

BY J. C. MUNNELL

Those of us who persist in experimenting with wildcat cartridges are a bit strange in many ways. We march to a drummer largely unheard by the average person. We are always running against the wind (to the barely perceptible strains of Bob Seger's melodic tunes). And, by and large, are just a bit smarter, wiser and probably better looking than all of those complacent .30-06-shooting conformist followers who never think for themselves, never take a walk on the wild side (there are some more melodious strains if you are capable of hearing them) and watch reality shows on TV.

All kidding aside — who's kidding anyway — we are different, although I strongly suspect all of us have, at some time, dabbled in wildcats of some sort. No? What *real* difference is there between loading and shooting, say a .38-56 Winchester or an 8x72R from feeding and firing say an 8mm/06 improved? Not much! Brass has

to be formed; loading data often has to be interpolated from old books which refer to powders like DuPont 17½ or Hercules HiVel No. 2 and bullet weights measured in grams. In one sense or another, anyone who has loaded more than half a dozen or so cartridges or for more than ten years has, at one time or another, been very close to being a wildcatter. It's fun and also often very satisfying and rewarding.

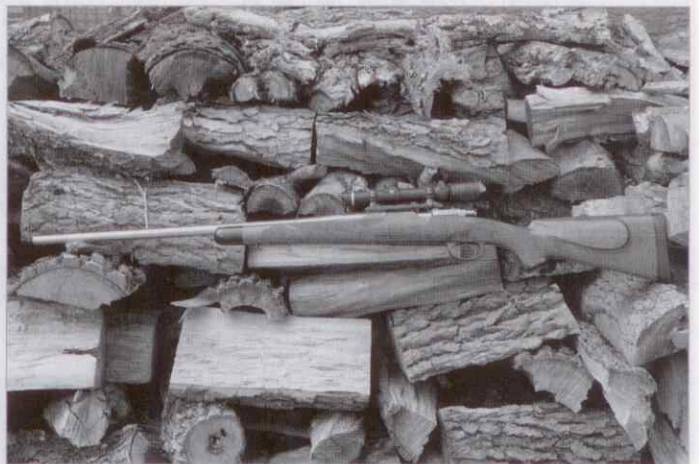
Do you know that Editor Dave secretly wants to build up one more rifle chambered for the .260 AAR? 'Tis true!

Now when a wildcatter loans you his personal rifle and it turns out to be a much-customized Model 98

Continued on next page



Right side of Fred's personal rifle.



Left side of Fred Zeglin's Z-hat Custom personal .358 Hawk rifle as loaned to the author for testing, together with the eminently sensible Leupold 1.5-5x scope. Quite a handsome rig.

The Hawk Wildcats

Continued

Mausers in a very handsome piece of walnut with a Leupold 1.5-5x scope, it becomes obvious that we are dealing with a very knowledgeable individual and one of impecca-

ble taste. This is what recently happened when our Editor received an advanced copy of Fred Zeglin's new book *Hawk Cartridge Reloading Manual*, and decided there might be an article on Fred and his Hawk line of wildcats waiting to be written.

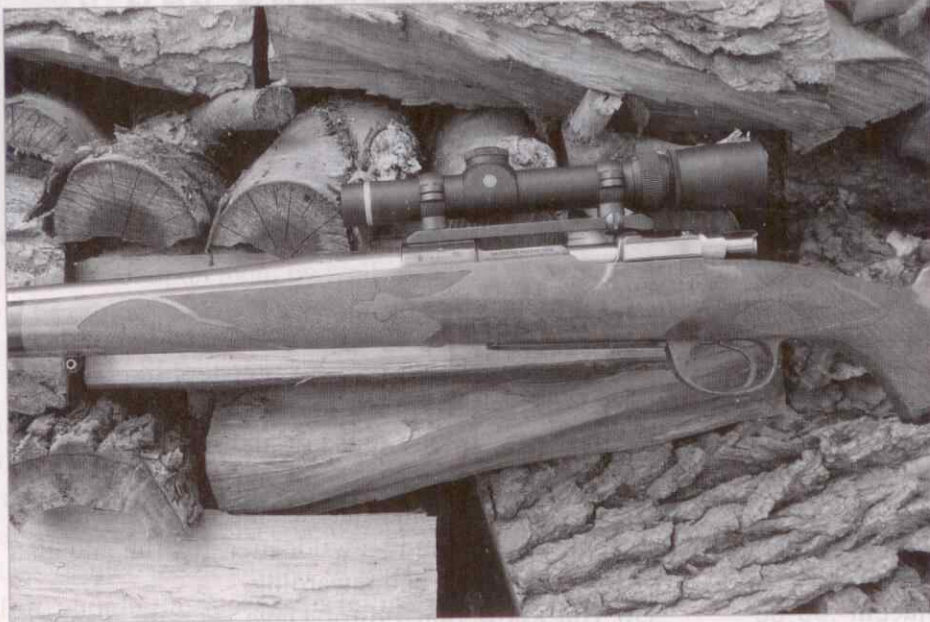
Requesting that I investigate this

possibility, Dave suggested I contact Fred and see if I could beg, borrow or steal (OK, maybe I suggested that last one) a rifle chambered for one of the Hawk wildcats for testing and evaluation. Fred was happy to accommodate and generously sent along his personal rifle chambered for the .358 Hawk, together with some formed cases and a set of reloading dies of the type Fred had made for him and which he makes available to his clientele.


For about six weeks, I was able to work with this gun and learn a few things in the process. But first, who is Fred Zeglin and what is a Hawk cartridge? Fred is a gunsmith in Kalispell, Montana who has been at his profession since graduating from Lassen College with an AA degree in gunsmithing in 1984. Along the way, he served a year and a half as production manager for McGowan Precision Barrels and previously as a store manager/gunsmith for Sandbar Gunsmithing in Casper, Wyoming. He goes by the trade name of Z-hat Custom (www.Z-hat.com), and by the looks of the rifle he loaned me, his work is pretty darn good. He also is the proprietor of a reamer rental business known as 4-D Products (www.4-dproducts.com) through which he supplies chamber reamers in a vast number of flavors to the trade. He has written two books on wildcat cartridges and is currently working on a book about one of my personal heroes, P. O. Ackley.

The common thread in all of these undertakings is an *understanding* of what he is doing, not merely a vocation. Too many gunsmiths today know what a wildcat is, but have no understanding of the *why* or *how* of its design. Fred, like P. O. Ackley, seems to be a genuine student of wildcatting, not merely an assembler of rifles chambered for non-factory rounds.

His first book, *The Reloader's*

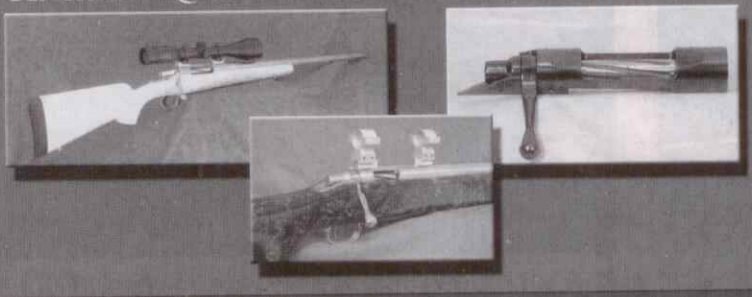


Close-up of the left side of Fred's .358 Hawk rifle. Note Mauser 98 receiver and small Leupold scope – proof that Mr. Zeglin knows of what he is about. Note also the excellent checkering. Unfortunately, Fred no longer does any checkering.



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Guide To Wildcat Cartridge Design, published in 2005, discusses these whys and hows of designing a wildcat cartridge. He emphasizes that in order to rationally design a wildcat, one must first decide what goal he wants to accomplish, then must decide how best to go about this — what parent case should be used, what form it should take, etc. Fred discusses many of the technical aspects, then goes on to cover several of the more “historical” wildcat “families” as designed by earlier wildcatters as well as going into some depth on certain more recent developments. Of course, he also discusses the mechanics of wildcatting, such as case forming, etc.

The second book — *Hawk Reloading Manual* — deals with the history, design, rationale and loading of the Hawk line of cartridges from 6mm through .411 inch. While he lays no claim to having “invented” the first Hawk cartridge, the story is a fascinating example of the parallel work of two individuals: Bob Fulton, the original builder of the Hawk bullets (hence the name of the cartridges), in 1988, and Dave Scovill, long-time Editor of various Wolfe Publishing Company magazines, in 1993. To be very brief, the first Hawk rounds were built from the European 9.3x62 case, which, although differing in several minor details, is very similar to a “.36 Whelen” with the shoulder moved forward, the idea being to achieve a bit more powder capacity than the .06 family of cases. (Approximately a nine percent increase was realized.) Both Dave Scovill and Fred decided to use the .30-06 case instead, due to its ready availability, but also to relocate the shoulder forward and expand it, while leaving the shoulder angle basically alone.

While this preliminary work was going on, a client of Fred’s

requested a .35 caliber Hawk and another .40 caliber, which became .411 inch so as to assure more sufficient shoulder for proper headspace than a .416 bore would have. (Interestingly, Fred quotes Michael Petrov’s two PS articles [February, 2001 and December, 2003] on debunking the myth that

the .400 Whelen suffers from headspace problems.) Finding the basic concept to be sound, Fred then necked cases down and up from .24 caliber to .41 caliber, with the result that today there is an

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Close-up of right side of the Z-hat Custom .358 Hawk rifle: A Mauser with a small Leupold variable chambered for a wildcat cartridge. Does it get any better?

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The Hawk Wildcats

Continued

entire family of Hawk cases. This second book also provides loading data for each cartridge.



Case on left is a .35 Whelen, center is a .35 Whelen Ackley Improved and on right is a .358 Hawk. Note the extra body length of the Hawk round.

To further make life easier for prospective buyers, Fred has made arrangements with Quality Cartridge (www.qual-cart.com) to have properly head-stamped brass available for most of the Hawk rounds and with a manufacturer of reloading dies to produce – for Fred – dies for all the Hawk cases. Chamber reamers are available, both through Pacific Tool and Gauge (PS advertiser) and Dave Manson Precision Reamers (PS advertiser).

So, why consider a rifle chambered for one of the Hawk rounds? In order to answer that question, it is necessary that you know the foregoing, as well as that Hawk cases can be readily made from various .30-06-family cases, or are readily available commercially and that they are not *radical* departures from commercial rounds. However, obviously there must also be ballistic advantages in order for the Hawk rounds to be useful. Based upon my two experiences – albeit, both have been brief – I believe there to be such an advantage to the Hawk cases. In saying this, please note that I am also making – in my own mind

– comparisons to other efforts at wildcatting the '.06 case, i.e., Ackley Improved rounds, Rocky Gibbs' efforts, etc.

The names Z-hat and Fred Zeglin were not exactly new to me when our Editor called, but neither was I very familiar with either Fred's work or the cartridges. A few years ago, a good friend had Fred rework his Weatherby Ultra Lightweight Mark V from .308 Winchester to .300 Hawk, a project a lot more complex than merely re-chambering the rifle. When this gun came back from Z-hat Custom, we looked it over rather thoroughly and pronounced the work to be very professionally done. Unfortunately, we did not get to shoot it very much before my friend's right eye went bad and he was forced to sell all of his right-handed rifles. Since I was more interested in a certain Apex Mauser in .300 Apex (see PS July, 2008) at this time, the .300 Hawk did not find its way into my stable. More's the pity.

In very abbreviated testing, the .300 Hawk proved a distinct improvement over the standard .30-06. Velocities of 3275 and 3150 fps with 150 and 165 grain bullets respectively were achieved, along with good accuracy. This was enough of a ballistic improvement to at least get my attention. Incidentally, case formation was simple enough and was accomplished by necking .280 Remington brass – the parent of all Hawk calibers from 6mm through 8mm – to .35, then back down part way to .30 to form secondary shoulders, then fire formed.

When the .358 Hawk arrived, I decided to make up 20 more cases in addition to the ones Fred had included. Fred suggests necking .35 Whelen brass up to .411 caliber using a tapered expander ball (which he had thoughtfully forwarded), then necking the cases back down

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to .35 caliber until cases will chamber with only slight resistance when closing the bolt. However, I decided to try my standard “Cream-of-Wheat” method and only neck the cases up to .375 inches, then partly back down to .35 caliber, since the Mauser extractor would permit cases to be held firmly against the bolt face. 20 out of 20 formed perfectly in this manner. Although this will work in a rifle with a Mauser-type extractor, use only Fred’s method in any gun with a push-feed action.

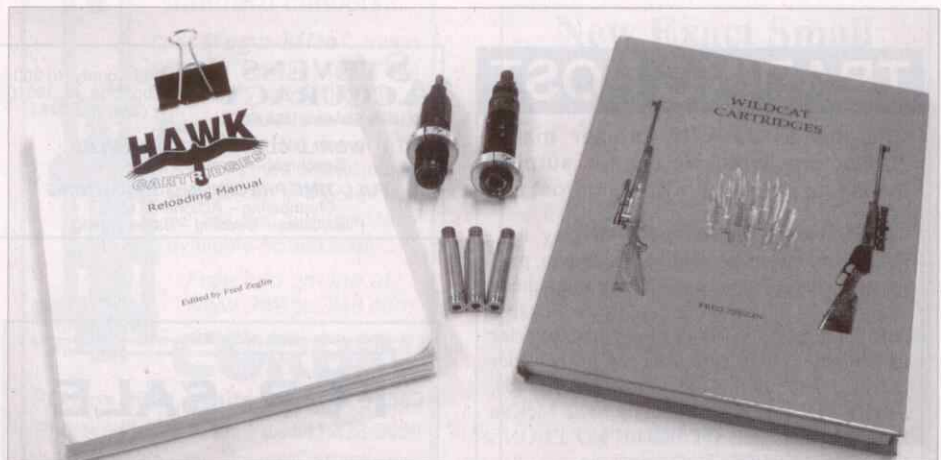
While I had the .358 Hawk, I was able to try bullets of 200, 225 and 250 grain weights. Since I began with 200 grain round nose bullets, and ran out of them before finding maximum pressures, my results with these were not as thorough or as impressive, as with heavier bullets. With these three weights, a velocity of 2840 fps, 2759 fps and 2562 fps respectively was achieved. These results are suffi-

ciently above those of the standard .35 Whelen (especially the somewhat under-loaded factory loadings) to be regarded as worthwhile. Again, reloading was completely straightforward once cases were formed. I should note that Fred suggests a maximum case length of 2.450 inches for the .358 Hawk, which requires trimming cases after fire forming. This I neglected to do, and did not run into any problems of cases being too long for the chamber. However, after a few loadings, case mouths on my cases were beginning to appear a bit rough and frayed, so I would suggest adhering to Fred’s suggestions and trim cases.

Standard-force primers are fine and powders in the 4895 to 4064 burning range are ideal. The dies supplied by Fred worked beautifully and the rifle demonstrated some rather good accuracy, particularly with the 225 grain Nosler AccuBond and 200 grain Barnes TSX. Since I have always regarded the .35 Whelen as a bit of an under-achiever, I found the .358 Hawk a refreshing improvement.

Interestingly, the Hawk round has a slightly larger case capacity than does the .35 Whelen Ackley Improved. So, is this enough reason

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Fred Zeglin's two books (the left one is in "proof copy" form), his reloading dies and three .358 Hawk cases. If you want a rifle chambered for one of the Hawk rounds, Z-hat Custom is truly a one-stop shop.



The reloading dies for the .358 Hawk as supplied by Fred Zeglin. Note the window-type seating die which Fred calls a "Bull's-eye In-Line Micrometer Seater." Despite the name being a real mouthful, both dies work perfectly.

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The Hawk Wildcats

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to choose one over the other? Like all cartridge decisions, this one ultimately rests within your personal preferences. There are those who do not care for the 40 degree Ackley shoulder, feeling that it causes feeding problems. The more sloping shoulder of the Hawk aids feeding. It should be noted, however, that the shoulder diameter of both the Hawk and the Ackley rounds are the same — .454 inches — and that in certain Mauser magazines, this fact will reduce case capacity

by one round unless the inside of the magazine box is increased in size by filing or otherwise removing metal. Since ballistics are similar, the choice one is left with is purely up to your personal preference. Certainly either cartridge will affect a game animal the same as the other. For what it's worth, in the particular .35 Whelen Improved-chambered rifle I had occasion to experiment with a few years back, I used slightly more powder to obtain slightly less velocity than I got with Fred's rifle.

The Hawk cartridges are well thought out and well executed. Fred's planning with the ultimate

consumer in mind makes him a "one-stop shop". Should you decide to have a rifle made up for one of the Hawk rounds, he can do it all — rebarrel or rechamber a rifle, as well as supply dies, brass, etc. What you receive is all you need to shoot, reload and hunt with your rifle. And if you also purchase his books, he will tell you the whys and hows of designing a wildcat cartridge, as well as give you enough reloading data on the Hawk round to get you well on your way.



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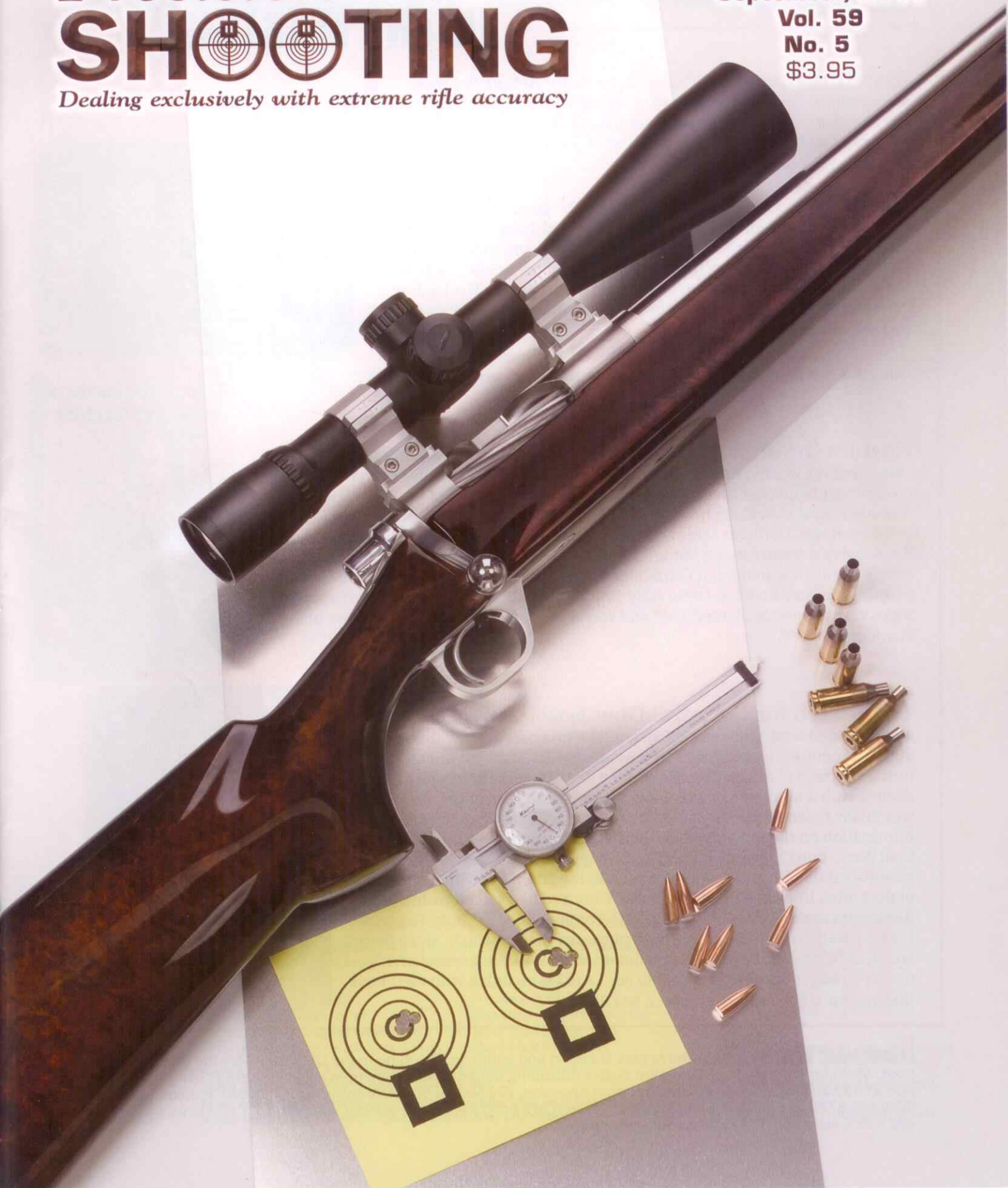
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