Silhouette shooting is an extreme test of handgun accuracy and power, but the .414 Dan Wesson is up to the challenge.

By Todd Spotti

andgun silhouette is certainly one of the most demanding challenges in long-range shooting. You face 40 steel targets, which consist of 10 chickens placed at 50 meters, 10 pigs at 100 meters, 10 turkeys at 150 meters, and 10 rams at 200 meters. Each stage of the match consists of two relays in which the shooter has 2 minutes to shoot five animals. One point is awarded for each animal hit and knocked over. If you hit an animal and it doesn't fall down, too bad. No point is scored.

Shooters compete in different classes based on their skill level. This is a good system: Novice shooters only compete against other novices and experts only compete against other experts. There are also different categories of competition that vary by the type of handgun used. (The revolver class is definitely one of the most difficult.)

Vital Requirements

Handgun silhouette shooters need only two simple things from their revolvers: brute force power, and the elegance of minute-of-angle accuracy. The Dan Wesson .414 SuperMag has plenty of both.

Let's talk about power first. As previously mentioned, in order to score points during a IHMSA silhouette match, the steel targets have to be hit and completely knocked off their stands. The ram is definitely the most difficult target





in this respect because of its weight and its distance from the firing line.

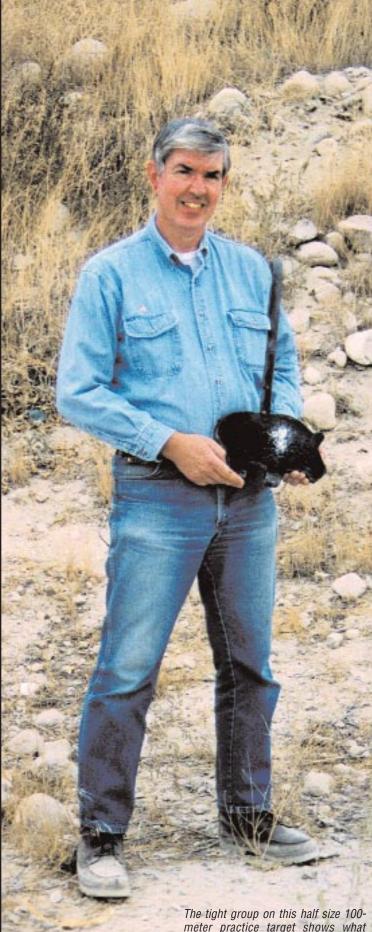
A standard T-1 steel ram target will normally weigh between 50 and 55 pounds. Consequently, it has to hit square and *hard* to kick the target over. This is definitely no job for a 9 mm.

The ram is also located 200 meters away from the firing line. Think about this a little bit: 200 meters equals 217 yards. That's more than the length of two foot ball fields laid out end to end — a heck of a long shot with any gun, not to mention a revolver. When fired over that distance, the normal .357 Magnum bullet will have lost nearly 25 percent of its velocity and energy. Even the impressive .44 magnum will have lost approximately 27 percent. Consequently, when dealing with the combination of the weight and distance of the target, the serious handgun silhouette shooter must look for every available power advantage in order to reliably take down a ram.

OK, having the power to knock down all the targets was just the beginning. Now we have to worry about the accuracy portion of the formula. The steel animals are roughly life-size, which makes handgun silhouette competition a natural introduction to handgun hunting. However, the biggest difference between the two sports is again the distance at which the targets are placed, i.e., 50, 100, 150 and 200 meters. Only the very best revolvers will have the mechanical accuracy to reliably hit the regular steel animals at those distances. Then there are the shoot-off targets. Now it really gets interesting.

If there is a tie score, the winner is decided after an even more difficult round. Now the accuracy part of the equation really comes into play. For tie breaker targets, many clubs often use the steel chickens, which are usually shot from 50 meters, out at 200 meters. These targets only measure approximately 6 inches by 8 inches. When placed way out

100-YARD DATA				
POWDER	BULLET	PRIMER	VELOCITY	GROUP
27.0 WW296	210 Sierra	Win	1503	1.75
27.8 WW296	210 Hornady	Win	1465	2.10
26.5 H110	210 Hornady	Win	1609	1.55
24.3 Lil' Gun	210 Nosler	Win	1536	1.65
25.2 Lil' Gun	210 Hornady	Win	1593	1.88
26.5 Lil' Gun	210 Nosler	Win	1650	1.51
23.0 H4227	220 SAECO	Win	1506	1.78
25.0 H4227	220 SAECO	Win	1593	3.00
25.5 H4227	220 SAECO	Win	1618	2.11
25.2 H4227	245 LH Cast	CCI	1545	2.00
23.0 AA5744	270 LH Cast	CCI	1202	2.25
24.2 AA5744	270 LH Cast	CCI	1346	2.21
24.5 N110	210 Sierra	Win	1625	1.89



meter practice target shows what Spotti is capable of with the .414.

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at the ram line, they appear to be nothing more than little black blobs.

Other silhouette clubs like to increase the level of difficulty even more by using half size silhouette targets for shoot-offs. In those cases, the chicken targets measure slightly over 3x3 inches. Exceptional accuracy is clearly required to hit such a minuscule target at such a long distance.

Not long after handgun silhouette was established as a sport, shooters realized that many of the conventional revolvers and the cartridges of the time were somewhat lacking under these new more stringent requirements. In order to provide the extra margin of power and accuracy needed in silhouette competition, many shooters felt a special type of revolver cartridge was needed. This led to the development of the SuperMag series.

More Power Is Possible

The basic concept was conceived by Elgin Gates, the noted big-game hunter and champion racing boat driver. It was both simple and complex at the same time. Most magnum revolver cases are approximately 1.285 inches in length. Gates found that by lengthening cases to 1.6 inches, enough additional powder could be added to substantially boost pressures and velocities well over standard magnum cartridges. In fact, given a revolver of sufficient strength, the additional powder capacity permits loading to rifle-like pressures. In effect, Gates created a totally new class of cartridge — the Super Magnum.

As mentioned before, a typical magnum case is approximately 1.285 inches in length. It typically develops around 36,000 psi pressure. On the other hand, the 1.6-inch SuperMag case was found to develop pressures around 50,000 psi, which, by the way, is the average working pressure of the 30-'06 rifle cartridge. In other words, a 19-percent increase in volume was yielding a 28-percent gain in performance. In practical terms, this boost in pressure easily provides 200 to 300 fps more velocity to the SuperMag revolver shooter. Whether shooting steel rams in a silhouette match or Russian boar in the Carolinas, the extra power of the SuperMag is good medicine.

To handle the extra performance, the Dan Wesson company designed and built its famed SuperMag series of revolvers. They're currently offered in .357 SuperMag, .414 SuperMag, and .445 SuperMag. These are large, exceptionally strong guns, but just as importantly, they're exceptionally accurate as well.

Built To Be Better

The excellent accuracy comes from three aspects of the gun's design. The first is it's size and strength. The Wesson .414, equipped with an 8-inch barrel, measures 14 inches in length and weighs in at a substantial 72 ounces. This extra mass means the gun has an

extra margin of mechanical stiffness. More stiffness equates to less shake and vibration during firing, and that means more accuracy.

The second design feature that contributes to the Wesson's accuracy is the cylinder locking system. Most revolvers latch at the rear of the cylinder, which is the end farthest away from the critical barrel/cylinder gap. The Wesson system features a heavy latch at the front of the cylinder. This is the optimum location. The heavy latch securely fastens the front of the cylinder yoke (the most flexible part of any double-action revolver) to the massive frame and thus works to prevent movement between the cylinder and the frame during firing. This ensures that the critical alignment between chamber and barrel is preserved while the bullet is passing between one and the other.

Wesson also takes special care to make sure that the cylinder locking bolt precisely fits the locking notches cut around the circumference of the cylinder. Just as importantly, the locking bolt is also an exact fit with the bolt window cut in the bottom of the frame. Doing so ensures there is minimal side-to-side play of the bolt that can be transferred to the cylinder. The end result of all this care is very likely the best cylinder lockup you'll find on any double-action revolver.

The third part of the equation is Dan Wesson's unique tensioned barrel system. The barrel is hand-screwed into the frame. The factory sets the barrel/cylinder gap at the industry standard of .006 inch. However, since the barrel in not locked in place like on a conventional revolver, the individual shooter is free to adjust barrel/cylinder gap to the absolute minimum in order to increase velocity. A wider gap allows more of the propellant gases to escape out to the side. A smaller gap doesn't. Consequently, I set mine at a mere .001 inch.

As an aside, I should note that the Wesson's cylinder is so perfectly aligned with the barrel that even with this tiny barrel/cylinder gap, there is no danger of cylinder drag. On many other brands of revolvers, the face of the cylinder will wobble back and forth side to side when the cylinder is rotated. If the barrel/cylinder gap is too small, the face of the cylinder will drag against the barrel. This doesn't happen with the Wesson.

Once the gap is set, a heavy barrel shroud is slid over the barrel and then fastened with a nut at the muzzle end. By tightening the nut at the muzzle, the barrel is now drawn away from the frame and is placed under an impressive amount of horizontal tension just like when musicians turn a key and tighten a string on their violin. Doing so results in the total elimination of barrel whip and in significantly smaller barrel oscillations when the gun is fired. Oscillations are reduced even further by the fact that the barrel is supported at both ends, i.e., in the frame and by the muzzle end of the shroud. All other revolver barrels are supported only by the frame. Reduced barrel vibration translates into superior accuracy.

Cartridge Selection

So why did I choose a .414 Super Mag? Because a .41-caliber bullet of equal weight can do anything a .44 can and do it better. First of all, we have to recognize that .44 Mag bullets aren't really .44-caliber. The standard ".44" actually measures only .429 inch in diameter. That means that the ".44" isn't even a .43-caliber. On the other hand, the .41 Mag bullet is a true .41, measuring exactly .410 inch. This also means that a .41caliber bullet of equal weight has a slightly better ballistic coefficient or ability to slip through the air. Result? More power delivered on the target down range.

For those who prefer to let someone else do their loading, ammunition for the .414 is available from the Dan Wesson company. Both 170-grain and a 220-grain loads are offered. Dan Wesson is also working on a new line of premium hunting ammo for the .414 that will feature 240-, 265-, and 300grain slugs featuring a very interesting mechanism to ensure bullet expansion. However, handgun silhouette is a reloader's sport.

Reloading for the .414 is pretty much a straight-forward affair. Cases for .414 are readily available from Starline, and .414 dies are offered by Redding. Regular .41 Mag dies can be used in a pinch; however, the Redding dies do a great job with a minimum amount of fuss and adjustment.

Only two extra considerations have to be taken into account when reloading for any of the SuperMag series. The first is that rifle primers should be used rather than pistol primers. Since we're working with a extra long straight column of magnum ball powder, the hotter, longer burn time provided by rifle primers is necessary to provide the best ignition. Magnum pistol primers just don't have enough spark to do the best job, and they're not really made for the kinds of pressures we're developing with the .414.

The second consideration concerns recoil. When loaded to the absolute max, the .414 can create significant recoil. After all, this is a cartridge that has 16 percent more case capacity than the mighty .44 Magnum and is considerably more powerful. When loaded at the top end, we want to make sure that we're using a heavy roll crimp to ensure the bullets in the other chambers don't start moving out of their cases as the the gun recoils. For those wishing an extra margin of holding power, the Redding profile crimp die is just the ticket as it combines a conventional roll crimp with a taper crimp.

For powders, the standard ball types such as H110, WW296, AA #9 work very well. Vihtavuori's N110 is the fastest burning of the bunch and so naturally produced the best velocity of all and as an added bonus accuracy was among the best. Hodgdon's Lil' Gun, which has a burning rate slightly slower than H110 was an exceptional performer and seems to be a natural for extra-large cartridges. Hodgdon's H4227 probably has the most flexibility and can produce good groups over a wide range of velocities. In fact, if I had only one powder to choose from, H4227 would probably be the one.

The range of .41-caliber bullets from the manufacturers is admittedly not very robust. Sierra has the best selection with 170-, 210- and 220-grain bullets. Nosler and Hornady offer only a single 210-grain bullet each, and Speer provides 210- and 220-grain half jacket bullets that are really more suited for close range self-defense purposes.

For those who like pouring their own, Redding SAECO has the widest variety of .41-caliber cast bullet molds available, including its No. .415 which is a beautiful 220-grain gas-check design. SAECO molds are simply the best you can buy.

If you like the economy of bullet casting but don't have the time for it, Leadhead's Bullets in St. John, Kansas is the place to go. It offers both a 245- and 270-grain gas-check design. These are very impressive and extremely well-cast. I've used these bullets extensively, and they have carved out a large and loyal following among silhouette shooters. Cast out of lead that measures 20+ on the Brinell hardness scale, these heavy hitters are exceptionally accurate. Prices are also very reasonable. The 245-grain design is perfect for silhouette or white tail deer, and the 270-grain has a wide appeal to those who like spanking the rams with lots of extra authority. The 270s are also very effective bullets for those who like hunting boar with a handgun and like the superior penetration of a heavyweight bullet.

So what do you get when you combine a well-proven yet innovative design with the new generation quality that comes from modern CNC machinery and attention to detail? What is probably the best double-action revolver on the planet. When coupled with the very powerful .414 SuperMag cartridge, you have a tough combination that relegates the ordinary .44 Mag revolver to the second string. Here's a team that will flatten steel with all the authority you could wish for and which will also allow the handgun hunter take game at longer distances without any fear of running out of performance.

What more could you want?



FOR MORE INFORMATION: International Handgun Metallic Silhouette Association [763] 323-3359 www.ihmsa.org

Dan Wesson Firearms [607] 336-1174 www.danwessonfirearms.com

> Leadhead's Bullets [620] 549-6475

