amp BT Hearing Protection	Nov.
		Viridian Weapon Technologies Reactor R5 Gen 2	1101.
ACCESSORIES/SUPPLIERS/SERVICES/0	OTHER	Green Laser Sight for SIG P365	Feb.
5 Star K6 Speedloader	May	Viridian Weapon Technologies E-Series Red Laser Sight for SIG P36	
1791 Gun Leather 3 Way Multi-fit OWB Concealment Hols	ter Sept.		Nov., Dec.
1791 Gun Leather Open Top Revolver Holster	Sept.	_	Feb., Dec.
1791 Gun Leather SCH Multi Fit IWB	Sept.	Wright Leather Works Cobra IWB/OWB Holster	Feb.
Barber Leather Works Chameleon Holster	Sept.	Wright Leather Works Cruiser IWB Clip Holster	Feb.
Blackhawk! Ambi Flat Belt Holster 40FB02BK	Sept.	Tright Education Transaction Trib Grap Production	1 00.
Blackhawk! ARC IWB/AWB	Sept.	AMMUNITION	
Blackhawk! Leather IWB Holster	Feb.	Aguila Super Extra 40-Grain Plated RN 22 rimfire	June
Blackhawk! Sportster Holster	Sept.	CCI Blazer 40-Grain LRN 22 rimfire	June
Brownells BRN-180 Upper	April	CCI Long CB 29-Gr LRN 22 rimfire	June
Champion Ear Muffs Electronic	Nov.	CCI Mini-Mag 36-Grain Copper Plated HP 22 rimfire	June
CYA IWB Holster	Jan., Dec.	CCI Mini-Mag 40-Grain Segmented Hollow Point 22 rimfire	June
DeSantis GunHide Flex-Tuk Holster	Feb.	CCI Quiet-22 Segmented Hollow Point 970 22 rimfire	June
DeSantis Hidden Truth Holster	Feb.	CCI Standard Velocity 40-grain LRN 22 rimfire	June
Galco Corvus Holster	Jan.	CCI Stinger 32-Grain CPHP 22 rimfire	June
Galco GunLeather Ankle Trauma Medical Kit	July	CCI Suppressor 45-Grain Subsonic HP 957 22 rimfire	June
Galco GunLeather Summer Comfort	Feb.	CCI Velociter 40-Grain Copper-Plated HP 22 rimfire	June
Galco N3 Holster	Feb.	Federal American Eagle 38-Grain Copper-Plated HP AE22 22 rimfire	June
Galco Royal Guard	Feb.		June, Dec.
Galco Titon IWB Holster	Jan.	Fiocchi 38-Grain CPHP 22HVCHP 22 rimfire	June
GearCraft IWB Plus Holster	Jan.	Fiocchi 40-Grain CPRN 22FHVCRN 22 rimfire	June
GearCraft Quickie Holster	Jan.	Remington 22 Short 29-Gr Golden Bullet Plated Round Nose 22 rimfi	
HKS Speedloaders	May	Remington Golden Bullet 40-Grain HP 22 rimfire	June
Howard Leight Impact Sport Hearing Protection	Nov.	Remington Thunderbolt 22 LR 40-grain LRN 22 rimfire	June
Hunter Co. Inc. Snap Off Series 1100 Holster	Sept.	Tips for Better Pistol Marksmanship	August
Jason Winnie J121 Holster	Feb.	Winchester M22 40-grain Black Copper Plated Round Nose 22 rimfire	•
Jason Winnie Little Problem Solver Holster	Sept.	Winchester Super X 37-Grain HP 22 rimfire	June
Jeffrey Custom Leather EZ Carry Holster	Feb.	Wolf Match 40-Grain LRN 22 rimfire	June
Jeffrey Custom Leather Ranger R Leather Lining/Alligator	Trim Sept.	From Maton 40 Orani El IIV 22 minilio	Julie
JM Custom Kydex AIWB Holster with wing claw	Jan.	Compiled and edited by	
		Managina Editor Tracey Taylor	p.

Managing Editor Tracey Taylor. GT

Pistol Safes: We Compare Four

We look hard at a quartet of boxes from Boyt, GunVault, Liberty Safe, and Hornady to find the best combination of safe storage and access control when space is tight.

art of owning a firearm is being responsible for the care and storage of it while not in use. Safely storing firearms in secure lockers or safes is important, especially for those with children or anyone not familiar with gun handling living in the home. While we can all dream of having a 50-gun safe bolted to the floor, some situations call for a smaller, simpler option. The safes in this test were chosen with size in mind for safe storage and access control when space and portability are paramount. These four safes are great examples of the various options for storage and transportation available. We encourage everyone to store firearms in a safe and responsible way, and hope these reviews point you in the direction of the storage option that is right for you.

Boyt Secure Vault "Speed" Series Medium Front Load Vault, \$130

The Boyt Secure Vault is by far the largest of the safes acquired from Brownells, and our first impressions of it were good. Measuring 13 by 8.5 by 6.25 inches externally and 12 by 8 by 6 inches internally, there is plenty of room for a full-size pistol, a spare magazine or two, and a flashlight, with room to spare for a folding knife, if you want one. The four-button combination allows for quick access without franticly fumbling with a key. But two keys are provided for access as well.

The body's 15-gauge steel construction and a spring-assisted door make for a solid look and feel, with clean welds and a good-looking gloss finish. Boyt has included a tamper alarm (for three consecutive incorrect code

We acquired four safes from **Brownells to** compare for securely storing pistols either on the go, in a drawer, or under the bed. Top row, left to right, are the GunVault NanoVault 200 (Brownells 100-006-687WB) and the Hornady **RAPID Safe**



2600 (Brownells 100-018-641WB). Bottom row, left to right, are the Liberty Safe HD-90 (Brownells 100-017-838WB) and the Boyt Secure Vault (Brownells 100-014-399WB).

attempts) that triggers a constant beep alarm that is only turned off when the safe is opened with the key, the batteries removed, and the unit reset by leaving it without power for 60 minutes.

There are four holes on the bottom to mount the safe, and the design meets the California DOJ rules for safe gun storage. A feature we are particularly keen on is the 9-volt jump option on the side for when the batteries die. This allows you to power the safe with a 9-volt battery on two touch points to use the code when the batteries are dead.

We liked this safe from the outset, but the more we used it, the more we had problems with the design and function. First, if a battery comes loose, which can happen if the covers are not completely clipped in, or the batteries die, the safe forgets its programmed code and goes back to the manufacturer default code, so don't lose the instructions.

Speaking of batteries, buy stock in Duracell now because the safe

runs on eight AA batteries.

Consistent use for our writers with larger hands, or those who filled up the safe, resulted in scratches and scrapes because the top cover for the latch mechanism and battery unit is held on with wing nuts. While the door does open a full 90 degrees, the two wing nuts at the front and one in the rear were still a nuisance, cutting down the 6-inch internal space to just 3.75 inches at the door. When intentionally avoiding the wing nuts, we would occasionally hit the 1.375-inch-tall latch hook on the door.

Our Team Said: We weren't thrilled with frequently reprogramming the Secure Vault or scratching ourselves on the rough edges, but given its size, for the price it is a solid option for quick-access vaults.

GUN TESTS GRADE: C+

GunVault NanoVault, \$30

The GunVault NanoVault is the smallest of the safes in this test, measuring a skinny 9.5 by 6.5 by 1.75 inches externally and 7.5 by 6.25 by 1.5 inches internally. The

ACCESSORIES COMPARISON





The Boyt Secure Vault, left, is by far the largest of the safes, measuring 13 by 8.5 by 6.25 inches externally and 12 by 8 by 6 inches internally, with plenty of room for a full-size pistol like a Glock G17. Above, the GunVault NanoVault is the smallest of the safes in this test, measuring 7.5 by 6.25 by 1.5 inches internally. A snubbie revolver fits okay; the Glock is a tight fit. Check your guns before buying.

2-inch loss in length is due to the hook on the latch being on the inside of the catch, taking up more interior room than if reversed.

The use of 18-gauge steel makes this not as sturdy, but much lighter for portability, and the powdercoat finish should hold up well over time. There are two holes for mounting if needed, but there are better options for a semi-permanent safe because mounting is not recommended by the manufacturer. The NanoVault does come with a 3-foot-long steel cable to lock it to or around an immovable object, again enhancing the security-on-the-go options. The thin design does lend itself well to fitting in bags, briefcases, under seats, in drawers and glove boxes, but the clamshell top is not spring assisted, so it will take both hands and more space to open.

The NanoVault is TSA approved for checked baggage, so far as to be used as the demo in the agency's "Travel Tips: Traveling with Firearms" video, so it's a great option for those who fly with firearms. While its small size is its best attribute, it is also its biggest drawback. Fitting a full-size pistol in it is tough. By placing the grip along the hinge with the barrel to the side of the latch, we were able to fit a full-size 1911 in the

NanoVault, though we did have to apply pressure while locking and unlocking because the pistols grips were too thick to fit without completely compressing the foam inserts. While annoying, it does mean you won't have to add padding to the sides, as the pistol will not move when traveling. Our compact FNP fit lengthwise, but it had the same issue with thickness. It wasn't until we got into our subcompacts that opening and closing the safe without pressure was an option. The NanoVault is not California DOJ approved, so once you arrive in the state, you will need to find another security option.

Our Team Said: Weighing in at just 3 pounds, the NanoVault is supremely suited for safe storage while traveling with a smaller pistol, although we would go a different route if you are looking for anything more than security on the go.

GUN TESTS GRADE: B-

Liberty Safe HD-90, \$50

The Liberty HD-90 is well sized at 10.8 by 8.3 by 2.5 inches externally and 10.6 by 7.1 by 1.3 inches internally. Using 18-gauge steel, this safe weighs in at 5.1 pounds according to the manufacturer, but our scales showed a slimmer 3.9 pounds. The extra pounds compared to the NanoVault are

more to haul around while traveling, but it does provide enough room to comfortably fit a full-size 1911 and a couple of magazines. The thin foam padding covers the top, bottom and half of the hinge side, so you may want to add more to the sides to prevent scratches and scuffs to your pistols' finish while moving about. Anti-pry security is built into each side, and a 3.5-foot steel cable is included to lock the safe to any secure object when traveling. The HD-90 is both TSA and California DOJ approved, so it makes for a great travel safe, though its larger size makes packing it a little more difficult. Still thin enough to fit in a drawer or under a car seat, we did have issues fitting it in gloveboxes and smaller bags and briefcases. Liberty includes two screws for mounting using the pre-drilled holes in the bottom and rubber feet on each corner to help keep it in one place. The clamshell lid is not spring assisted but does run the hinge on the long side, requiring less overhead space to open.

Our Team Said: Lack of padding aside, we like the HD-90 for both a travel safe and a reliable desk drawer or bedside safe. Liberty also offers the same-size safe with a fingerprint scanner for a few hundred dollars more.

GUN TESTS GRADE: A-



Left: The Liberty Safe HD-90 measures 10.8 by 8.3 by 2.5 inches externally and 10.6 by 7.1 by 1.3 inches internally. It does provide enough room to comfortably fit a fullsize 1911, or a Glock 17 at left and a snubbie wheelgun at right, and a couple of magazines. The thin foam padding covers the top, bottom and half of the hinge side.



Left, the Hornady RFID RAPID Safe 2600 is great for security with quick access. A Glock 17 is a tight fit. It also comes with RFID options of a



key fob, wrist band, and two stickers, as well as two barrel keys to open the safe with your choice of devices.

Hornady RFID RAPiD Safe 2600, \$161

The Hornady RFID RAPiD Safe is great for security with quick access. The exterior measures 10.7 by 8.7 by 2.9 inches, slim for an electronic RFID safe, while the internal size is 7.0 by 7.7 by 2.2 inches. Those internal measurements are at its widest points without any padding, so keep that in mind when thinking about what pistols to store. Hornady states it fits many 4-inch-barrel pistols and 2-inch revolvers, and we didn't have trouble with those revolvers. But our 4-inch pistols made contact with the hinge and front housing, so be sure to measure first. Placing the pistol sideways helped it fit better, but it also made reaching in for it more difficult, nearly impossible when the safe was placed in a drawer, and obnoxious in a glovebox.

The access issue is not solely related to the spacing issues; it is also due to the opening space, or lack thereof. The narrowest point at the mouth of the safe is a mere 3.5 inches from the plastic computer housing to the lid lock catch on each side. This choke point makes reaching in from the side an easy way to scratch up your hand or pistol. The smooth finish and polished edges make scratches less frequent than some others, but in a rush we still managed to gouge ourselves and our pistols more than once. The lid can be opened to a completely flat 180 degrees for mounting and plugging in the DC power cable by releasing the lid catch in the back corners. Hornady supplies RFID options of a key fob, wrist band, and two stickers, as well as two barrel keys to open the safe with your choice of devices. To open the safe with the provided RFID options is simple and quick, but each has to be programmed before it will work.

Programming is simple: just press the programming button on the inside of the safe then hold the

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device to the RFID pad/button on top of the safe. Once programmed, that device will unlock the safe when placed within three-quarters of an inch of the RFID pad. The RFID unlock takes less than one second to read and open the safe. We used all three RFID options many times, and it always opened quickly. When plugged in to a wall outlet using the DC power supply, simply placing a programmed RFID chip in range would open the safe, while on batteries alone you must press the RFID pad to turn on the sensor. The LED indicator on the RFID pad flashes red when open and solid green when locked; the green LED turns off after 10 seconds using batteries but stays on when plugged into power.

The door is spring assisted and opens with enough force to wobble the safe if not screwed down using the four mount holes on the bottom. Hornady also provides a heavy-duty

cable and lug to lock the safe to something. The lug slides into a notch on the back of either side and is looped through the cable on one end. The RAPiD Safe 2600 is both TSA and California compliant, so travel with it is welcomed, although since it uses a thicker 14-gauge steel, it does weigh in at a hefty 6.5 pounds, so add that into your checked-bag weight.

Our Team Said: Despite the small opening and overall storage space, we like what the RAPiD Safe 2600 has to offer for security with speedy access, but we would recommend the 2-inch-longer 2700 model or two 1911-sized 4800 model for larger storage options if travel and mobility aren't paramount.

GUN TESTS GRADE: A-

Written by Austin Miller, using evaluations from Gun Tests team testers. Photographed by Gun Tests staff. **GT**

COMING UP IN GUN TESTS

- Driving holsters: We test the best holsters for driving, sitting for long periods, and by extension, riding a horse or motorcycle. We found a number of very good choices. Some are pricey, but all are worth the money. One in particular does well at a modest price. Makers include Wright Leather Works, DM Bullard, Jeffrey Custom Leather, and Galco.
- Four New 9mm Pistols: We test the Stoeger STR9, Arex Delta, Ruger Security 9, and SIG Sauer's P365, which seems to be a bestseller. There are three new handguns in the mix and one, the SIG P365, that a lot of readers have asked about.