Practical Handgun Accuracy

What Can You Realistically Expect Your Auto or Revolver to Do at any Given Range?

By Ross Seyfried

How good am I? How good should I be? These are very frequently asked questions among shooters (asked at least quietly to themselves). If there is a single common thread among shooters, it is the pursuit of excellence. The desire to hit that at which we are aiming or to make the small group runs strong among our tribe. Unfortunately most handgunners lack a yardstick—at least a practical one—that applies to things other than formal target shooting. The hunter, field shooter or recreational shooter wants to know if his or her skill measures up. While there is no precise definition of acceptable skill, I will offer some guidelines that I use myself, ways to measure whether to smile or frown at your results and, more importantly, to understand and increase your personal accuracy.

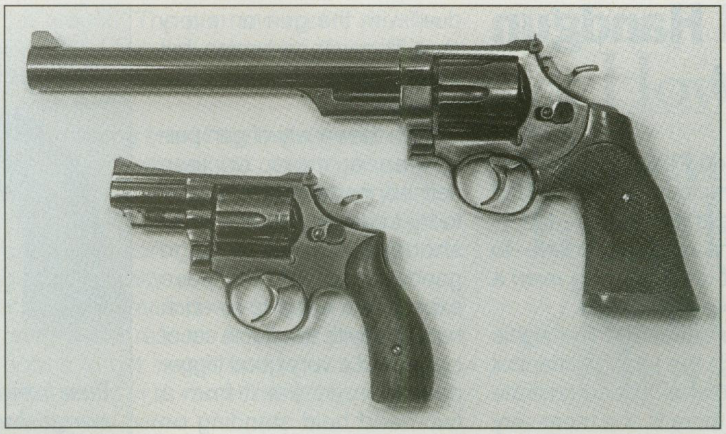
Let's begin with the basis that most of what you read in gun magazines is too good against which to compare. Gun writers rarely miss and the guns they test never make a bad group. Cynicism aside, most of the shooting you see in the magazines is designed to demonstrate the firearm's performance, eliminating the human element as much as possible.

Scope sights, benchrests or even machine rests are all designed to isolate the gun as much as possible from the often flimsy work of the shooter. It is, as I have said numerous times before, very difficult to "outshoot" your gun. Most good handguns are far more accurate than their shooters under field conditions.

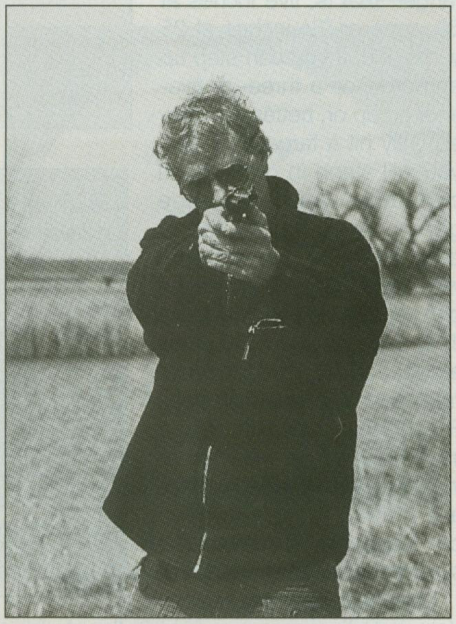
With that said, we have left three main factors that determine just how "accurate" the total package of shooter and arm should or can be. They are shooter skill, arm shootability and how that individual arm is held and shot.

Pure accuracy aside, all guns are not created equal from a shootability standpoint. Some handguns are as easy to hit with as the fickle machines can be, while others make fine shooting virtually impossible. Some of the factors that contribute to our ability to hit with a handgun are barrel length/sight radius, trigger quality, sight quality, weight, balance and recoil level. The perfect handgun, using the above factors, might be an Olympic target pistol with its long barrel and sight radius; moderate weight; perfect balance; flawless, light trigger pull; and virtually no recoil. The opposite extreme might be some variety of derringer chambered for a big-bore cartridge. A fine shot might hold an inch at 50 meters with the former, while the same shooter might struggle to keep the latter in a foot at 10 meters. Reality says the guns that most of us shoot lie somewhere between those extremes. But even within normal limits the difficulty factor varies.

Moving to the kinds of guns that most of us shoot, there are some specifics that influence our ability to hit or make groups with the piece. The normal, middle-ground barrel lengths range from four to six inches. This length neither greatly adds to nor detracts from our ability to make hits. A pistol or revolver with a four-inch barrel or equivalent sight radius is on the ragged edge of giving us trouble. Below that we can allow ourselves some increased group size at any range. The greatest shooting teachers are the otherwise-standard short-barrel revolvers. These are the two- and 2½-inch-barrel guns. While they are extremely accurate, these guns' short sight radius makes proving that accuracy very difficult. Making hits with the snubbies forces us to double our emphasis on the sights as well as the trigger release. Where a modest error with the normal barrel lengths might move a shot an inch or two at 25 yards, the same mistake with a short barrel will easily miss the paper. If we add barrel length to the norm, hits become easier. The 7½- and 8⅜-inch guns are comparatively just plain easy to hit with. All other factors being equal, a shooter might expect to reduce his grouping with a four-inch gun by half when shooting one of the long-barrel arms. Substitute a 10-inch tube and we start to have the "rifles" of the handgun world. They are unwieldy to carry but offer a sight radius that makes hitting relatively easy.



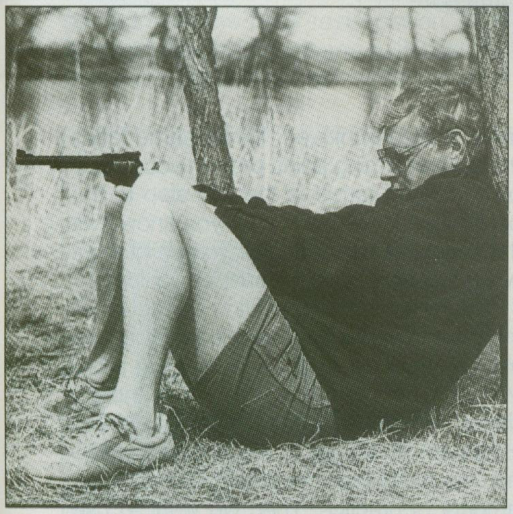
This 2½-inch round-butt .357 and 10-inch bull-barrel .44, both Smith & Wessons, represent the extremes of revolver shootability. An average shooter can expect to shoot groups ¼ the size of the little .357s with the long-barrel revolver.



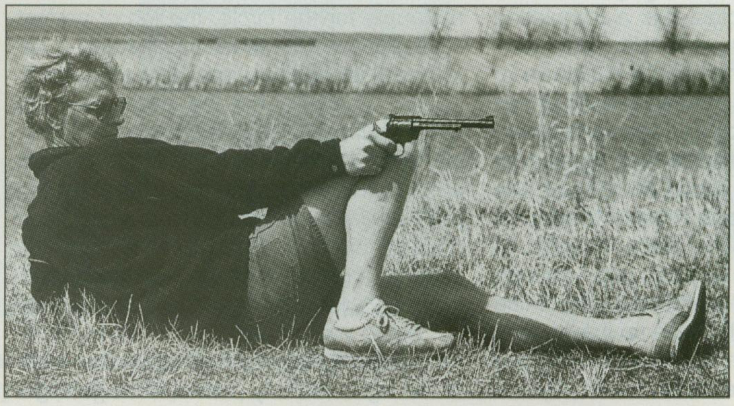
In many cases offhand will be the preferred shooting style. However, maximum accuracy is obtained by using any of several different positions that allow more solid support of the handgun.

This does not mean that the barrel/sight radius is *the* defining factor in handgun shootability. We can quickly negate much of the barrel advantage if the sights or trigger quality fail. High-quality sights are an integral part of our ability to shoot well. Good sights go a long way toward allowing us to put the bullets where we want them. A perfect sight picture shows us a square or slightly elongated rectangular (vertically) front sight in the rear notch. That notch should be wide enough to allow us to see daylight in about 15 to 20 percent of the front sight's apparent width on both sides.

My sight-color preference for all normal shooting conditions is black on black. If we contrast this kind of sight with the sights found on a G.I. .45 or a Colt Single Action Army, we again move in the direction of the shorter barrels. The accuracy is still there, but releasing the shot with uniformly perfect sight alignment time after time becomes



Resting the back against a solid object and supporting the gun as shown is a proven way of improving long-range accuracy. Shooters must be careful to avoid positioning a revolver in such a way that burning gases from the barrel/cylinder gap could cause injury.



This supported position is also popular among long-range shooters. However, once again, precaution must be taken to avoid serious burns from the barrel/cylinder gap.

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more difficult. Rounded edges or smaller sights just make hitting tougher. The folly of trying to adapt "express" rifle sights—the V-notch and bead found on double rifles—to handguns will almost universally foil even a good pistol shot.

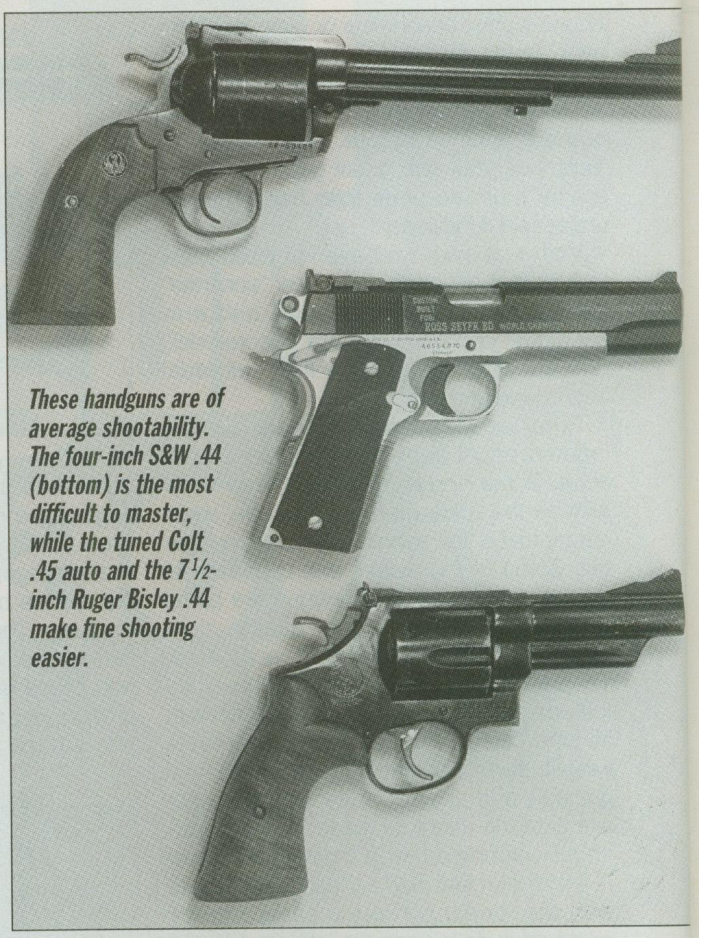
With a reasonable barrel and fine sights we begin to approach the total mechanical package that will allow us to demonstrate our ability. However, there is one more very influential "moving part" on our handguns: the trigger. To my hands the perfect trigger can be demonstrated by most out-of-the-box Smith & Wesson revolvers.

In this day and age of "lawyer-proof" triggers, I am continually amazed at the grand, glorious, wonderful triggers that Smith sends us. Something on the order of 2½ pounds of "breaking glass" is the norm. These are no-excuses triggers, ones that if you don't shoot well, it isn't the gun's fault. Fortunately most handguns—even some of the autos—can be tuned to this state by a highly skilled gunsmith. A heavier pull weight is acceptable and really won't detract from shootability as long as it doesn't go much over four pounds. Also, a light trigger with some "creep" can be very user-friendly. A smooth, consistent amount of trigger movement during release is actually preferred by some shooters. It's the combination of negative factors that makes hitting tough. The heavy, gritty creep found on a majority of factory arms is absolutely working against your performance. Worse yet is the combination of double and single action, or the generally horrid double-action pull found on some autos. With this kind of trigger performance, fine shooting is all but impossible, or at least must be judged relative to the difficulty.

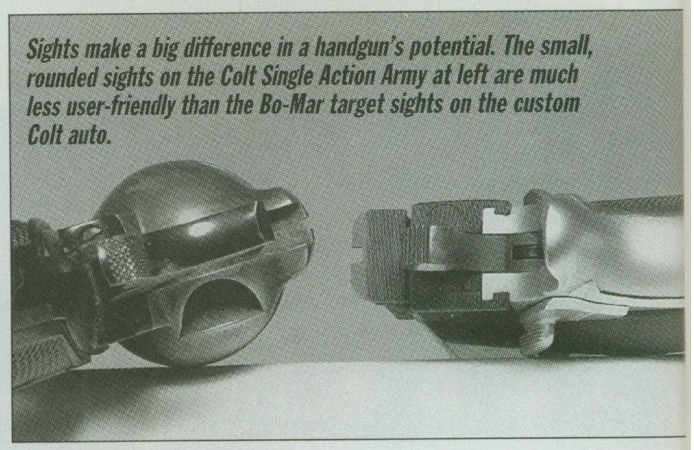
Beyond mechanical factors, recoil and noise/muzzle-blast levels certainly can add to the difficulty factor. At modest levels—up to .38 Special or light target loads in the big-bores—recoil and noise shouldn't affect your hits. The noise factor always assumes that you are wearing high-quality hearing protection.

When we start to use high-performance loads, the muzzle blast has a disquieting effect on the shooter, even with good hearing protection. A short-barrel magnum or one of the really big hunting cartridges has a large enough voice to encourage flinching, or at least less-than-perfect trigger control. As the actual recoil increases, the shooter must increase muscle tension to maintain control of the piece. A light .44 Magnum requires a very firm grip—enough tension to make the perfect subtlety of fine trigger control difficult. Move up the scale to the big .45s or something like the .475 and you will have to wage a mental and physical duel with the gun on every shot. They can be beaten, but it is the work of a true master to do so.

With the variety of gun performance more or less defined, we have some basis to try to define average good shooting with an average good gun. What should we expect from a four-to-six–inch handgun with a suitable set of sights and a very good trigger pull when we fire it from a two-hand hold standing on our hind feet? The best approximation I can reach is an old standard that goes back to my practical shooting days. Back then we used it for minimum gun accuracy; now I am relatively comfortable with the concept as a definition of suitable shooter skill. We call it minute-of-handgun accuracy, or one inch for every 10 yards of range—that is, five inches at 50 yards or 2½ inches at 25 yards, etc. If you can step up and produce a three- or five-shot group or, better yet, consistently hit a target that size, you will stand in pretty good company. As the range grows, the difficulty factor does increase. I'm not sure what law of physics enters the picture, but it is certainly more than twice as far to 100 yards as it is to 50 yards from a handgunner's point of view. Fortunately, as the range increases, or as we want to increase our precision, there are human factors that we can apply to decrease the size of our "minute."



These handguns are of average shootability. The four-inch S&W .44 (bottom) is the most difficult to master, while the tuned Colt .45 auto and the 7½-inch Ruger Bisley .44 make fine shooting easier.



Sights make a big difference in a handgun's potential. The small, rounded sights on the Colt Single Action Army at left are much less user-friendly than the Bo-Mar target sights on the custom Colt auto.

One important concept in demonstrating your accuracy is the choice of a target or aiming point. The standard round bull's-eye can be used, but it is a difficult aiming point, especially from an elevation point of view. Just where does the bottom of a black circle begin? If we substitute a rectangle for the circle, the job of perfect sight alignment becomes much easier. I like to use black or red paper on a white background. The height of the target does not matter, but its width should match the apparent width of the front sight at the chosen shooting distance. With this kind of aiming point you level the front and rear sights, then bring up the front sight until there is a thin sliver of white between the sight and target. Your eyes will unerringly duplicate this "sliver," giving you perfect elevation every time. With the colored paper matching the width of the sight, similarly perfect windage alignment is also achieved. While game lacks this perfect aiming point, proving your ability on a defined target is the first step to the confidence level that will let you know that the bullet will hit the top of your front sight when that sight is on the buck's shoulder.

The foremost consideration whenever an increase in skill is the quest is practice. It is very reasonable to assume that the more you train, both with live ammunition and dry firing, the better your shooting will be. However, as we get to the acceptable levels, the gains become small relative to the amount of practice. Then we want to use advantages, edges, anything that will allow us to hit more precisely. Because the benchrest cannot follow us into the field, we will ignore it, leaving it as a tool to test arms rather than shooters. We shooters come

equipped with some very useful rests of our own and learning to use them goes a long way toward making our accuracy meet the gun's potential.

We began with the standard standing, two-hand grip. Within this is a balanced, spring pressure between both arms, the gun hand pushing out while the supporting hand pulls back toward the body. There are times when a tree, rock, etc., can be used to "steady" the offhand shot. This at times offers little advantage, but if the wind is blowing, shaking the shooter, placing the back of your nongun hand against a tree may improve accuracy. But a shooting position other than offhand is very desirable.

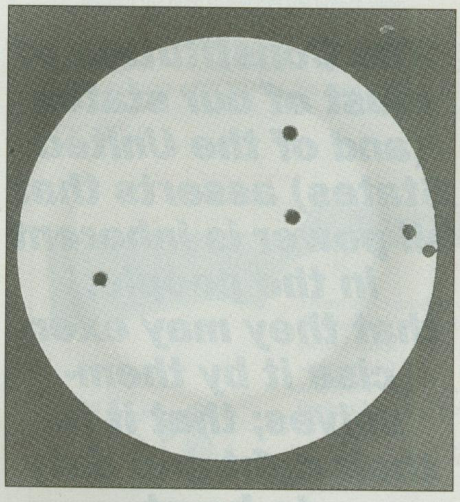
Kneeling is possibly the most universally adaptable field-shooting position. It is only a slight modification of offhand, but offers great gains in precision. Here the gun is held in the same way, but a right-handed shooter will place his right knee on the ground and sit on his right foot. The left elbow is now supported by the left knee, transferring some of the offhand push-pull pressure to downward pressure. By using the kneeling position I can usually cut ¼ to ⅓ from my standing groups.

Beyond kneeling there are three extremely steady shooting positions that are less usable due to terrain: prone, back rest and reclining. The latter two are mentor Elmer Keith's choice ued when he really wanted to get precise, and his definition of precise is almost frightening. Reclining and the back rest position were the methods Elmer used to make many of his long-range game shots.

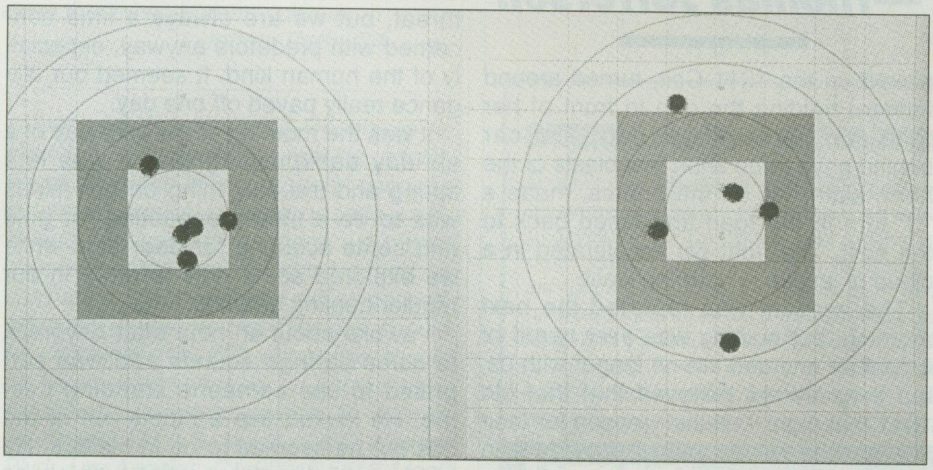
The reclining position evolved in a big open country where there were few trees or rocks to use as a back rest. It allows you to shoot over a bit more grass than prone, but the very technique itself takes some practice to master. A bit more elevation and substantially increased support can be gained from the back-rest position. This shooting style requires some solid object to support the shooter's back while sitting on the ground. The gun and hands are then supported between the knees. This position is extremely solid, possibly more so than a bench rest.

By utilizing one of the more stable shooting positions, our minute of handgun begins to get smaller. On a good day with fine light, a shooter who has a good mastery of sights and trigger control can begin to nudge his gun's accuracy potential. Moving from an inch per 10 yards down to half of that is certainly within reason. A normal paper plate begins to get in real trouble at 100 yards, with groups in its center rather than just hits on it somewhere.

In the end most of us will never shoot well enough to satisfy our desire for excellence. The motive of "smaller, further, faster" lurks within all of us, and that is good. Elmer explained his extreme-range hits to me years ago: "You practice and practice, until all of your shots are close. Then sometimes you get lucky. Those really long ones arch high; they go plumb to heaven and get redirected." Sometimes I think little groups happen the same way, only the ceiling is lower that day.



Paper plates make interesting 100-yard targets. The author feels that hitting one with five out of six rounds represents very good field shooting.



The group on the left shows good 25-yard accuracy for offhand shooting with an iron-sight handgun, while the approximately five-inch group at right is very acceptable at 50 yards.