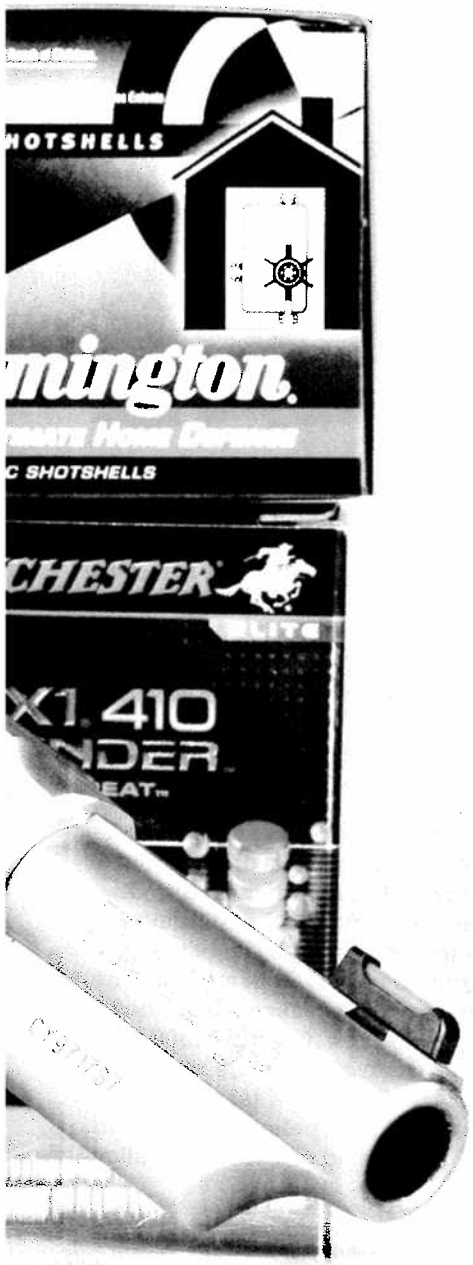
FEEDING The Judge

The .45 Colt/.410-bore Taurus Judge and similar revolvers have changed the nature of defensive wheelguns and have proven extremely popular. Now .410 loads designed specifically for such guns have emerged from Federal, Remington and Winchester.

BY WILEY CLAPP, Field Editor



Photos by Hannele Lahti

Light and easy to manipulate, the .410-bore shotgun was—and still is—a gun most often associated with beginning shotgunners. Sometimes a tool for advanced competitive shooters, the skinny .410 shell drops a fair amount of light game every year and powders its share of clay birds. In the scheme of things, this is where the .410 shotgun comfortably and traditionally fits.

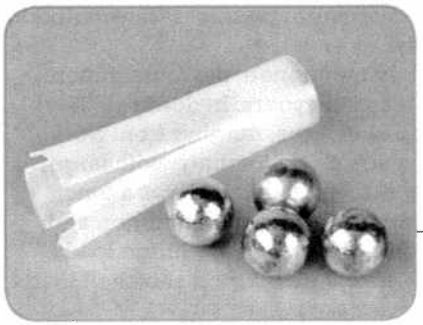
But the traditional role of the .410 was rather abruptly reconceived several years ago when the Judge revolver appeared on the market. Developed by Taurus Int'l of Miami, Fla., and Porto Allegre, Brazil, the new gun was a close-range defensive handgun chambered for the Frontier-era .45 Colt cartridge. It has exploded in popularity because Taurus designers extended the frame and cylinder far beyond what is required for a big-bore revolver cartridge, thus creating a sound platform that will fire both the .45 Colt and .410-bore ammunition. Since the barrel is rifled, the gun does not fall into the heavily restricted short-barreled shotgun classification.

There are several models of the Judge revolver in production, including stainless and blue steel versions, and lightweights with either aluminum or polymer frames. While their appearance is decidedly unorthodox, they sell briskly and they have become deservedly popular as defensive sidearms.

A personal-defense situation typically occurs at very close range, so the need for normal handgun accuracy is moot. The advantage of a shotgun shell at close range is the dispersion of pellets over a greater portion of an attacker's body, greater than what a single handgun projectile can offer. This tends to render a different kind of fight-stopping trauma because the kinetic energy developed by several pellets is transmitted to the target—broadly and instantaneously.

For a variety of uses that I have already mentioned, the ammunition makers have been loading .410 shells for many years. In doing so they typically have used most of the common shot sizes, ranging from No. 9 to No. 4. In recent years they have also made a few loadings with larger pellets of buckshot. But when the Judge came along, there was a quick demand for as much payload as possible, and Federal, Remington and Winchester went to work on what could be described as "Judge loads." That is what we are talking about here—newly developed shotshell loads for .45 Colt/.410-bore handguns.

Understand that this new .410 ammunition will work in any shotgun chambered for it—from the farmboy's little break-open single barrel to a Model 42 Winchester—but it has been optimized for use in short-barreled revolvers. There are two distinctly different kinds of such loads, those for 2½" chambers and those intended for the full 3"-chambered guns. The former will work in the latter, but not vice versa. All of the new loads feature multiple projectiles. There is such a thing as a .410 slug, but it is a .40-cal. Foster-type with a deep hollow base, and it weighs less than 100 grs. If the shooter was looking for a single projectile, he would be far better off using the .45 Colt option, with a 250-gr. lead semi-wadcutter.



Federal

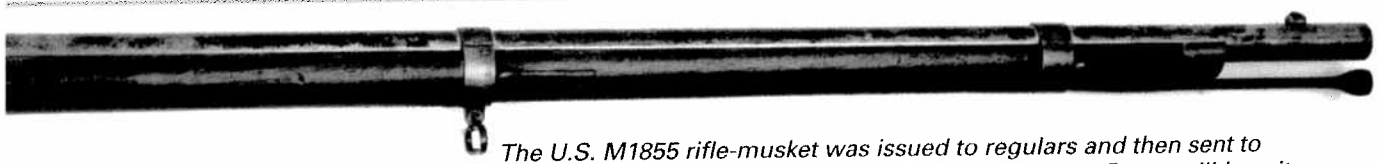
Federal Cartridge Co. came out with the first .45/.410 handgun load a couple of years ago, and that line has expanded to four options. The first is a 2½" load with four 000 pellets. Buckshot shooters know that a 000 pellet measures approximately 0.357" and weighs 72 or 73 grs. Federal's are copper-plated and leave the muzzle of a short revolver in a long plastic shot cup at a published velocity of 1200 f.p.s. That is also the velocity of a similar Federal 2½" load, this one loaded with 7/16 oz. of No. 4 shot. Understand that this is No. 4 shot (diameter: 0.129") and not No. 4 buckshot (diameter: 0.240"). My meticulous wife counted 63 of these little copper-plated pellets in one shell. The third Federal load is somewhat slower (775 f.p.s.) but carries five of the 000 pellets. It is a 3" load for the long-cylinder version of the Taurus revolver. There is also a 3" load featuring nine No. 4 buckshot at 1100 f.p.s.

Remington

Remington recently added the .410 bore to its list of HD Ultimate Home Defense ammunition. One load uses four 000 pellets atop a short plastic wad. The other has four 00 pellets. Both are 2½". The maker claims muzzle velocities of 1225 f.p.s. (000) and 1300 f.p.s. (00), both of which are zippy for a .410. Opening a sample shell showed lead pellets that seemed to be formed of a very hard alloy.

Federal's 2½" .410-bore self-defense loads feature either four copper-plated 000 pellets (l.) or 7/16 oz. of copper-plated No. 4 shot (r.), while one of the 3" offerings has five copper-plated 000 pellets (r., top).


FEDERAL PREMIUM
.410 HANDGUN
.410 3 IN BUCKSHOT
WINCHESTER
410
STOP THE THREAT
3 PLATED DEFENSE DISC™ PROJECTILES, 12 PLATED BBs
.410 GAUGE
2½ INCHES
750 VELOCITY
WINCHESTER
410/45
STOP THE THREAT™
410 2½ 1225 4 000BK
BORE LENGTH VELOCITY FPS PELLETS BUCKSHOT
410B000HD
HD
Remington



The U.S. M1855 rifle-musket was issued to regulars and then sent to the states, North and South, under militia allotments. Some militia units received 1855s, including the well-connected 7th New York Militia (below).

infantrymen were issued 85,000 rounds of rifle-musket ammunition, and an additional 40,000 rounds were placed in the wagon trains. But Indians, not Confederates, gave the California Column the most difficulty. At the water springs in Apache Pass, Ariz., the infantrymen had several skirmishes with the Apaches. In one attack, two soldiers were killed.

Back East, early on the morning of July 21, 1861, the Union army left its campsites near Centreville, Va., to engage the Confederates nearby at Manassas. Into the late afternoon Union forces appeared to be on the verge of a great victory. Southern reinforcements arriving on the battlefield launched a major counterattack, which led to a Union retreat that turned into a panic. As the regiments broke for the rear, many soldiers turned and fired their muskets into the air, fortunately missing the men in the front lines.

One of the Union infantry regiments in the battle in the afternoon was the 38th New York Infantry, armed with M1855 rifle-muskets. In the afternoon's fighting, the regiment suffered 15 killed, 55 wounded and 58 captured. The New Yorkers recaptured three of Rickett's artillery battery from the Confederates and dragged them to the rear, but the 38th was forced to leave them in the road. The last of the Union regiments to leave the field of battle was the 3rd U.S. Infantry. Additional Union infantry regiments engaged in the battle armed with the M1855s were the 1st Michigan, the 1st and 2nd Connecticut, and the 2nd Vermont.

The 42nd New York Infantry was one of several regiments that took part in the debacle at Ball's Bluff, Va., on Oct. 21, 1861. A reconnaissance in force was ordered to determine the activity of Confederate forces in the area. Having insufficient boats to transport all the troops over to the southern side of the Potomac River, many of the Union solders never reached the battlefield. Better-led Southern forces routed the attackers. In their retreat, the Union infantrymen threw their muskets into the river and attempted to swim to safety, and many of the 42nd's M1855 rifle-muskets were lost in this manner.

A year later, in the fall of 1862, Gen. Robert E. Lee made his first invasion of the North. On Sept. 17, 1862, at the Battle of Antietam, the bloodiest day of the war occurred with more than 22,000 casualties reported. In the battle, the 11th Connecticut, armed with both Sharps rifles and M1855s rifle-muskets, was attached to IX Corps led by Gen. Ambrose Burnside (later NRA's first president in 1871). Burnside's objective was to cross over a stone bridge—that now bears his name—and attack the Confederates. The plan called for the 11th to go forward as skirmishers and drive the Confederates from the bridge. The remaining troops would then charge across the bridge.

It was a hard fight, and it took several hours before the Union forces captured the bridge. The infantry then proceeded across, and was on the outskirts of Sharpsburg when Gen. A.P. Hill's Confederate infantry arrived from Harpers Ferry. Hill's troops counterattacked and drove the Union forces back. In the day's action, the 11th suffered 37 killed and 102 wounded. The battle ended in a draw, but Lee's army retreated back into Virginia.

The M1855 rifle-musket remained in service throughout the war on both sides. Although parts and tooling for the M1855 were moved from Harpers Ferry to Richmond in April 1861 to make the C.S. Richmond guns, the distinctive humpback lockplate remained, but without provision for the Maynard tape primers. But the C.S. Richmond muskets are a story for another day.

"8th Company, 7th New York State Militia, 1861" by Don Troiani. Courtesy of Historical Art Prints, (Dept. AR), P.O. Box 660, Southbury, CT 06488; (203) 262-6680; www.historicalartprints.com.

Winchester's PDX1 410 Defender loads employ the company's unique Defense Disc projectiles atop 0.18"-diameter (BB) shot (l.). The 3" load has four Discs, and the 2½" version has three.

SHOOTING RESULTS (5 YDS.)

Factory Load	Velocity (f.p.s.)	Energy (ft.-lbs.)	Hits: (five-shot string) 4" Ring	8" Ring	12" Ring
Federal 2½" Four 000 Buckshot	1200	921	15	5	-
Federal 2½" 7/16 oz, No. 4 Shot	1200	611	(Evenly dispersed pattern over 18"x30" area)		
Federal 3" Five 000 Buckshot	775	480	12	8	-
Remington 2½" Four 00 Buckshot	1225	1,081	3	15	2
Winchester 2½" Three Discs, 12 BB Shot	750	397	8	6	1*
Winchester 3" Four Discs, 16 BB Shot	750	516	16	3	1**

Notes: Guns were fired from a solid bench with targets placed at 5 yds. Target was the NRA B2. Velocities taken from manufacturers' specifications. Average ambient temperature during shoot 60° F. *Hits counted were from the Defense Discs, BB shot impacted target in centered 16" circle. **Hits counted were from the Defense Disc; BBs impacted target in centered 18" circle.

Winchester

The designers at Winchester approached the problem of an effective load for the .410 handgun with a blank sheet of paper. Their non-traditional projectile fills the space in the shell more efficiently with cylindrical, rather than spherical, projectiles. Each is 0.400" in diameter and 0.240" thick and leaves the muzzle at 750 f.p.s. Called "Defense Discs" by their maker, they are not true wadcutter bullets because their edges have a rather pronounced bevel. There are two varieties in the line. The 2½" length carries three of the Discs; the 3" version has four.

However, there's a little something extra in both. On the apparent theory that more is better, Winchester added 12 BBs under the three Discs in the 2½" load, and in the 3" version there are 16 of them. A single BB shot weighs 8.8 grs. and measures 0.18" in diameter. That means another 106 grs. of payload for the 2½" shell, 141 grs. for the 3".

The basic idea seems to be the same for all three makers. Since a shotgun shell is tubular in shape, using the interior space as efficiently as possible makes great sense. Defensive encounters are invariably at close range. I patterned the loads at 5 yds., slightly short of the FBI-researched standard distance of 7 yds. In a confrontation, the pattern spread from any of the six loads should stay on an NRA-standard Bianchi Cup target. Terminal effect would have to be pronounced, given a centered hit.

There is also the over-penetration factor to be considered; it's a problem with much of today's defensive guns and loads. Since this new .410 ammunition is designed to work by means of cumulative effect, there are multiple projectiles, none of which are particularly heavy. Penetration would, therefore, be limited, but the wound would be quite wide. In urban situations, this factor alone supports the .410 handgun concept.

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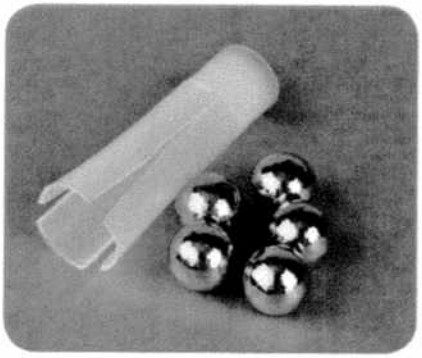

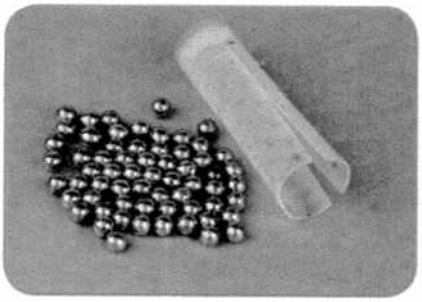

What About The Other 6 mms?

Photos by Hannele Lahti

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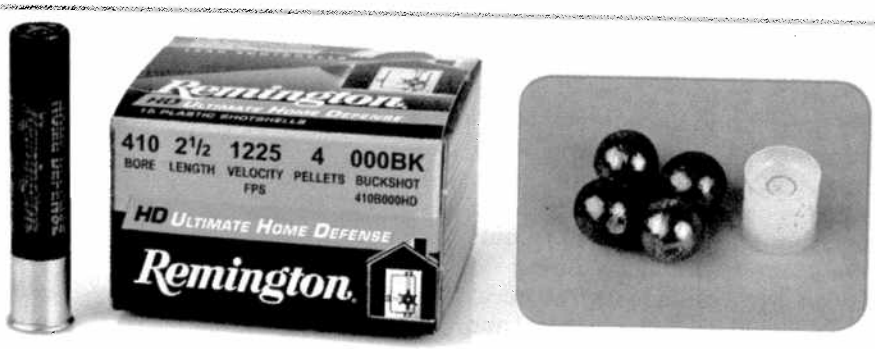

At this point, Remington offers only two defense-specific, .410-bore loads, both of which are 2½". The shells purportedly propel four lead-alloy 000 and 00 pellets to 1225 f.p.s. and 1300 f.p.s., respectively.

TESTING

To evaluate each load's utility, I fired each in the same exercise. I used the familiar Bianchi Cup target, which has scoring rings impressed into a cardboard backer silhouette measuring 18" by 30". The inner scoring area is a 4" circle, surrounded by scoring rings 8" and 12" in width. I fired five rounds of each load from a typical Judge revolver. In my tabulation on p. 71, you will see the number of hits in each scoring ring. At 5 yds. there were many hits on the cardboard from the plastic shot cups and/or wads. These projectiles have little mass and don't count. There were some surprises in the course of the shoot, as well as some satisfactory results.

Let's look at the various loads in the same order I have previously described them. First up was the Federal 2½" load with four 000 buckshot. Five rounds onto the R2D2 target produced exactly 20 hits with 15 of those in the center 4" circle. The Judge I used patterns this load tightly, essentially in an 8" circle at 5 yds. and close to the point of aim. The second load had the same velocity, but used 7/16 oz. of No. 4 shot. Here I got a completely different result. There was little centering, but rather a remarkably even dispersion of the 0.129" pellets over the entire 18"x30" target. Remember that there are other uses for the Judge than personal defense. If you are going after pests, this even-patterning load may be just the ticket.

The third Federal load was the 3" shell with five 000 pellets. Although more than 400 f.p.s. slower than the other big buckshot load, the dispersion was much the same, with 17 of the 25 pellets in the center circle and the other eight inside the eight ring. Even dispersion, indeed.

Remington's nominal 00 load was the fastest of any tested and produced significant recoil. On the target only three of the pellets found the center circle, but 15 were in the 8" ring and only two more strayed outside to the 12" circle. This simply means that the Remington offering stays inside the 8" circle just like the others, but spreads more evenly within that space. Because of the load's velocity, it delivers a harder blow than any other load tested.

Winchester Ammunition, you will recall, used a completely different approach when crafting loads for the .410 handgun. It offers two loads in this series, both with a combination of their "Defense Discs" and BB shot. A 2½" load works with three discs and 12 BBs, and its 3" version uses four discs and 16 BBs. Since the discs are .40 caliber, they are supposed to engage the rifling in the bore and become stabilized, leaving the following column of BBs to spread over a greater area. In my five-round group with each of the two versions, that appears to be exactly what happened. The discs tend to produce small patterns, but the BBs that follow them create an even pattern that is centered around the Discs' points of impact.

CONCLUSIONS

These new .410 loads are a curious development driven by the current interest in ever-more efficient self-defense guns and ammunition. Close-range use of multiple-projectile firearms is a valid concept. As far as the six tested loads are concerned, two are the efficient, 3" type. The Judge revolver that takes them is significantly larger and heavier, so some handgunners will choose the shorter, lighter Judge for concealed carry. Of the four remaining, one is better suited to pests than criminals. The three remaining are the ones most likely to be used. There's one from each maker and they are all effective man-stoppers.

Other makers may be entering the .45/.410 ammunition arena. I have heard of new .410 handgun loads from off-shore makers, but I lacked samples to include in this shoot. It's also interesting that Smith & Wesson recently announced a .410 revolver called the Governor that also shoots both .45 Colt and .45 ACP with moon clips. It isn't out in quantity yet. We are bound to see more variations in both guns and ammunition in the future. I would offer one cautionary note: Multiple projectile systems work on the basis of terminal effect, not hit probability. In other words, you shoot in the hopes of striking a decisive blow, not to increase your chances of a hit. For that reason, I like buckshot loads that pattern tightly. But the tighter the group, the easier it is to miss.

Hardware, no matter how cleverly contrived, will never make up for sloppy shooting. Shot placement matters.

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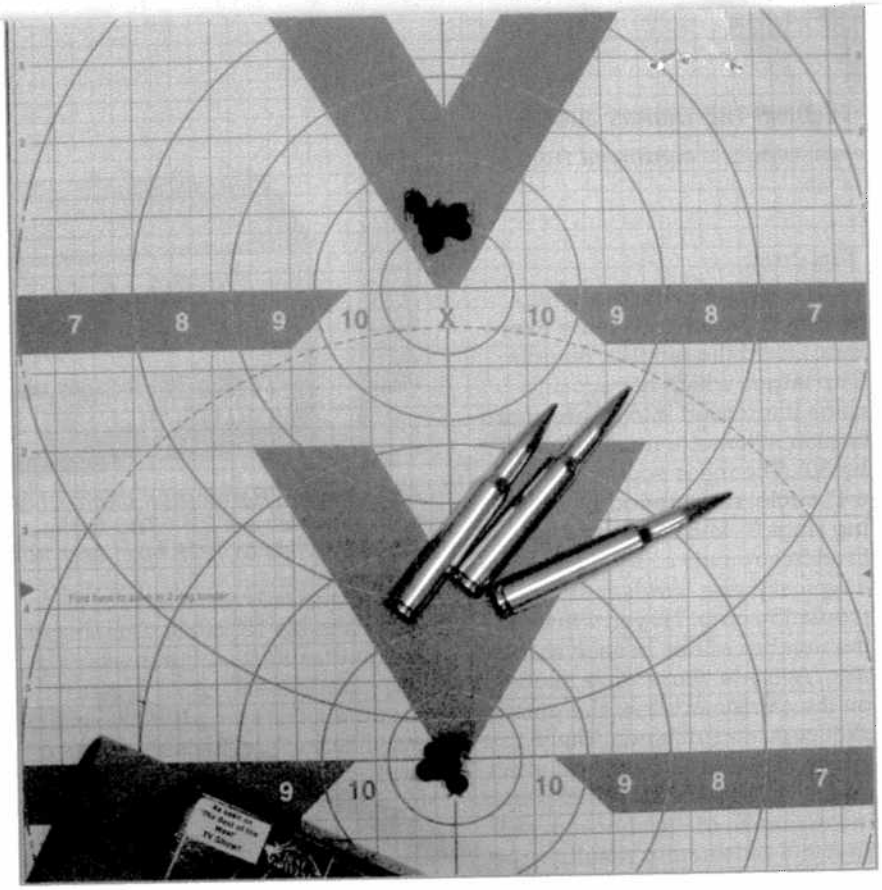
be used inside the bottom of one scope ring to raise that end of the scope slightly. Some scope mount makers even supply tape with two sticky sides, designed to prevent the scope from shifting during recoil. I've used this tape on occasion, including both electrical and duct tape. They all work, but only for very small corrections.

The traditional solution for elevation misalignment is to place a steel shim between the action and one of the scope mount bases. A shim under the front mount raises the reticle, while a shim under the rear mount lowers the reticle. Brownells (**www.brownells.com**) sells a variety of steel shims, whether pre-cut for popular mounts, or blanks that can be cut to size. Another solution is to cut down the underside of one of the bases. The most precise way to do this is with a milling machine, though it can be done by hand.

Windage misalignment is most easily fixed by using adjustable mounts, such as the Redfield/Leupold style with large, opposing screws on the rear mount base, or Conetrol mounts with tiny windage screws in each base. The Redfield/Leupold system is still popular; however, despite their bulky steel construction, it's actually one of the weakest scope mounts made. Only the front ring actually holds the scope firmly in place, and on any rifle that recoils more than a .30-'06 Sprg. you can sometimes actually see where the rear scope ring has shifted between the windage screws during recoil. The Conetrol system is much stronger.

Quite a few shooters seem to think that the windage screws on Redfield/Leupold mount are merely a sophisticated attachment system with no other function. While at the local range, I've heard several shooters complaining about a lack of windage adjustment in their scope, because they had the windage rings tightened way off-center.



A good range check for scope canting inside the rings is to shoot one group, then click in 6" to 8" of elevation and fire another group. The second group should be directly above the first.

Even if the scope ends up out of whack in fixed rings, all is not lost. Obviously, another potential cause of scope misalignment is the mounts themselves, but sometimes there is just enough dimensional difference between mount bases that trial-and-error will fix a windage problem. I've done this a few times with Weaver bases, which is one reason there's a box of miscellaneous Weaver bases on my workbench.

I've also "fixed" small windage problems with Ruger No. 1s by switching the two rings. This is relatively easy with No. 1s, because they use two rings of the same height. It's not so easy with Ruger 77s—unless you have several extra Ruger rings on hand—because the front and rear rings are usually different heights.

Many scope-mount manufacturers also provide bases without screw-holes so that gunsmiths (or anybody else handy with a drill press) can put slightly off-center holes in the base. Also, with rings that clamp to the base, such as Weavers or Rugers, the base or clamp can often be filed on one side to provide a little windage. Some manufacturers, such as Talley, will even custom-machine mount bases so that the scope will line up with the bore.

These days many shooters automatically ream or lap the interior surfaces of new rings. This aligns the insides of the two rings with each other, preventing any slight stress on the scope tube, but it doesn't have anything to do with aligning the scope with the bore itself. In fact, any reaming or lapping should be done only after the scope is lined up with the bore. Otherwise any alignment correction made to the rings defeats the purpose of reaming or lapping.

All of this may sound like a lot of trouble, but even the best scope in the world is useless if it is pointing in a direction different from that of the barrel of the rifle to which it is mounted. It's a lot easier to fix a $100 set of scope mounts than end up with a $1,000 scope that refuses to track correctly.

Photo by author