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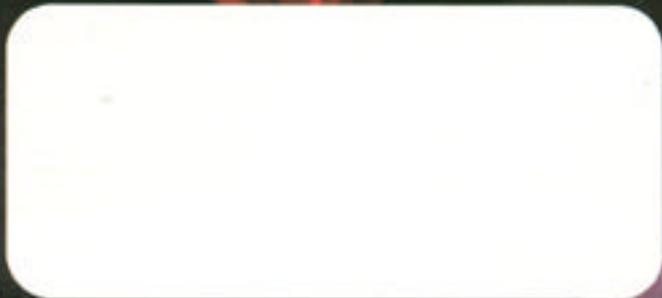
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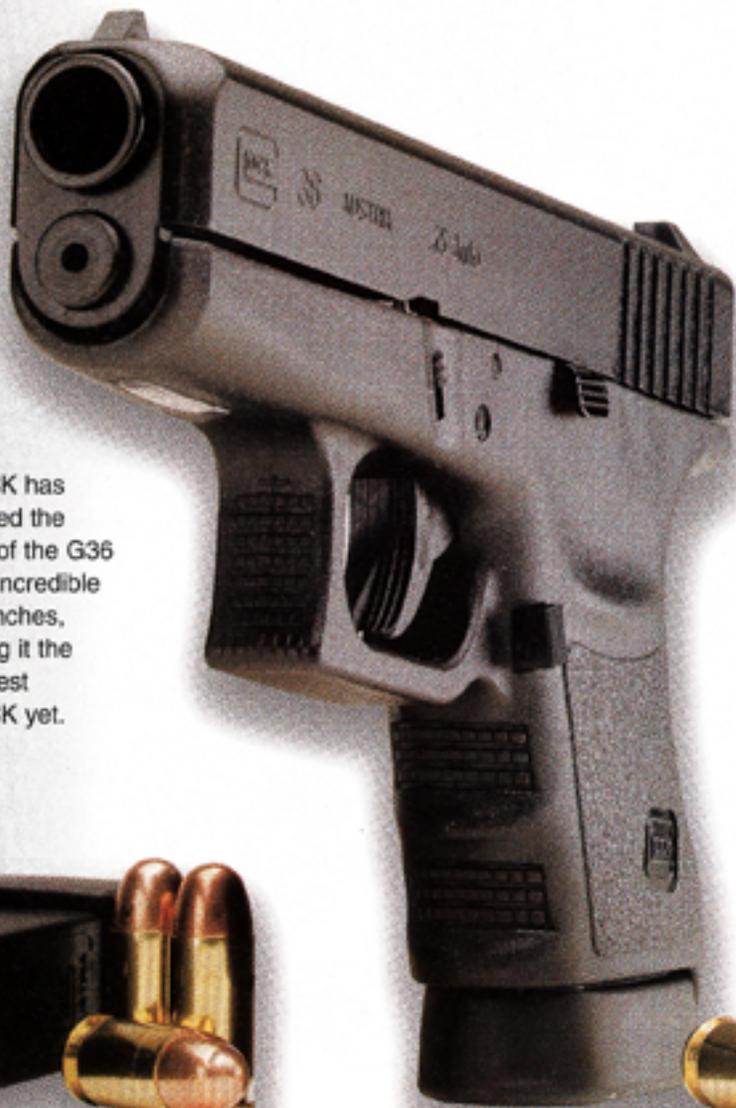
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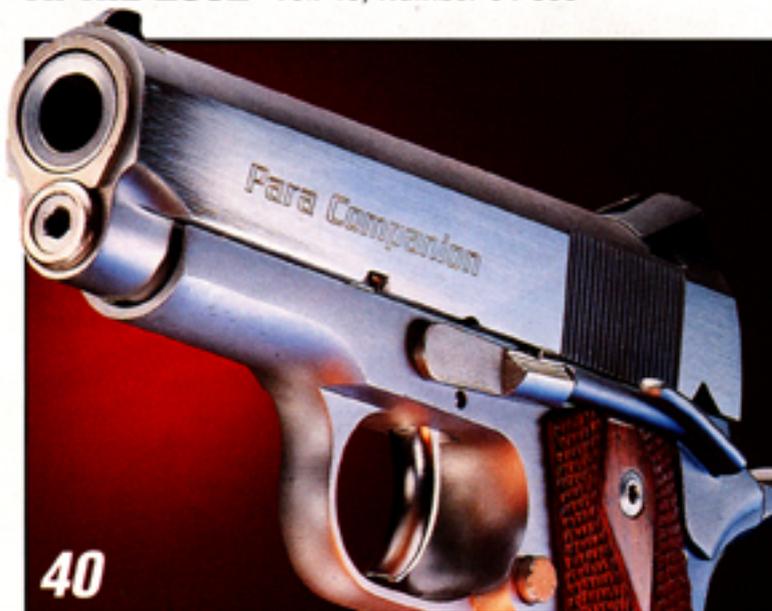
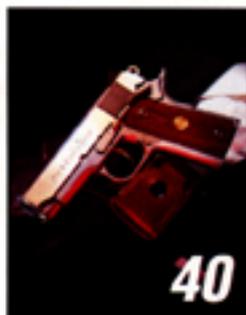
# GUNS

MAGAZINE

APRIL 2002 Vol. 48, Number 04-568

**On The Cover:**  
Para-Ordnance Companion  
By Massad Ayoob

Photo by Ichiro Nagata



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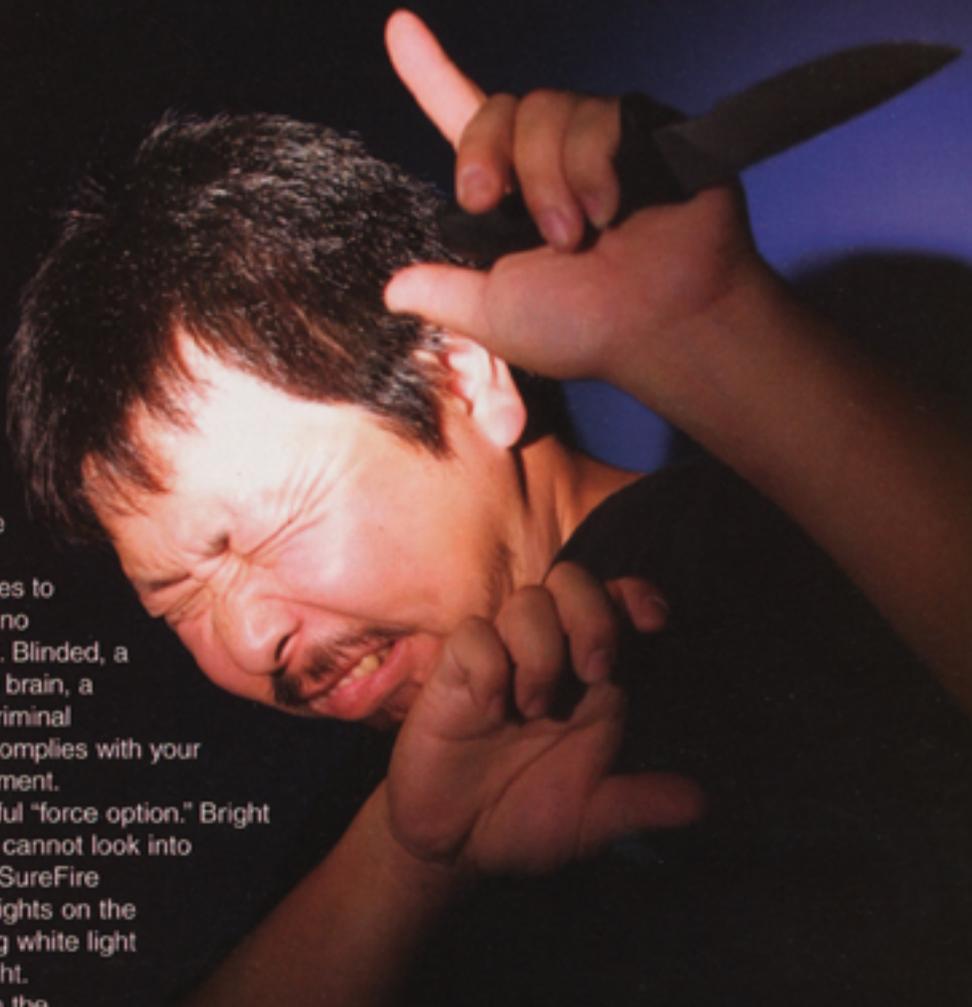
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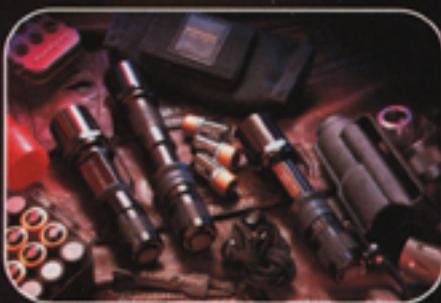
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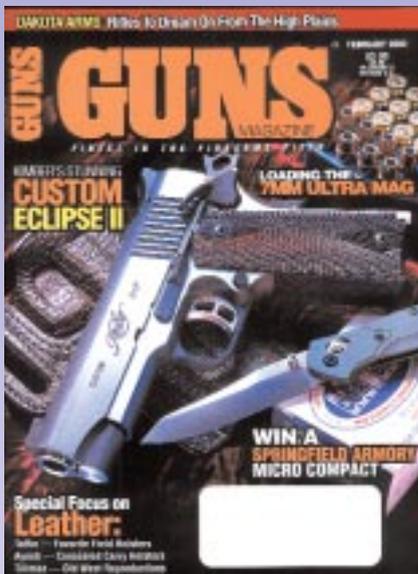


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LETTER OF THE MONTH



GUNS MAGAZINE FEBRUARY 2002

I am writing to thank you for the article on Old West Reproductions in the February *GUNS Magazine*. I've been at the shooting game for many years and I like all types of guns, but these days I find Cowboy Shooting and the older, more nostalgic firearms to be much more interesting. It was nice to see an article that was more along those lines, and I hope that you will include more coverage of this sort of thing in the future.

I also enjoyed the Handloader column about reloading the .25-20 WCF. That's a grand old cartridge. Please encourage Charles Petty and John Taffin to write more about these good old calibers that are seeing much more use these days. I for one am a big fan of the .44-40 and would enjoy reading more about loads for that great old-timer. It may be old, but it still gets the job done. The new guns are interesting, and I still like to read about them, but please don't forget the older guns and loads too.

J.T. Petterson  
Via e-mail

*Quite a few readers took the time to write in or call regarding a letter in February's Crossfire that described a sign posted at a Wal-Mart store in Kentucky. The sign forbade the possession of concealed firearms by customers. A check with the Wal-Mart corporate offices established that Wal-Mart "has no nationwide corporate policy regarding lawfully possessed firearms by store patrons."*

Editor

**Wal-Smart!**

When I read W. Tandy Chenault's letter in the February 2002 issue regarding Wal-Mart's "new anti-gun policy," I called my best friend of 23 years who is the manager of the Wal-Mart in Perry, Oklahoma. He confirmed through the corporate offices that the policy stated by the manager of the Mt. Sterling, Kentucky, store is NOT Wal-Mart policy. Wal-Mart's official policy is that there will be no banning of lawfully concealed carry by customers (associates may not carry), nor will there be any posting of signs to the contrary.

He stated further that it is possible the store manager is very new to the position, may be someone who is stridently anti-gun, or that there may have been some specific incident at that store that warranted this individual decision. However, the statement given to Mr. Chenault that this is Wal-Mart's new nationwide corporate policy is erroneous.

Sam Murano,  
Boise, Idaho

**Will The Real Wal-Mart Decision Please Stand Up?**

Having just read the article by W. Tandy Chenault regarding guns and Walmart, I have checked several area Wal-Marts and they insist that guns are welcomed at any Wal-Mart store. The manager at the one located in Mt. Sterling is quite mistaken. Wal-Mart has allowed concealed guns in all its stores nationwide. I think that Mr. Chenault needs to return to his Wal-Mart and advise the manager that his or her policy on guns does not match with the commitment of all of its stores.

Bruce Bolton  
Pewee Valley, Ky.

**An Avid Gun Collector Speaks On Wal-Mart Decision**

Mr. Chenault is upset because Wal-Mart does not want people carrying firearms in its stores, as an avid gun collector, shooter and sportsman who first joined the NRA in 1965 and strongly supports the Second Amendment, I also shop at Wal-Mart and am comfortable with its decision.

Howard L. Norris  
Mansfield, Ohio

**People Find The Darndest Things....**

Just read the September issue. In it, Mr. Taffin wishes that *The Boys' Life of Theodore Roosevelt* would be reprinted so he could get two copies for his grandsons.

Well, he doesn't have to wait. He can get online, or have someone do it for him, and go to abebooks.com and order everything from a first edition, \$40.00, to a used library book for \$5.00.

I have found this place to be invaluable for finding the darndest things!

Dave Wilcox  
Arroyo Grande, Calif.

**Kudos To Dave**

The column by Dave Anderson on flinching was one of the best I've seen. Flinching is something that most of us fight with all of the time and it was nice to see Anderson's advice on the subject. I'm looking forward to reading the second part of this to see if he has a quick fix to keep me from ever flinching again. Of course, I know that isn't going to happen, but it was nice to read some suggestions about how to fight this nasty problem. Please keep up the good work, it's nice to see more instructional type information in the magazine.

John Gallagher  
Orlando, Fla.



GUNS MAGAZINE™ welcomes letters to the editor for "Crossfire." Send your letters to: CROSSFIRE, GUNS Magazine, 591 Camino de la Reina, Suite 200, San Diego, CA 92108. Email: ed@gunsmagazine.com

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## When It Won't Work, Check AGI's Videos

**O**n opening day this past dove season, I was hunting with a good friend who was shooting a Remington 1100 in 12-gauge.

After a bit, I noticed he wasn't taking a second shot while birds were still flying well within range. Curious, I strolled over and discovered that his 1100 wasn't feeding the second round properly. It, indeed, had not been feeding properly for some time, which leads me to the following test question:

"A Remington 1100 comes in for repair. It won't feed. The gun fires and ejects the round in the chamber; however, the shell that was next in the magazine is now laying on the carrier. There are five things that can cause this. Which of the following four are correct?"

- a) Weak magazine spring
- b) Sticking magazine follower
- c) Bent extractor
- d) Cartridge stop timed too fast
- e) Carrier latch spring is too strong

Well, I didn't know the answer either until I reviewed the American Gunsmithing Institute's instructional tape on the Remington 1100. The proceeding test question I just quoted was actually generated by AGI as part of its final written exam for its Shotgun Course.

It's certainly not necessary for you to even be interested in gunsmithing to appreciate the wealth of information contained in AGI's tapes. Today, AGI covers a variety of firearms, as well as general gunsmithing practices and procedures. What its tapes do for anyone owning a Remington 1100, 11-87, 870; a Mossberg 500; or Winchester '97 is to acquaint the owner with the history, design, function and repair of that firearm.

This process of self-education truly enriches gun ownership and makes you somewhat more informed and confident when speaking with a gunsmith.

For example, the 2-hour AGI tape on the Remington 1100 and 11-87 models thoroughly covers the bolt locking, gas and carrier systems by using a cutaway model that highlights common mechanical problems. You'll probably learn more than you want,

but a little knowledge can go a long way when you're way out in the field with a misbehaving gun.

Priced at \$29.95 each, the shotgun tapes are a bargain.

The free AGI catalog is fascinating simply because of the breadth of the tapes now available. And if you really get involved, there is a Master Gunsmithing Course of 103 hours that includes many more models of shotguns, including 7½ hours on double guns alone.

### Time To Go Tactical?

The recent terrorist attacks on our Homeland once again remind us that the basic security of our homes and families is a personal responsibility. In spite of the popularity of the handgun as the ultimate personal defense tool, the shotgun remains the most sensible defensive firearm that the family can learn to employ quickly and accurately. It is a ferocious equalizer.

In 1971, Remington developed and marketed a metal, folding, ammo-carrying pistol-grip stock for the Model 870 pump. Aimed at the police market, the folding stock pump gun became an overnight hit with homeowners. It's even popular with professional hunters in Africa who appreciated its compactness and firepower when backing-up clients hunting leopard.

Today, we have a variety of after-market pistol grip and folding pistol grip stocks, flashlight holders, extended magazines and side-saddle shell holders that make the conversion of a standard Remington 870, Winchester 1200/1300, and Mossberg 500/590/600 into a handy tactical weapon a simple matter of a few minutes with a screwdriver.

There are factory, tactical models avail-

able as well. Winchester offers its Defender Model 1300 series with a pistol grip. Mossberg markets its Model 500 Persuader/Cruiser models with either a pistol grip stock or a conventional stock, or both.

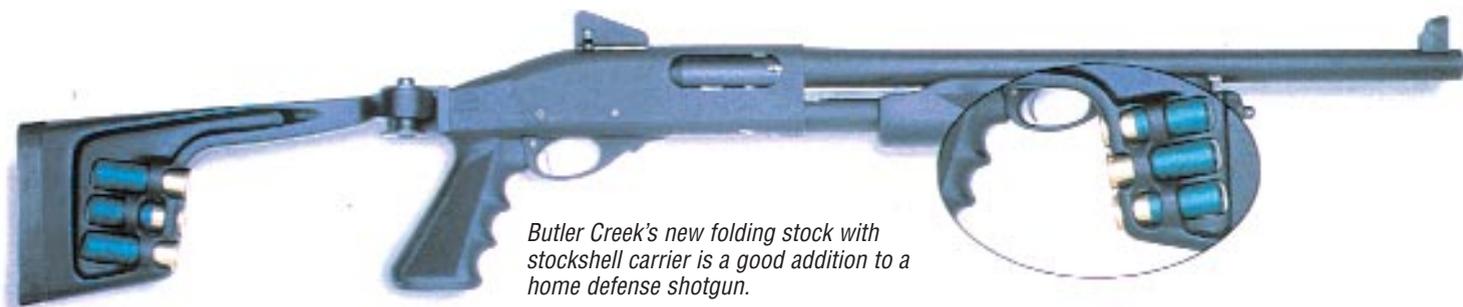
But if you have a spare pump gun to convert or even a sporter that could be converted into a handy tactical model during the off-season, it's easier than ever. It also may bring a certain degree of peace-of-mind.

Pachmayr, under its Tac Star label, offers an extensive selection of after-market grips and accessories, as does Butler Creek. In fact, Butler Creek has just released a new Protector model folding stock that incorporates a handy spare shell holder in the folding portion of the buttstock. The well-designed drop-in stock fits the 12-gauge models of the Winchester 1200/1300, Mossberg 500/590 and Remington 870, and can it be fired from the compact, pistol grip-position or with the stock fully extended.

Either way, the shotgun is a versatile firearm for home security and is readily available in areas burdened by restrictive handgun regulations.



AGI's informative gunsmithing videos can get you out of a jam.



Butler Creek's new folding stock with stockshell carrier is a good addition to a home defense shotgun.

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#### RIFLE OF THE YEAR

Marlin – Model 1895 Cowboy 45/70 with octagon barrel • [marlin.com](http://marlin.com)



PRIZE 5

#### SHOTGUN OF THE YEAR

U.S. Repeating Arms Co. Winchester Model 9410 lever-action .410 • [winchester-guns.com](http://winchester-guns.com)



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**PRIZE 8** AMMUNITION OF THE YEAR  
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**PRIZE 9** KNIFE OF THE YEAR  
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**PRIZE 10** ACCESSORY OF THE YEAR  
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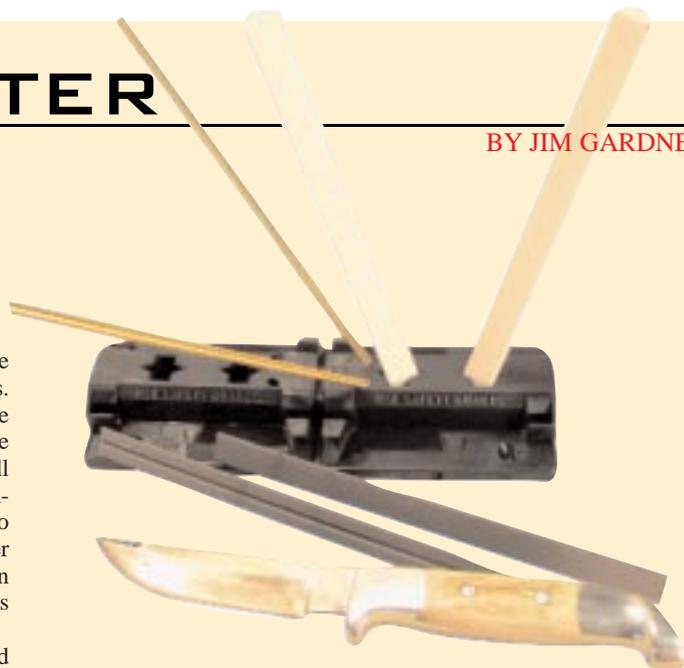


## Spyderco Tri-Angle Sharpmaker

**S**pyderco has improved its well respected Tri-Angle Sharpmaker knife and tool sharpening system. If you have not had the pleasure of using one of these, I can tell you that it is the fastest and easiest system for putting a good edge on your cuttin' tools.

I have been using and enjoying the earlier version of the Sharpmaker for many years. I purchased it to use on the serrated edge of my Spyderco knife, but I soon found that it made quick work of all my regular sharpening chores. The key to the Sharpmaker is the triangular alumina ceramic stones. This shape not only allows you to sharpen those serrated blades, you will find that you can use the corner of the stones for fast, aggressive restoration of a blunted edge, and then switch to the flat surface of the stones for a final honing. The system is quick, easy, and it puts an edge on a good blade that is almost scary.

The new version is much more compact than the original, and when stored measures only 8x3x1¼ inches. The kit consists of the base and cover, four (two coarse and two fine) alumina ceramic stones, two brass safety rods, and an instructional videotape and brochure. The Sharpmaker is easy to use, and while you may not really *need* the video, you'll be surprised at the range of tools that the tape shows you how to sharpen. Unlike the original Sharpmaker, the new version lets you select between the normal 40-degree edge bevel and a 30-degree bevel to restore over-sharpened or badly damaged blades. The ceramic stones are grooved to permit sharpening of your fish hooks and other pointed items, too.



The Spyderco Sharpmaker is really a great tool. The price is a bargain at \$68.95. I've taken mine on countless hunting, camping and fishing trips and would never willingly leave it behind. Give one a try, and I suspect that you'll feel the same way.

**FOR MORE INFORMATION:**

**Spyderco**  
www.spyderco.com  
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## KEL-TEC SUB-2000



The SUB 2000 is a self-loading carbine for small caliber gases. Different versions of the SUB 2000 will accommodate either Remington-Union carbines, i.e. .380, Glock or Beretta. The rotating magazine is removable and black. The SUB 2000 can be converted to a side or top-loading magazine design. The SUB 2000 also features an internal safety/deployment lock.

**Technical specifications:**

Weight unloaded	4 lbs	1.8 kg
Length open	30"	762 mm
Length closed	17"	430 mm
Barrel length	18.1"	459 mm
Magazine capacity	10/12	25/30
Controls:	Recocking push bolt Locking operating handle Safety/deployment lock	

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## Woodhaven Custom Calls

There are a number of really good turkey calls on the market, but I have been working with one recently that looks as good as it sounds. Mike Pentecost, of Woodhaven Calls, puts out the most attractive friction-type calls that I've seen.

The body of these calls is turned out of high grade, well-seasoned walnut. It looks good, it sounds great, and unlike a plastic-bodied call, it feels welcome in the hand on a frosty morning. You can choose from three materials for the friction surface: the usual slate, aluminum, or etched glass. Each has a different tone, and one or the other may prove more effective at certain times of the day or during the early or late part of the season. A variety of strikers are available, each of which can also make a subtle difference in the tone produced.

I particularly like the frosted glass surface, and Woodhaven can mount a photograph under the glass. Woodhaven's Website shows a great example of this with a photo of Pentecost and his young son. Woodhaven can also laser engrave the calls with your company's logo or message, and frankly this makes about the slickest advertising premium I've seen.

Woodhaven also offers a really nice walnut and white oak box-type turkey call, as well as a variety of other hunting calls. Considering the quality, the prices are more than reasonable. Take a look at the Website or give Pentecost a call. You'll be glad you did.



**FOR MORE INFORMATION:**  
**Woodhaven Custom Calls**  
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## Hoppe's Electronic Sound Muffler

Unlike conventional hearing protection that blocks all sound, these new Electronic Sound Mufflers from Hoppe's permit you to hear normal conversation on the range. The built-in circuitry picks up these sounds via two microphones mounted on the ear cups, so you can not only hear what is said, but also tell what direction it is coming from. At the instant the circuitry picks up loud, damaging noise such as a gunshot, it blocks it and prevents damage to your hearing. They are really an improvement over conventional hearing protection, enabling you to listen for range commands or just enjoy chatting with your shooting partner.

These Hoppe's muffs are very well padded and comfortable, are easy to adjust for size, and are powered by a single 9-volt battery. The noise reduction rating is listed at 25 db. One feature I particularly appreciate is the automatic off function. If you accidentally put these away with out remembering to turn them off, they will shut down automatically



after about four hours, saving your battery.

Perhaps the best use for these great muffs is when taking a new shooter to the range. While you and I may enjoy the familiar sounds of the firing range, it can be a pretty intimidating place to someone new to shooting. With conventional hearing protection, the new shooter is made virtually deaf and cannot hear your helpful instructions and encouragement. By loaning your Hoppe's electronic muffs to new shooters, they will be able to hear you clearly, and won't be tempted to remove their hearing protection at the wrong moment. Introducing friends, family and coworkers to the pleasures of shooting is one of the best things we can do for the future of our sport, and the more pleasant we can make that first shooting experience, the better. Retail price for the Hoppes Electronic Muffs is \$187.32.

**FOR MORE INFORMATION:**

**Hoppe's**

www.hoppes.com  
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## Get The Best From Your Rifle!

### Sinclair Bolt Tool

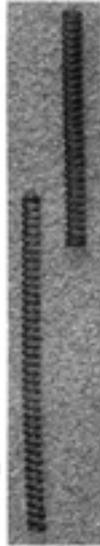
Our Firing Pin Disassembly Tool for Remington 700's makes removing and installing Remington firing pin assemblies a breeze. Our tool enables you to remove your firing pin assembly in seconds, allowing you access to the assembly for routine cleaning and lubing.

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GUNS MAGAZINE

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The Knight's Cross and the velvet-lined Case are both numbered to match the P38 serial number.

## ROCKY MOUNTAIN CARTRIDGE

There seems to be a real nostalgia wave in shooting right now, which probably has been inspired by the popularity of cowboy shooting. There are all sorts of neat old guns out there with ammunition that is either not available or prohibitively expensive. There are great big books that tell us how to make brass for *this* from brass for *that*, but the process often involves lathe work or costly forming dies. And, of course, there are some cartridges for which there is no modern case that can be adapted. I've always enjoyed the challenge of this type of job, but very often if you count the value of your time, it's simply more trouble than it's worth.

So it was with considerable glee that I discovered Rocky Mountain Cartridge on a recent visit to Cody, Wyo. The company is a spinoff from the Ballard Rifle Co., also

located in Cody. Just studying the list of over 100 available cases is educational (RMC doesn't sell loaded ammo). For example, we all know about the .45-70 Winchester, but did you know that there were also .45-60, .45-75 and .45-90 Winchester cartridges? There are lots of lovely old Winchester '86s and '76s out there that are chambered for those oldies. Add the proprietary cartridges for Ballard, Stevens, Maynard, Spencer and Sharps, and it's easy to see why the list is so long. Rocky Mountain Cartridge even offers brass shotgun shells in all the standard sizes, plus 24- and 32-gauge.

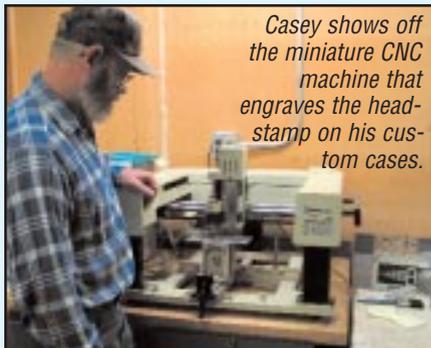
Owner Dave Casey was kind enough to show me around the small shop. For someone who is used to seeing brass made at the big ammo companies, this is very different. The centerpiece of the shop is a large CNC lathe. All RMC cases are turned from brass rod. Much of the space is taken up by a material rack full of long brass rods of different sizes. The lathe has a material feed mechanism and will turn out cases as long as it has rod to feed. The secret, of course, is the extensive library of CNC programming that makes everything run.

But from that point on, almost everything else is manual. Each case is chucked up in a standard lathe where the primer pocket and flash hole are drilled. The case is then washed and sized in a press just like you and I have. The other neat piece of gear is a computer-controlled engraving machine that

does the headstamps. This is a great feature. Casey can change the headstamp at any time to make personalized brass. If I want "Charlie's .45-90," it's easily done at no extra charge. Casey pointed out a very practical value for this service as well: It makes for easy identification of brass at matches and such.

The final step is to anneal the neck. This is done just as you and I would with a propane torch, although Casey's is a bit fancier. There are two burner heads that are fed from a propane tank just like we see on gas grills. The case is held in the flame until it just turns red and is then dropped into a pan of water to quench it.

As I watched the manufacture of the cases, I was impressed with the speed of the CNC lathe and the finish of the cases that came from it. The lathe operates unattended, and it takes a minute or two for each cycle, but the cases look almost as if they have been polished. Of course brass is easy to machine, but the tooling is first-rate. The list of cases available is much too long to list here, but if you're interested in an obsolete American cartridge, the chances are good that Rocky Mountain Cartridge will have it or can make it.

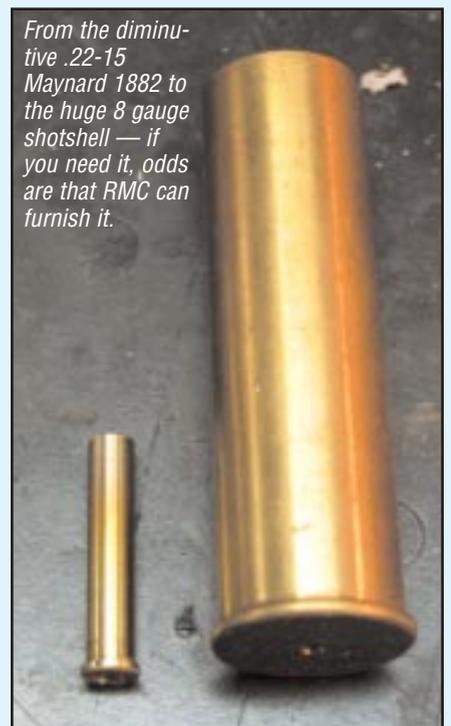


*Casey shows off the miniature CNC machine that engraves the headstamp on his custom cases.*



*Dave Casey and Charles Petty examine the CNC lathe that is used to produce the various RMC cartridge cases.*

*From the diminutive .22-15 Maynard 1882 to the huge 8 gauge shotshell — if you need it, odds are that RMC can furnish it.*



### FOR MORE INFORMATION:

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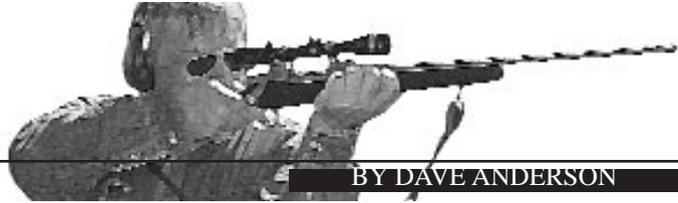
And like the HK Mark 23, all USP models are available in hard-hitting .45 ACP, the caliber preferred by American shooters.

All USP pistols use a control-lever as a combination safety and decocking lever, and can be converted to any of nine trigger firing modes for left- or right-handed shooters.

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# An Ode To The Classic .222 Remington Cartridge

**T**he 2001 Remington catalogue lists the .222 Remington cartridge as being available in the 700 BDL with a 24-inch barrel. A call to Remington, though, indicated that it has “temporarily” stopped chambering rifles for the .222 Rem. Frankly, I suspect the halt will prove permanent. Some gunmakers still list .222 rifles as being available — but try and find one. For old timers this is a bit shocking. For nearly a quarter-century after its appearance in 1950, the .222 was one of the most popular and influential cartridges. It set new standards for accuracy and greatly enhanced the growth of varmint hunting as a sport. We can’t let the .222 Rem fade away without a nod of respect.

The .222 Rem was the right cartridge at the right time. In the American post-World War II era, there was a growing interest in hunting and shooting. At the same time, hunting opportunities were not as available as they are today. Whitetail deer were still relatively rare in many areas. Populations of game such as sheep and grizzly were greater, but few hunters had the means and time to hunt them. And people who had hunted Africa were about as common as astronauts are today.

But people wanted to hunt. What was available were groundhogs, prairie dogs, rockchucks, crows, magpies — creatures then considered pests, vermin, which came to be known as “varmints.” Of the .22 centerfires available immediately following World War II, the .22 Hornet was a bit on the mild side, the .220 Swift had (unfairly) been criticized for short barrel life and for being tricky to reload, and the .218 Bee and .219 Zipper were available in lever-action rifles that were difficult to scope.

The second influence was the increasing interest in accuracy and benchrest competition. In 1944, a Seattle-based group of shooting enthusiasts formed the Puget Sound Snipers Congress, with matches at 100 and 200 yards from the bench. On the east coast, an informal accuracy match in Maine was followed by the now-legendary

Johnstown, N.Y., match over the Labor Day weekend, 1947, at which benchrest as a formal shooting sport began.

## Development Of The .222 Remington

Military historians say that “victory has a thousand fathers, defeat is an orphan.” It’s the same with cartridges. No one claims responsibility for the .225 Win or the 5mm Rem Mag. But with successful cartridges, people line up to bashfully admit that, gosh, it was my idea first.

Mike Walker of Remington, one of the pioneers of benchrest competition, was most responsible for designing the .222. He had been working on a .22 varmint round inbetween the .22 Hornet and .220 Swift. Walker experimented first with .25 Rem brass, then .30 Carbine cases. As a Remington employee, he had an advantage most wildcatters lack. He wasn’t limited to modifying an existing case. He simply had Remington make up a new rimless case with the capacity he wanted.

Warren Page, shooting editor of *Field & Stream*, was also a benchrest pioneer and a close friend of Walker. He and Walker found that the first .222 loads (48-grain at 3,135) had bullets a bit too stiff for good expansion. Page recommended upping bullet weight to 50-grain, velocity to 3,200 fps, and making bullets with thinner jackets. The resulting load proved highly effective. Remington began chambering its model 722 for the new round in 1950.

The Remington 722 wasn’t fancy, but it was moderately priced, extremely strong, very accurate, and had an excellent trigger. The rifle and cartridge were just what the market wanted. Varmint hunters and benchrest shooters alike appreciated the .222’s fine accuracy, mild report and light recoil. Among benchrest competitors, the .222 was virtually the standard cartridge for more than a decade while experimenters unlocked many of the secrets of rifle accuracy.

## Nothing Lasts Forever

Even while the U.S. military was standardizing the 7.62mm M-14 service rifle, experiments with lighter calibers were ongoing. Reducing recoil to improve controllability in full-auto fire and increasing the soldier’s basic ammo load were the factors that motivated the search for a smaller cartridge. The .222 was tested, but the ballisticians wanted a bit more bullet weight and velocity.

The cartridge that Remington offered in commercial form as the .222 Remington Magnum (1958) was tried, followed by a slightly smaller version that the military

standardized as the 5.56mm M193 round in 1964. Remington offered it as a commercial cartridge called the .223 Remington in January 1964.

The .222 continued its dominance as a varmint cartridge and as a popular benchrest cartridge for about another decade. In the early ’70s, the Vietnam War ended, and tons of low-priced, good-quality military surplus 5.56mm ammunition became available. About the same time, Dr. Louis Palmisano and Ferris Pindell were developing the “short, fat” cartridge concept into the .22 PPC that would eclipse the .222 as a competitive benchrest cartridge.

Name recognition kept .222 sales steady for a few more years, but the .223’s huge advantages of cheap surplus ammunition and brass, plus its somewhat superior ballistics, made it unstoppable. Riflemakers began dropping the .222 from their lineup. Today if you want a .222, it will have to be specially ordered, custom-built, or bought in used condition.

## The .222 Remington Today

Current factory ballistics for the .222 show a 50-grain bullet at 3,140 fps, almost exactly what Walker first developed 50 years ago. The .223 Rem is listed with a 55-grain bullet at 3,240 fps. Sentiment aside, if forced to choose, I’d take the .223 every time. It’s just as accurate, it provides somewhat better ballistics, and the choice of ammunition and rifles is excellent. A .222 Rem revival just isn’t going to happen.

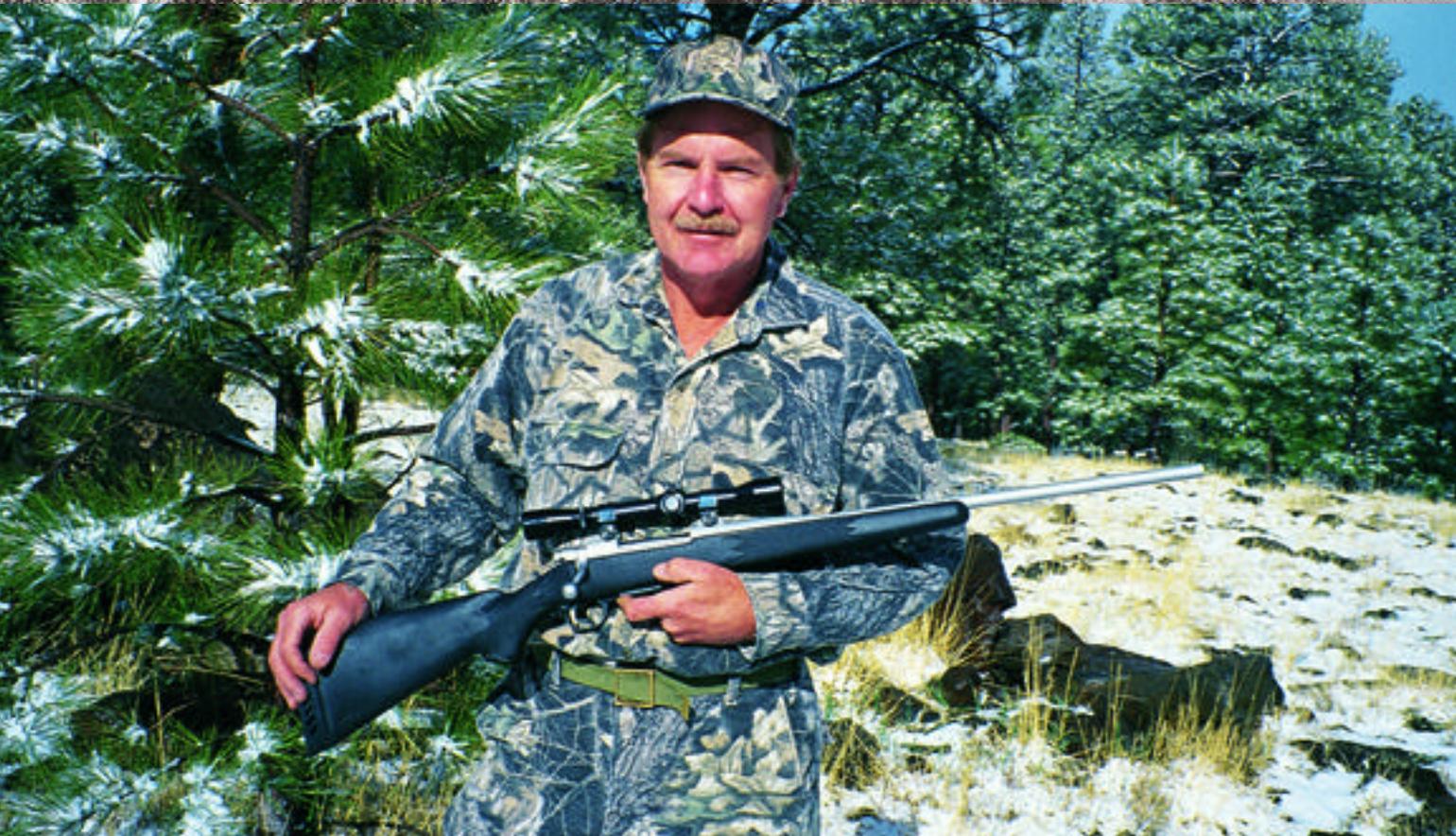
Still, with hundreds of thousands of .222 rifles in existence, the cartridge isn’t about to go away. Loaded ammunition will remain available for many decades. The most recent list of RCBS reloading die sales shows the .222 in 18th place among rifle cartridges, ahead of such numbers as the 7mm STW, .280 Rem, .220 Swift and 6mm Rem. Evidently shooters are buying up those used .222s and keeping them fed.

IMR-4198 and H-4198 have long been classic .222 powders, as has BL-C(2). Other good choices include Reloder 7, H-322, H-335, Accurate Arms 2230 and 2460, Viht 132, Norma N-200, N-201, and W-W 748.

For many years in my old Sako Vixen .222, I loaded thin-jacketed 50-grain Sierra Blitz or Hornady SX bullets to about 3,050 fps. This is still a good load — relatively quiet, easy on barrels, and good expansion. 40-grain Hornady V-Max and Nosler Ballistic Tip bullets are a fine alternative. At 3,400 fps in my Sako, they are very accurate and shoot a bit flatter than the 50-grain load.

Logically, the .223 is a better cartridge, but logic isn’t the only factor. My trim little Sako Vixen and the classic Triple Deuce have been favorites for 30 years, and I expect they will remain so for another 30.





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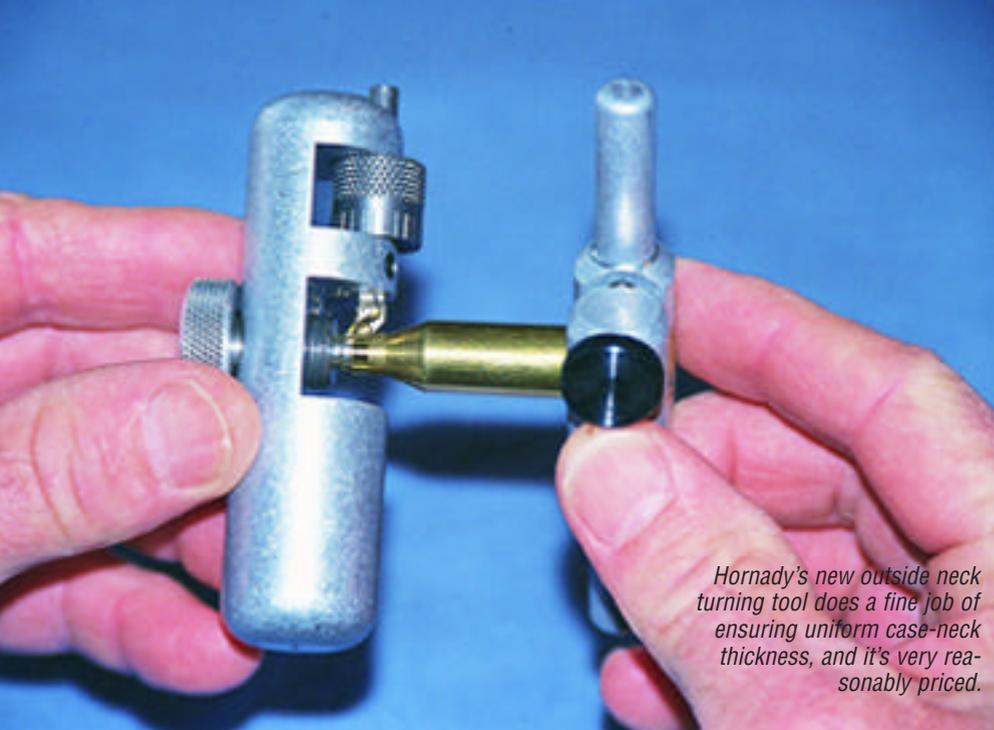
By Holt Bodinson

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**T**he big-game hunt of a lifetime often comes down to a single shot, and when you consider that the hunt may cost as much as a luxury car these days, it's just good sense to lavish as much care as possible when assembling a hunting handload. Quality ammunition is one variable of the hunt that we have total control over. The loading process may require more time and the use of a few more tools and gauges, but at least you'll be going afield with utter confidence in the products of your labor — the finest hunting ammunition in the world.

The overall objective of producing a premium hunting handload is to minimize variables from one round to the next. We're looking for low shot-to-shot variations in velocity coupled with sub-MOA accuracy with premium bullets so that trajectories and impacts out at 300 to 400 yards are consistent and predictable.

Here's what it takes.



*Hornady's new outside neck turning tool does a fine job of ensuring uniform case-neck thickness, and it's very reasonably priced.*



*A precision seating die with micrometer adjustment such as this one from Bonanza, will permit you to fine tune your seating depth for maximum accuracy.*

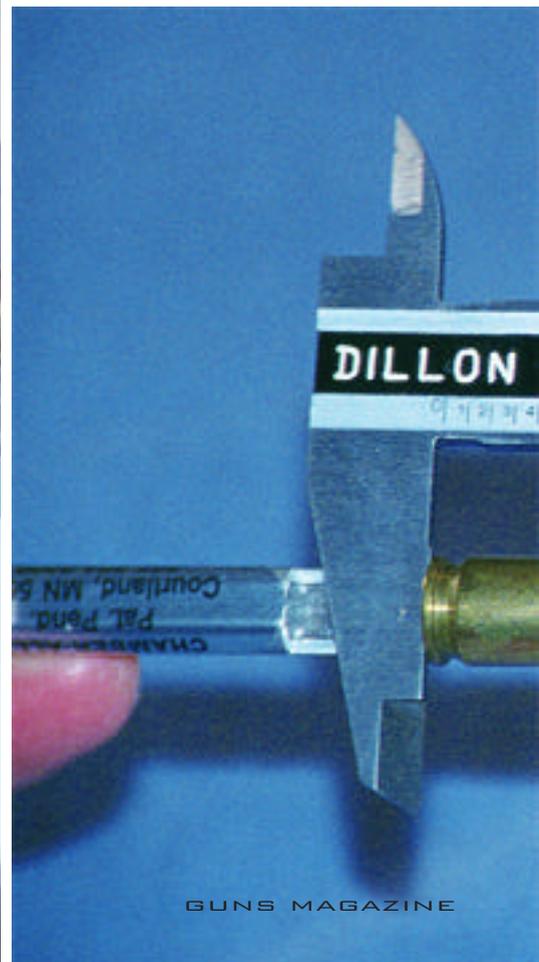
## Fresh Components

Handloaders tend to squirrel away and accumulate a lot of components that either age gracefully or tend to tick over and deteriorate quickly. Unless you buy 8-pound caddies of powder, I recommend starting out with fresh powder, fresh primers, new brass, and even the latest batch of premium bullets. Why new bullets? Quality control simply gets better every year in the bullet business. When compared to the overall expense of a big-game hunt, the cost of buying fresh components is simply insignificant.

## Powder

Big-game hunting is associated with temperature extremes. You may be hunting at 120 degrees Fahrenheit in Zambia or at -30 degrees Fahrenheit in the Arctic. Stick or extruded powders have tended to be less temperature-sensitive than ball powders, especially at lower temperatures. Hodgdon, for example, has even advertised the lack of temperature sensitivity in its new Extreme series of extruded powders. If you'll be hunting at either end of the thermometer, it would be prudent to select an extruded powder that also provides a high degree of loading density in your case.

And when preparing match-grade hunting ammunition, make sure and weigh each charge to the nearest tenth of a grain. We're only going to be loading perhaps 20 to 60 such cartridges each season, and being spot-on with the powder charge is just another variable we've licked.



## Primers

Primers are still made by hand, and manufacturers have found that certain employees excel in making consistently uniform batches of primers. As a result, these primer lots are segregated and marketed as “match grade” primers by Federal and CCI. I recommend using match-grade primers for the purpose of minimizing, as much as possible, variables from one shot to the next. And just as a precaution, be sure and check each primer to ensure it has an anvil in place. I’ve never found a case of the “missing anvil,” but I’ve heard tall tales of such.

Primer pockets deserve some attention. In most brass, the bottom of the pocket has a slight radius, and the depth of the pocket may not be uniform from one case to the next. I recommend Sinclair’s one-piece tungsten carbide primer pocket uniformers that can be either turned by hand or a power screwdriver. They cut the pocket to a uniform SAAMI depth, square the bottom of the pocket with relation to the head of the case, and can never get out of adjustment.

Flash holes, too, need a bit of work because the process that punches them through throws up a burr within the case. Removing that burr ensures that the primer flame passing through the flash hole is evenly distributed to the powder charge. Uniform ignition is further assured, and vertical dispersion caused by ignition variances is minimized. I recommend the universal caliber flash hole reamers marketed by Sinclair and Hart rather than incurring the expense of caliber-specific types.

Primer seating should be carried out with a separate tool that permits you to feel the primer bottom when it is fully seated. Two tools that I’ve found that have a nice “feel” to them are the RCBS bench-mounted Automatic Priming Tool and the hand-held Lee Auto-Prime. Whatever system you use, it’s important to seat the primer fully without crushing it so that the ignition process is uniform.

## Bullets

Bullets are the most expensive component in our match-grade hunting ammo. Don’t get cheap. It’s the projectile that gets the job done. The problem for many handloaders is that the selection of premium hunting bullets available today is simply staggering.

My thought is to pick a bullet that will not fail to penetrate and that is designed to hold together regardless of how good or bad the shot placement might be. That means a bullet that is mechanically held together like the Nosler Partition, monolithic like the Barnes X, or bonded like the Swift. I have been shooting Nosler Partition bullets for decades, and they have never failed me. I’ve also used Swift’s A-Frame, Barnes’ X-Bullet, Winchester’s Fail Safe, Speer’s Grand Slam, Federal’s Trophy Bonded, Woodleigh’s Weldcore and Northern Precision’s Bonded Core. Frankly, they all work. Selection really becomes a question of what bullets are readily available and which prove to be most accurate in your rifle.

## Brass

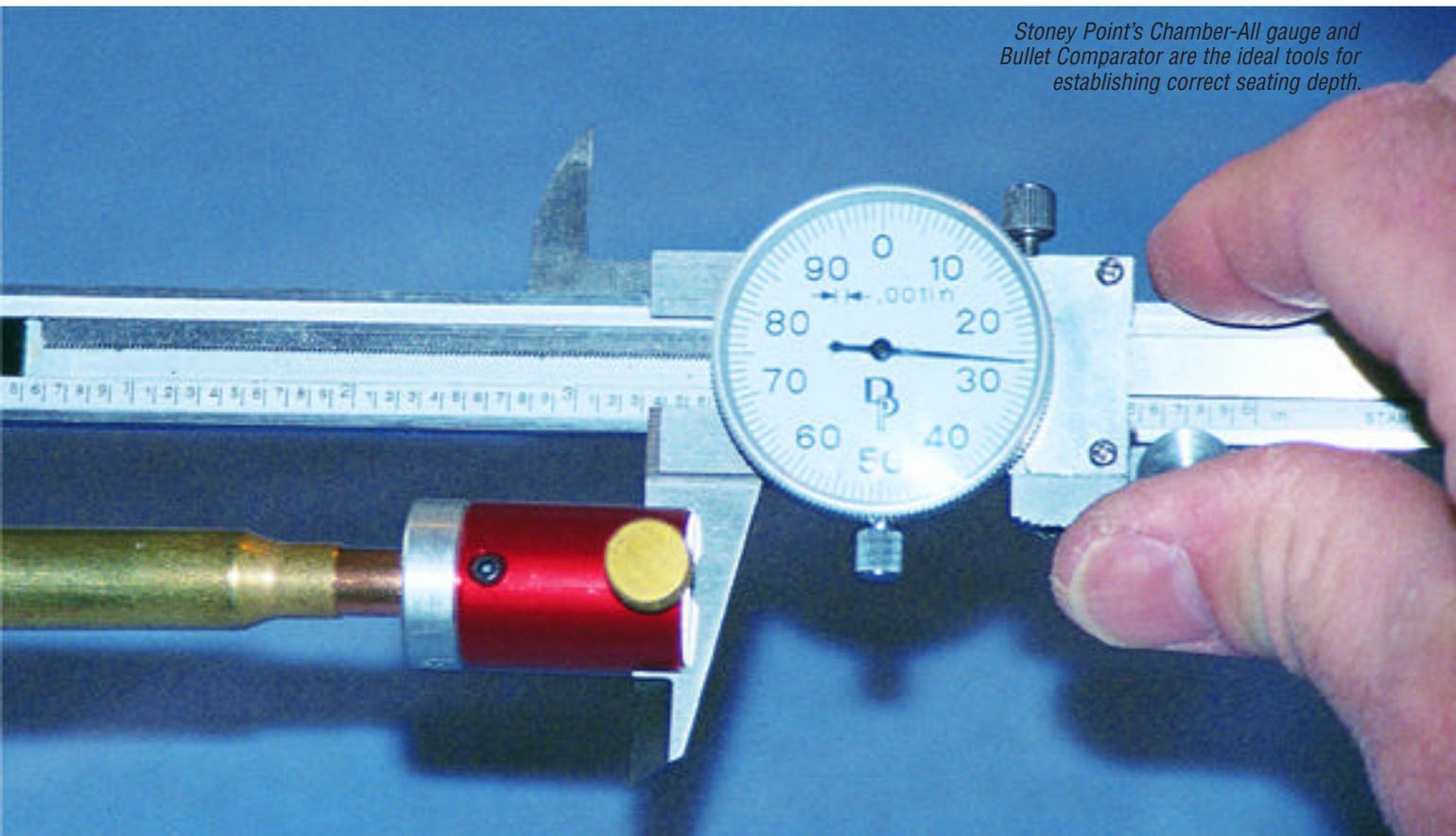
Norma and Lapua are producing some of the most precisely manufactured and finished bulk brass now available. It’s pretty and expensive, but I find that bulk brass available from Winchester and Remington, usually in stock at your local gun store, is just as good once it has gone through some minor preparation.

Buy at least 100 cases with the same lot number and do a case-by-case examination for visible production flaws. Do any case shoulders exhibit creases? Throw them away. Are any necks badly dented? Either chuck them or set them aside for plinking loads. Does each case have a flash hole? Remember, bulk brass has not gone through a final factory inspection process that would cull out these misfits.

You can weigh your brass on an electric scale and sort it out into batches with uniform case capacities. I do this with smaller capacity cases like the .308. I don’t follow the regime religiously with bigger cases, but I should. It permits you to sort out cases that fall at both extremes of weight and utilize the more uniform cases that tend to group up nicely between the extremes.

At this stage, you’ve reamed the primer pocket and the flash hole. The next step is to completely full-length resize the brass. This step is absolutely essential for two reasons. It establishes a uniform headspace dimension (you would be amazed of the headspace variances in bulk brass), and it straightens out and squares the case neck with the body.

And while we’re on the subject of



*Stoney Point's Chamber-All gauge and Bullet Comparator are the ideal tools for establishing correct seating depth.*

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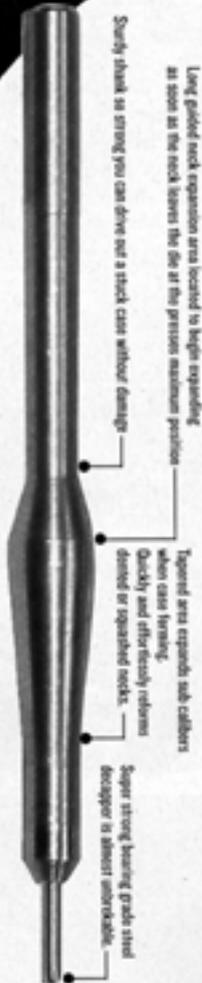
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headspace, I highly recommend the use of the Stoney Point Headspace Gauge Tool or a RCBS Precision Mic to measure some fired brass from your rifle for the purpose of adjusting your full-length resizing dies. Without a gauge, you are completely in the dark when it comes to matching the headspace of your resized cases to your rifle's unique chamber. For hunting ammunition, I would suggest adjusting the full length sizing die so that it sets the shoulder of your new brass back .005 inch from the headspace measurement of your fired brass.

Bulk brass also varies in overall length, so the next step is to run every case through a trimmer set to the proper trim-to length of the caliber to eliminate any long necks.

Chamfering and deburring the case mouth is routine and is hastened if you have an RCBS Case Prep Center, the RCBS 3-Way Cutter in your trimmer, or a power screwdriver case prep set from Lyman. By hand, I find that the Lee chamfering tool combined with Lyman's VLD deburring tool produce a neat, professional job.

Finally, you can outside neck turn the brass if the lot indicates a severe lack of uniformity when measured with a proper micrometer. The only two reasons I turn necks on hunting brass are if I have formed cases from another caliber or if I stumble into a tight-necked chamber. For example, I form the 7mm/.300 Weatherby wildcat by necking down .300 Weatherby brass and then neck turn. Hopefully, you won't run into a tight-necked chamber on a production big-game rifle, but I have a stock Ruger Model 77 in .243 Win that absolutely requires the brass to be neck-turned. The good news is that Hornady has just introduced a very inexpensive neck-turning tool that works perfectly.

### Assembling The Premium Hunting Load

The remaining variables are powder selection, powder charge, optimum overall length, and concentricity of the completed round.

Current loading manuals are a good place to start when selecting powder. Nosler's identification of the "most accurate" powder accompanied by loading density percentages is very helpful. Sierra's recommendations for the most accurate hunting load are invaluable. Older Lyman manuals listed "most accurate" loads, and the editorial comments in the current Accurate Arms, Hodgdon, Hornady and Speer manuals provide a wealth of powder selection information.

Once a beginning powder charge and bullet have been selected, it's essential that an optimum overall length for the cartridge is established for your chamber based on the distance the bullet ogive is set off the rifling. There are no finer tools for this job than Stoney Point's Chamber-

*continued on page 27*

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## HANDLOADING

continued from page 24

All OAL Gauge used in conjunction with its Bullet Comparator and a quality seating die with a micrometer adjustable head. Adjusting the amount of bullet jump in increments of .005 inch, and then shooting those loads for group size, will soon establish what the optimum OAL is for your handload in your rifle's chamber. The instructions accompanying the Stoney Point tools are simple and informative.

A final touch on hunting ammunition that may be exposed to extreme elements is a sealant applied to the rim of the primer and the juncture of the neck and bullet. It's tedious work and not recommended unless necessary. The Old Western Scrounger sells a good commercial sealant under the George & Roy label.

The ultimate test of the quality of your final product is to check it on a concentricity gauge. I use a RCBS Casemaster. It's simple, accurate, and it comes mounted with a dial indicator. It retails for about \$70. Placing the mid-point of the neck or the bullet under the dial indicator,

I spin every round of ammunition to check runout. We should be able to achieve a runout no larger than .004 inch. Excessive runout can be the product of many steps along the way, including the uniformity of the brass, the concentricity of the sizing and seating dies (Yes, there are bad dies out there!), and the reloading press itself. In short, a concentricity gauge is a useful diagnostic tool for identifying many problem areas in the reloading process, and it certainly is the litmus test for quality ammunition.

And finally, set the safety on your rifle, and with the muzzle pointing in a safe direction, carefully chamber every round to ensure that each and every round is perfectly formed. We don't want any surprises in the field!

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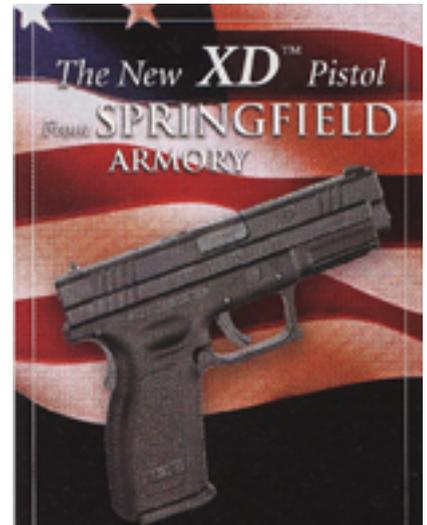
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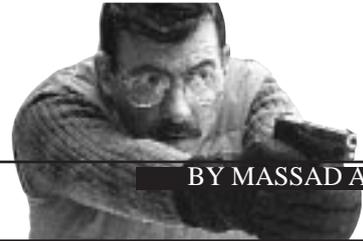
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## AIRPORT SECURITY, ET AL, POST 9/11

It was true what the pundits said.  
After the **9/11** attack, things changed.

It made us feel as our parents must have when they learned of Pearl Harbor. It changed a lot. It didn't "change everything," as some columnists said, but it changed a lot.

Editor Jim Gardner suggested I talk about airport security in this space. As you might imagine, that has changed, too.

In some airports, delays of more than 2 hours have become the norm to allow for all baggage to be hand-inspected. Personally, I'm budgeting 3 hours or more. When you have a name like mine, the eyeballs of airline personnel sort of bulge when they read the ticket. "Sir, you have been selected for..." "Yeah, I know, 'random additional security check.'" My own definition of "random" has had to be revised of late.

I fly with guns. It's part of my job. I check them at the counter in full compliance with Federal Air Regulation 108.11, as I have for lo, these many years. That hasn't changed. Not for me, even with the Arabic name, and not for you. At least, not as of this writing.

### In the Airport

Our enemies have promised that the "rain of airplanes" crashing down upon the innocent will continue. I'll take them at their word. As a Frequent Flier, I'm not upset to see more security at the airports.

I would actually be thrilled to see *good* security at some airports.

It pleased me to see New Jersey State Troopers out in force at the Newark airport. I've worked with some of these people in training. They're sharp. While some of their top commanders in the past have needed an attitude adjustment about Constitutional law, the rank and file are great individuals and highly competent, and I'm delighted to have more of them in place where there could be trouble.

The National Guardsmen are a comforting presence at the airports, and I've told several of them that to their faces. They would be an even more comforting presence, however, if all of them had ammunition in their guns. There is reason to believe that many do not. Those who do have hot NATO hardball in their 9mm Berettas. If they have the deep penetrating SS-109 rounds in their M-16A2s,

you do not want to be anywhere near them if they have to fire, because those things *will* go through and through the next Mohammed Atta with enough power to kill you and your kids on the other side of the body.

The Judge Advocate General's Office has long since done the study of the law — national and international, statute and treaty and caselaw alike — and determined that the Geneva Convention/Hague Accords rule on no



expanding bullets is limited to declared warfare in an international theater. Counter-terrorist activities by the U.S. military are clearly exempt. *Please*, let's issue some 9mm hollowpoint and some expanding-bullet .223 ammo to those fine members of the National Guard who have been assigned to airport details....

### Return of the Sky Marshals

The Sky Marshal thing worked when we instituted it decades ago. It worked so well as a deterrent that complacency developed, and by 9/11/01 there were only about two dozen of them in action, all on international flights, none placed where they could have prevented the horror of that day. There are some 67,000 applications in already for perhaps 1,000 immediately-open jobs. Regs were recently relaxed to allow retired cops who don't "fit a profile" that terrorists can spot. The sooner we follow the Israeli model and have a couple of armed, unidentifiable counter-terrorist personnel on every flight, the better.

By the way, the "Sky Marshal Gun" is the SIG P-229 in caliber .357 SIG, firing an ordinary jacketed hollowpoint 125-grain bullet, travelling a bit faster than 1,350 fps. The old "Goldfinger" thing about a bullet through a jetliner's window at altitude sucking everyone out of the plane is just the bunk. Ask any professional pilot, for Heaven's sake.

### Arming Pilots

I'm for it. The pilots are for it. Commercial airline pilots in the United States were routinely armed for decades with no problems and the occasional saving of life. Thanks to Senator Bob Smith (R/NH), it looks like it might actually happen. There is reason to believe that Israel, Russia, and perhaps other countries have already armed their pilots.

There can be no genuine, sincere doubt that armed pilots would have had the best chance to forestall the horrors of September 11.

### Arming Passengers

Gotta tread easy here. Sky Marshals, the logical role model, are among the most highly trained law-enforcement officers in America with firearms. We're talking a draw to the shot from concealment, with a hit in the central nervous system area of the target, in well under a second and a half to pass just part of the qualification. One bozo wrote in a national magazine that anyone with a gun permit who signed a piece of paper that said they had read the rules of flying armed should have a gun on the plane. Do you buy into that? Do you want to be in the line of fire of some fat cat with a pistol he's never fired, but a carry permit he bought in a "discretionary" state with a well-placed political contribution? Neither do I. I'd rather take my chances against the next Atta and his box-cutter.

Give it time. First, two steps. Get pilots who volunteered for it to be trained and armed and put them in place. Just as quickly, *encourage* police officers who have already been certified to fly armed aboard commercial aircraft by the FAA to carry their guns when traveling even on non-official business. As of now, these certified cops are allowed to carry on-board only when on "official business that requires us to be armed aboard the aircraft or in the terminals." There are thousands of us already so certified, and "good to go." Put us on armed as part of the regular security process. Let these concepts prove to the doubters that they'll work. *Then* look into a system that would allow certain private citizens to qualify to fly armed aboard commercial aircraft after meeting stringent standards.

It's a war. The enemy's people are already in place in this country, sleeper agents waiting for the command to strike. We cannot drop our guard. There is so much more we can do to enhance airport security. Armed private citizens understand it better than the overwhelming majority of the political commentators.



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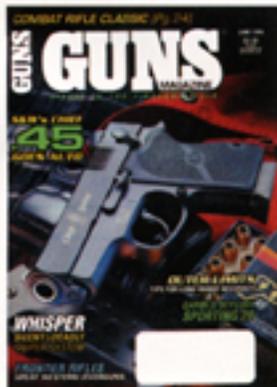
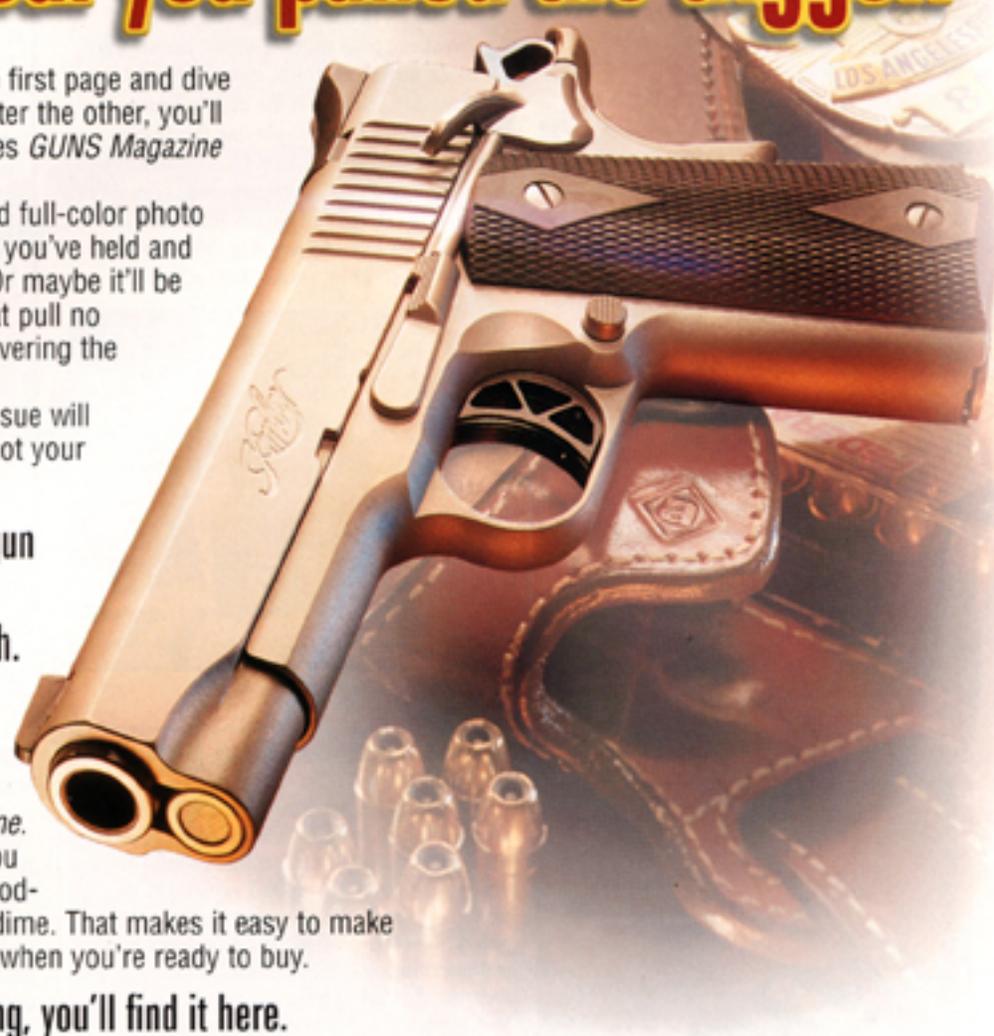
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440-C, Satin finished blade is 7 3/8" overall, 1 1/2" blade. Kit includes blade, pins and black Victra handle material.

SS444 Boot Blade only ..... 16.95  
SS444K Complete Kit ..... 18.95

**CUSTOM KITS**  
The kits below include stainless steel pre-shaped blade, brass rivets, tubing, guard and handle material and step-by-step instructions.

**WASHITA HUNTER**

SS463 Washita Blade only ..... 19.95  
SS463K Washita Kit ..... 27.95

**SIoux HUNTER**

7.5" overall with 3" blade  
SS458 Sioux Blade only ..... 17.50  
SS458K Complete Kit ..... 25.95

**CHEYENNE HUNTER**

9 1/8" overall with 4 1/2" blade  
SS496 Cheyenne Blade only ..... 18.75  
SS496K Complete Kit ..... 27.90

**KAW SKINNER**

7 1/2" overall with 3" blade  
SS782 Kaw Blade only ..... 15.82  
SS782K Complete Kit ..... 24.90

**NAVAJO SKINNER**

8 7/8" overall with 4 1/4" blade  
SS783 Navajo Blade only ..... 24.72  
SS783K Complete Kit ..... 32.20

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Standard Panarise with 360° rotation and 180° tilt. Perfect angle for any job 2 1/2" nylon jaws withstand heat to 200°F.

PV301 Standard Panarise ..... 32.25

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By Richard W. Barney and Robert W. Lovell  
BOK101 ..... 11.95

**HOW TO MAKE FOLDING KNIVES**  
A Step-by-Step How-To by Ron Lake, Frank Corfante and Wayne Clay  
BOK102 ..... 11.95

**CUSTOM KNIFEMAKING**  
By Tim McCright  
BOSCK ..... 13.95

**THE COMPLETE BLADESMITH**  
Forging Your Way to Perfection  
By Jim Hrisoulas  
BOP301 ..... 39.95

**KNIFE TALK**  
The Art & Science of Knifemaking  
By Ed Fowler  
BOK111 ..... 11.96

**THE WONDER OF KNIFEMAKING**  
By Wayne Goldard  
BOK114 ..... 15.95

**STEP-BY-STEP KNIFEMAKING**  
The complete guide to making knives.  
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BORSSK ..... 17.95

**KNIVES 2001**  
All new!  
By Joe Kertzman  
BOK107 ..... 17.50

**BALDOR**  
BUFFERS

CAT.#	H.P.	RPM	SHAFT DIA.
BL114	1/4	1600	1/2"
BL111	1/3	1600	1/2"
BL332B	3/4	1600	3/4"
BL333B	3/4	1600	3/4"

Call for current pricing!

**KNIFE SHARPENING KIT**

Dealers Inquire

Used by professionals for near clean edges on cutlery. One wheel for sharpening, another for cleaning and polishing, all compounds and instructions included. Includes bushings to fit 5/8" or 1/2" arbor.

WKS800 8" set ..... 19.95

**WHEEL & COMPOUND KIT**

Kit includes:  
Four 3/4" sewed muslin wheels, one 3/4" loose muslin wheel,  
one each grooveless brush-on cutting compound in grits 240, 320 and 400, one blinding bar, one bar of white rouge and a polishing guide.

Specify Arbor Size (1/2", 5/8", 3/4")

6" Kit ..... 59.95  
8" Kit ..... 79.95  
10" Kit ..... 99.95

**TRADITIONAL CUTLERY KIT**

11 pc. traditional style cutlery set includes pre-shaped surgical stainless blades shown above plus handle material, and rivets. Carving set and steak set also available.

SS801 11 pc. Traditional Set ..... 49.95  
SS807 \* Carving Set ..... 19.50  
SS803 \*\* Steak Set ..... 25.95

**ELECTRO-CHEM ETCHING**

Each your blades with the easy to use Personalizer Plus etching machine. Type name or draw a personal design on the special stencil material provided, then follow the easy to use instructions for professional results in seconds. Complete Kit contains everything you need to etch stainless, carbon steel and more.

EC302 Personalizer Plus ..... 179.95

**HIDDEN TANG KITS**  
440-C Stainless blades are about 10 1/4" overall, blades are 5 1/2". Kits supplied with blade, brass guard, threaded pomel and block of Dymondwood handle material.

**TEXAS BOWIE KIT**

The Texas Bowie Blade, (12 1/2" overall, 7" x 1 1/2" x 3/16" thick blade), brass guard and pomel and a pre-drilled dymondwood block for the handle.

SS494 Blade only ..... 27.95  
SS494B Kit complete ..... 39.95

**FRONTIER BOWIE**

SS914 Frontier Blade only ..... 13.95  
SS914K Frontier Kit ..... 27.95

**CAPE SKINNER**

SS911 Cape Blade only ..... 18.95  
SS911K Cape Kit ..... 32.95

**JANTZ SPECIALTY BLADES**  
Made from 440C Stainless Steel

**MONARCH**  
Overall length 7", blade 4 1/8"

SS262 Gut Hook Blade ..... 8.70

**TUNDRA**  
Overall length 7", blade 2 3/4"

SS260 Tundra Blade ..... 8.70

**KODIAK**  
Overall length 6 1/8", blade 2 1/2"

SS261 Kodiak Blade ..... 8.10

**THE SHARK**  
Overall length 5 1/2", blade length 2 7/8", 2 3/4"

SS176 Shark Blade ..... 8.95

**STAINLESS DINNERWARE**

440-C Stainless Kit includes:  
4 forks, 4 knives and 4 spoons, rivets and handle material. Great gift

SS500 ..... 64.96

**CORBY TYPE RIVETS AND DRILLS**

Precision machined of solid brass 5/16" heads slotted for easy installation. Use RD3 rivet drill for perfect countersinking and alignment.

CP601 Pkg 12 Rivets ..... 12.12  
RD3 Rivet Drill ..... 19.95

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# SAKO'S SNIPER:

## The TRG-22 Precision Rifle

Sako, a name well respected by sporting riflemen, is set to capture the precision rifle market.



The Sako's bipod is both rugged and well thought out. It is easily installed or removed from the rifle.



**Story By David M. Fortier**  
**Photography By Emily K. Fortier**

**T**here was a time not so long ago when military snipers had to make due with slightly modified service rifles. These "sniper rifles" had their start by being selected from their brethren for displaying superior accuracy. This was usually done during preliminary testing at the factory. Rifles that shot particularly well, say five rounds into less than 1¼ inches, would be set aside. They would then be modified by the addition of mounts and optics to become sniper rifles. Some countries went to great lengths, such as the British, which built its No. 4 MK 1 (T) sniper rifles. Others, such as Russia at the height of World War II, simply mounted optics onto rifles already known to shoot well. Yet the end result was basically the same: a superior shooting standard issue combat rifle.

While robust and often surprisingly accurate, most of these sniper rifles had serious shortcomings for true sniper

**TRG-22 ACCURACY AND VELOCITY CHART**

**Black Hills 175-grain Match**

Vel 2,603      100 yd .50"      300 yd 1.25"

**PMC 168-grain Match**

Vel 2,469      100 yd .65"      300 yd 1.38"

**S&B 168-grain Match**

Vel 2574      100 yd .47"      300 yd 1.25"

**Winchester 168-grain Match**

Vel 2,600      100 yd .57"      300 yd 1.5"

**Radway Green 147-grain Ball**

Vel 2,780      100 yd 1.5"      300 yd 4.0"

*Groups are an average of four five-shot groups fired prone from the bipod. Velocity readings were taken 12 feet from the muzzle with an Oehler 35P chronograph.*

**TRG-22 SPECIFICATIONS**

<b>Operation</b>	Manual Turnbolt w/60 degree lift, 3/8" throw
<b>Caliber</b>	.308 Winchester
<b>Length</b>	45.25 inches
<b>Weight</b>	10.36 pounds (without optics)
<b>Barrel</b>	26 inches, 4 grooves RH Twist 1:11
<b>Feed</b>	10 round detachable box magazine
<b>Manufacturer</b>	Sako Ltd. — Riihimaki, Finland



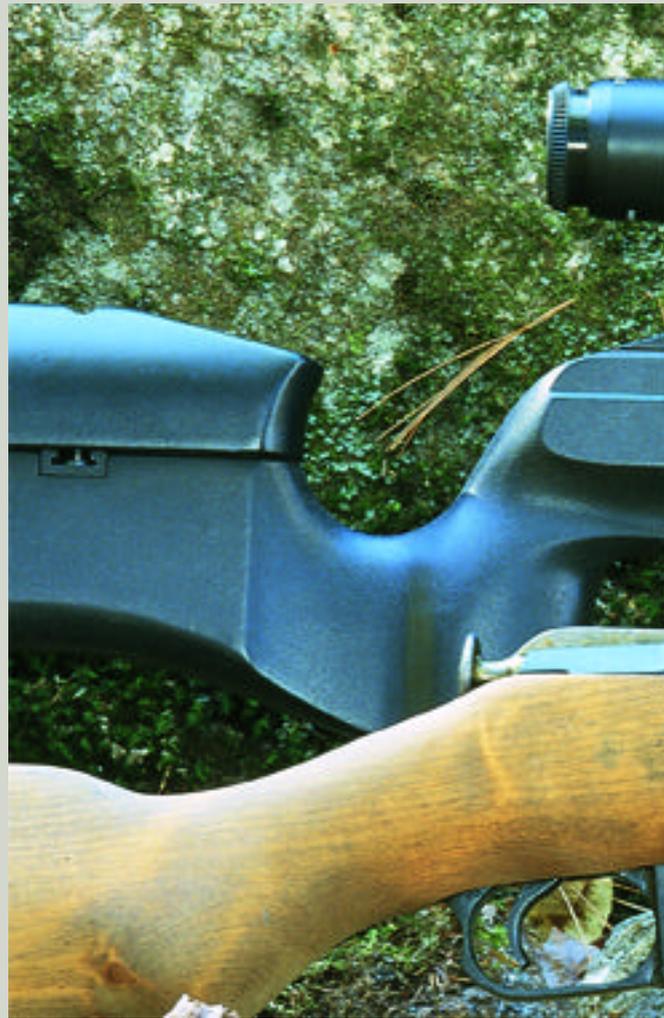
*The well designed stock of the Sako and reasonable 10.5 pound weight makes shooting from alternate positions a snap.*



*Close-up of the TRG-22's quick release scope mount. Also note the Allison Tool Pathfinder mounted on the I.O.R. Tactical scope.*



*This view shows several details of construction. Note the adjustable trigger, Garand-type safety, location of magazine release and grasping stud on the rear corner of the magazine.*



work. Most problems could be traced to the simple fact that they had originally been designed to serve as combat rifles. While they could be tweaked, their designs didn't lend them for use as a dedicated sniper's weapon.

### Genesis of Sako

One company that recognized this was Sako of Finland. So when Finland's military began trying to modify Tsarist-era Mosin-Nagant actions into modern sniper rifles in the 1980s, Sako felt it was a dead-end street. The designers at Sako were well-aware of the strengths and weaknesses of the Russian Mosin-Nagant action. After all, the company's origins reached back to 1919 when a government-owned repair shop was established for the Civil Guard in an old brewery in Helsinki. It was here, repairing M1891 Mosin-Nagant rifles, that Sako was born. As the years passed, the company grew, and eventually the arsenal was moved north of the capital to Riihimäki in 1927. That same year, it became a limited liability company under the name "Suojeluskuntain Ase- ja Konepaja Osakeyhtiö" (Civil Guard Arms & Machine-shop Co. Ltd.), better known simply as SAKO (pronounced sock-O). SAKO produced

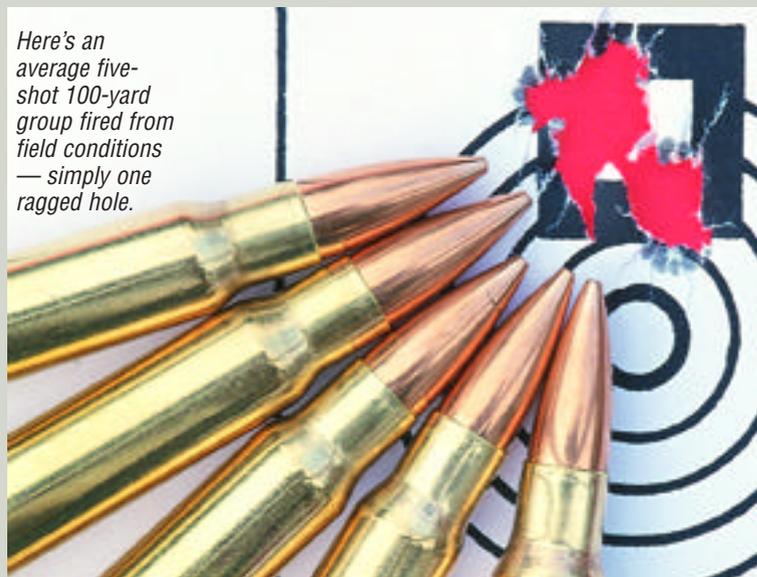
rifles for the Finish Army during the Winter War of 1939-1940 and the Continuation War of 1941-1944 with the Soviet Union. As a result, the company learned quite a bit about the needs of snipers.

Sako's engineers knew that simply adding a heavy match barrel, synthetic pistol grip stock with adjustable comb, bipod, silencer, and modern optics to a Mosin wouldn't turn it into a world-class sniper rifle. The engineers knew that the action was the heart of any rifle and felt that they could do much better. This desire to build the best led to the creation of one of the finest sniper rifles ever fielded, the Sako TRG-21. I fell in love with the TRG-21, a truly fine rifle, the first time I had an opportunity to use and train with one. At the time, I didn't think it could get any better. However, I'm glad to say that I was wrong, and Sako has improved and upgraded the rifle to become the new TRG-22.

### Setting New Standards

Like many current European sniper rifles, the TRG-22 is based on a successful target rifle. Sako used its TR-6 target rifle as the foundation for the .308 TRG-22. To enhance accuracy, the rifle's receiver is a massive cold hammer-forged unit enclosed on top with an ejection port on the right side. It features an integral 17mm dovetail rail that facilitates the mounting of optics or target sights. Inside the receiver rides a "resistance free" bolt that features three symmetrical lugs with a total locking surface of 75mm. The bolt sports a large claw extractor and a conventional-style spring-loaded ejector. It's easily manipulated via an oversized Tactical bolt handle and features a short 60-degree throw.

Mated to the receiver is a free-floating, cold hammer-



*Here's an average five-shot 100-yard group fired from field conditions — simply one ragged hole.*



forged match barrel. Length is 26 inches with four grooves and a right hand twist of 1:11. The muzzle is threaded to allow mounting an iron front sight and/or muzzlebrake. In addition, a suppressor can be mounted, and the rifling twist of 1:11 was utilized specifically for best accuracy with subsonic ammunition. Being able to easily affix a suppressor to the weapon increases both the weapon's usefulness and a sniper's survivability on the modern battlefield.

The receiver is mated via three screws to an aluminum alloy bedding block. Encompassing the bedding block is an ergonomic injection-molded polyurethane two-piece stock. The stock design belies its target rifle heritage and can be used as a sniper rifle, UIT standard rifle, or CISM Military rapid fire rifle. While very different from the stock on a U.S. M24 or M40A1 sniper rifle, it nonetheless is well thought-out and comfortable. The forend is wide and slightly beavertailed, with an accessory rail, yet it's not blocky like that of the Accuracy International AWP, and it carries well. The butt features a prominent pistolgrip, angled for a comfortable hold.

To ensure a perfect fit, the rifle's stock is fully adjustable. The shooter can adjust not only for length-of-pull, but also the buttplate's height and pitch. Similarly, the comb can be adjusted for both height and pitch. One thing that I like about the Sako system is that to make adjustments, spacers are added or removed to facilitate adjustments. While not as quick as a thumbwheel system, once adjusted, it stays put. And let's be honest, once you've set the rifle up to fit, that's where you want it to stay. I personally prefer this type of system over one that can come out of adjustment simply by being dragged around while on a stalk. In addition, these adjustments allow the rifle to be tailored to fit the individual rifleman, whether right- or left-handed.

The rifle feeds from a detachable 10-round magazine. Simple looking, it features central feed for reliability. Cartridges load easily into the magazines, and the mags insert and eject smoothly from the weapon. Best of all, cartridges feed effortlessly. What more could you ask for? The magazine release is a simple protected lever located in front of the trigger guard. If for some reason the mag doesn't eject completely, a stud is located on each side of the unit allowing it to be quickly pulled free. This is easily the best detachable magazine system I have ever seen on a bolt-action rifle.

The trigger on the TRG-22 is not only excellent, but it also has a very flexible design. It's a two-stage affair and is adjustable to give a pull weight of 2 to 4 pounds. However, it

*continued on page 69*

*The TRG-22's stock is fully adjustable for length of pull, buttplate pitch and height as well as comb height and pitch.*





# Handloading on A BUDGET

***For most of us, shooting as much as we would like means taking up reloading. Let Taffin give you a look at how to get started.***



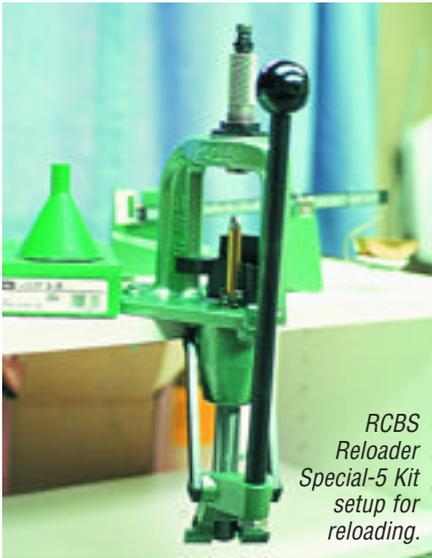
*Looking at Taffin's loading bench today, you would find it hard to believe that he started with a Lyman #310 tool. Nearly 50 years separate this well used Lyman #310 Nutcracker Tool from the brand-new version setup for .45 ACP.*

## By John Taffin

One of life's greatest shooting pleasures is shooting factory loads through a Colt Single Action Army .45 Colt. In my case, it was one of the first of the Second Generation .45s, a 7½-inch version, to arrive at my local gunshop in early 1957. It was beautiful, and it was an expensive \$125, especially for one whose take-home pay was less than \$40 a week. I don't recall what the factory loads cost (in those days it was either Remington or Winchester), but I do remember realizing that I would need to start reloading if I wanted to shoot very much. But my, those factory loads were wonderful to shoot. Align the sights, carefully squeeze the trigger, and feel the gentle nudge in your hand as the 255-grain bullet made its way down the 7½-inch barrel and headed for the target.

Once that first box was empty (I rationed them out very sparingly), I ordered a Lyman #310 Tool for the .45 Colt. Along with the nutcracker tool from Lyman, I also ordered 100 primers, 1 pound of #5066, 100 bullets, and a Lyman #55 powder measure. The #310 Tool performed all the operations except full-length resizing, so I also ordered a full-

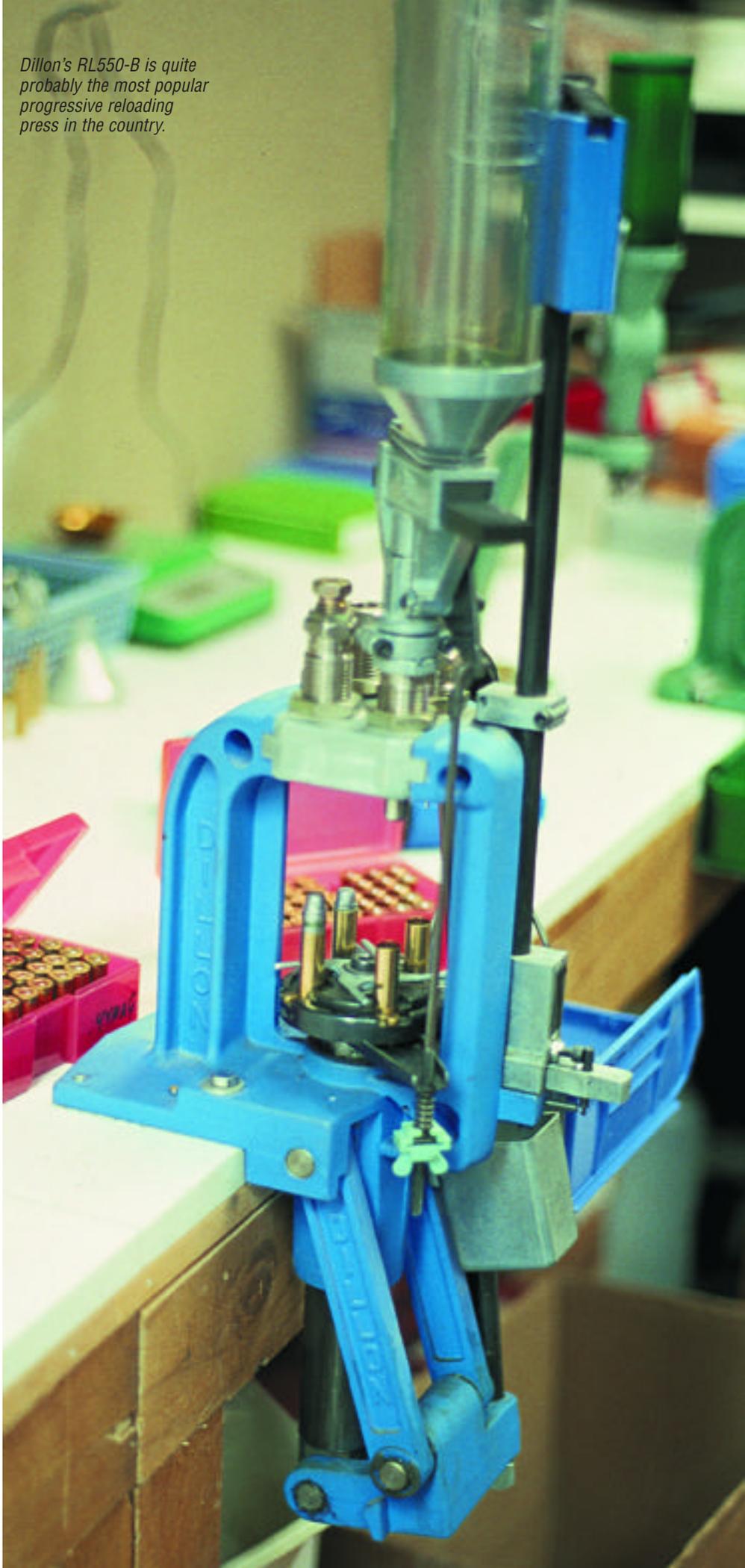
*Dillon's RL550-B is quite probably the most popular progressive reloading press in the country.*



*RCBS  
Reloader  
Special-5 Kit  
setup for  
reloading.*



*Midway's Portable Reloading  
Bench with both the Dillon  
AT500 and Square Deal  
presses mounted.*



length sizing die, even though I didn't have a press. Cases were hammered into the full-length sizing die and then tapped out with a wooden dowel. I was ready to reload.

## An Early Lesson

The #55 was set for the proper charge, cases were de-primed, belled, primed, charged with powder, and then the bullet seated and I was ready to go. Five of the big .45 Colt rounds were loaded into the cylinder of the Single Action Army, the hammer safely let down on the empty chamber, then eared back to full cock, sights aligned, and the trigger gently squeezed. I was definitely not prepared for what happened next. The grip frame of the Colt Single Action Army slammed back into my hand and then rolled downward until the barrel was pointing straight up. I knew something was wrong, but being a dumb teenager, I fired the second shot with the same results. Then the third, fourth and fifth shots! All of them felt the same. I was smart enough to know something was wrong but not smart enough to do the right thing, which should have been to pull the bullets and discard the loads. God certainly watches out for fools and sixgunners, especially when they are one in the same. I actually fired the remaining 45 rounds to get rid of them!

What had gone wrong? Obviously the loads were too warm. Fortunately, neither my new sixgun nor I were injured. I had used a powder measure and set it according to the chart provided. However, I did not have a powder scale with which to check it. Perhaps the chart was off. Perhaps I set it wrong. Perhaps. However, I really did learn a valuable lesson through all of this and that is:

**NEVER LOAD SMOKELESS POWDER WITHOUT CHECKING THE CHARGE WEIGHT WITH A POWDER SCALE.** Never! Never! Never! A powder scale is absolutely essential for safe reloading.

## Taking The Plunge

The world has changed drastically in the last 50 years, and that holds true also for reloading. We have an enormous variety of information, components, and definitely all levels of equipment available to us today. I will take an alphabetical look at what is offered by the various manufacturers, with the emphasis on entry-level kits that are kind to the wallet for those constrained by a monetary budget. There are other ways we can be "budgeted" also. I may be short on time and/or work space in addition to, or instead of, dollars. With that in mind, I will also briefly look at answers for those who may be hampered by these budget restraints.

**DILLON PRECISION INC.:** Even though scientists long ago proved that the shortest distance between two points is a straight line, Mike Dillon still goes around in circles. No single-stage or straight line presses are

found in the familiar blue finish of equipment from Dillon Precision. Every press — from the entry level AT500 to the highly sophisticated Super 1050 — is built on the principal of the circle. The AT500 is described by Dillon as an Advanced Turret press, and it is the only currently manufactured turret press that I know of in which the dies are stationary and the cartridge case rotates. The AT500 has a removable die plate with four stations. The universal shell holder actually is four shell holders that will accept more than 40 different cartridge cases. Only one of these stations may be used at a time, and the brass case itself is rotated to each die station in turn.

The AT500 can be upgraded to a RL550B progressive press in the future, which delivers one finished loaded round with each crank of the handle.

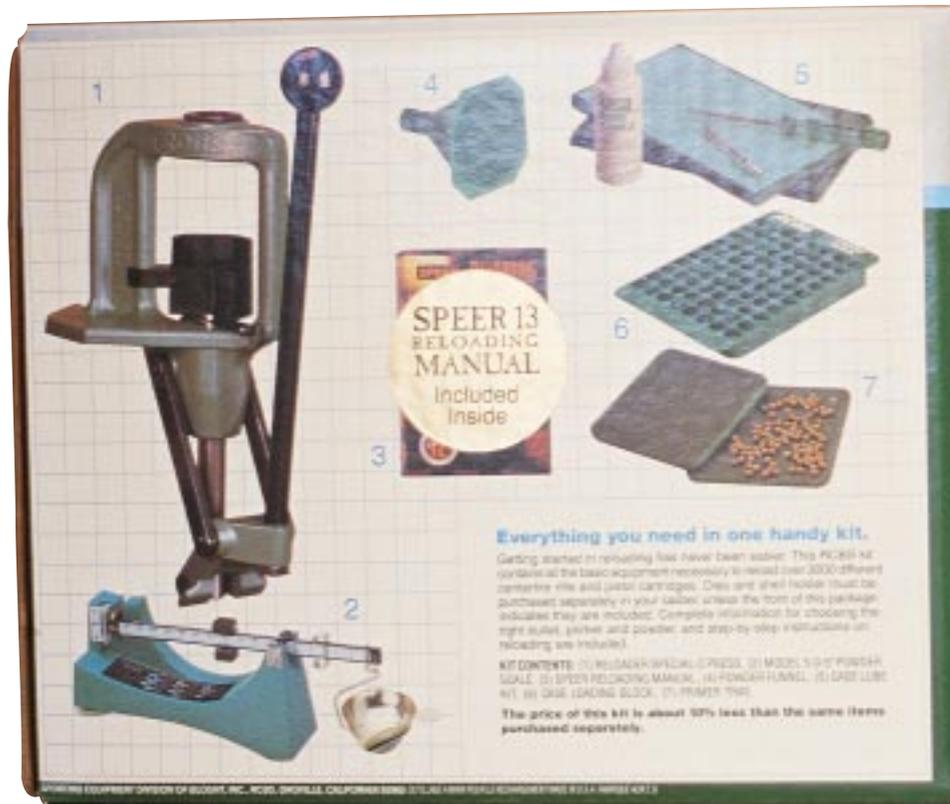
If you are primarily a handgunner, Dillon Precision's budget offering is the Square Deal "B." Unlike most progressive presses that require a great deal of setup time, the Square Deal comes complete with dies, adjusted and ready-to-use. Simply mount it to the bench, attach the handle, and mount the powder measure. Each crank of the handle turns out one loaded round. The Square Deal is available for practically any pistol cartridge, from the .32 Smith & Wesson Long to the .45 Colt.

If your budget is controlled more by the clock than the checkbook, Dillon Precision offers three sophisticated progressive presses: the already mentioned RL550B, which can yield up to 500 rounds per hour

(my output is closer to 400); the XL650, with automatic case feeding rated for 800 rounds per hour; and the appropriately named Super 1050, with a production rate of 1,200 rounds per hour.

The ideal situation is to have a press mounted securely to a sturdy loading bench. However, in real life things are not always ideal. If you are cramped for space due to small living quarters, there is an answer. Midway offers a Portable Reloading Bench. This is a three-piece affair with a circular base, a 27-inch tall center pole, and a removable top that is 9-inches square. I have mounted both of the Dillon entry-level presses on the Midway Portable Bench with the AT500 setup for .308 on one side, and the Square Deal for .45 ACP on the backside. I prefer that my bench be a little taller than this, so I do plan to replace the pole eventually with a longer piece of pipe. Even with both presses mounted, this whole affair is small enough to fit into the back corner of a closet when not being used.

**HORNADY MANUFACTURING:** Hornady's beginning reloading kit, the Lock-N-Load Classic, consists of the Lock-N-Load Classic single-stage press, three Lock-N-Load bushings (which allow dies to be easily changed without interfering with their adjustment by simply twisting them in or out of the press), primer catcher, priming system, automatic primer feed, Lock-N-Load powder measure, powder scale, two-volume reloading manual set, reloading block, primer turning plate, chamfering and



# RCBS

For the reloader just starting out, a package deal such as this Partner Press kit from RCBS can save money, time and frustration.

## PARTNER PRESS RELOADING KIT

Standard Kit Includes:

- PARTNER PRESS w/ PRIMER ARM
- RC-130 SCALE
- CASE LUBE KIT
- POWDER FUNNEL
- PRIMER TRAY
- DEBURRING TOOL
- CASE LOADING BLOCK
- SPEER RELOADING MANUAL
- COMPLETE INSTRUCTIONS



deburring tool, and a spray can of One Shot Case Lube — everything needed except dies, which must be ordered separately.

As the monetary budget expands, which normally happens for most of us, especially once the kids have grown and gone, Hornady offers a companion Lock-N-Load progressive press that allows a greater volume of reloads in a shorter period of time. Once I have everything ready to go, I can load anywhere from 350 to 400 rounds per hour with this Hornady offering.

**LEE PRECISION INC.:** The reloader on a budget has no two greater champions than John and Richard Lee. They have been offering inexpensive but highly usable reloading equipment for several decades now. The first progressive press I ever used was the Lee setup for .32 Magnum nearly 20 years ago. When I moved on to more sophisticated equipment, that press was passed on to another shooter, and as far as I know, it's still being used.

As we have mentioned, everything offered by Lee can be used as a "starter kit." The Lee Hand Press doesn't require the use of a loading bench and yet provides enough leverage to full-length resize fired rifle cases. If you prefer a straight-line single-stage press, there is the Lee Challenger. As with all Lee presses, the Challenger comes complete with a set of dies and a shell holder of choice. The Lee Turret comes with primer arm, primer catcher, and also accepts the Lee Pro Auto-Disk powder measure. This powder measure is activated by the case

while the neck is being flared and comes with a series of changeable disks that allow you to set it for hundreds upon hundreds of different loads with dozens of different powders. Remember, however, to always check any type of powder measure by the use of a properly calibrated reloading scale. Lee advises that the chart which comes with each Pro Auto-Disk powder measure is only a guide to determine the approximate capacity for each cavity. Again, as with any powder measure, a scale is needed to verify the correct charge weight.

Lee's entry-level progressive press is the Load-Master, which features five die stations, automatic indexing, automatic priming, case feeder, quick change shall plate, primer catcher and dies.

It should be noted that Lee is the only manufacturer of dies that offers both a shell holder and reloading information with each set of dies.

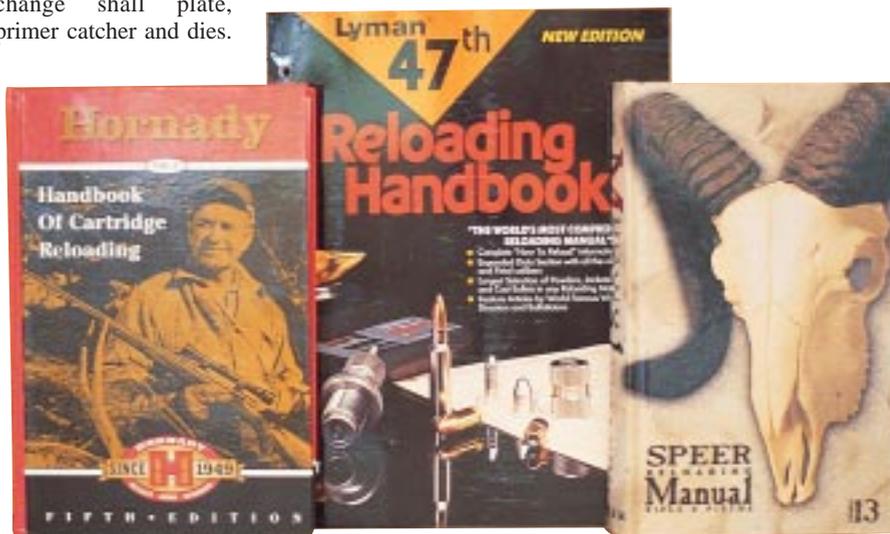
In addition to offering a complete line of very reasonably priced reloading equipment, Lee Precision also offers a unique service to help reloaders who are just beginning. These items may only be purchased for someone who is not already a reloader, and for these beginners Lee will offer "distressed" items at 60-percent off the regular retail price. The items may have paint defects, scratches, dings — anything that prevents them from being sold as new-in-the-box merchandise. Everything is 100-percent functional. Contact Lee for further information.

**LYMAN PRODUCTS CORP.:** As mentioned earlier, my first reloading experiences were with products from Lyman. I still have the original #310 Tool setup with dies for both .357 Magnum and .45 Colt. If I ever had to reload on the move again, this tool would be put back into use along with a new #310 kit setup to handle .45 ACP. No matter how sophisticated your reloading room may become, there is still always room for the #310. For reloaders on a budget, Lyman also offers the Acculine Starter Kit, consisting of the Accupress (which may be used as a hand tool or by mounting to the bench), a Pro 500 Scale, case lube, priming die, deburring tool, powder funnel, primer tray, loading block, and a copy of its excellent Reloading Handbook, now in its 47th Edition.

The Deluxe Reloaders Pro Kit adds a case-trimming tool with the most used pilots as well as four shell holders. In either case, dies must be ordered separately. Unlike the #310 Tool, the AccuPress when used as a handpress provides enough leverage for full-length resizing. For those

*continued on page 75*

*No matter what the budget constraints, reloading manuals are an absolute necessity. These are three of the best.*



Professional quality equipment that you can trust. Para Companion shown with Cold Steel Ti-Lite, Mitch Rosen leather gear, Black Hills ammo and SureFire E1 flashlight.



Keeping Good Company

# THE PARA-ORDNANCE COMPANION

Story By **Massad Ayoob**

Photos By **Ichiro Nagata**

The Para-Ordnance

LDA system is

wildly popular,

and the compact

new Companion

proves that good

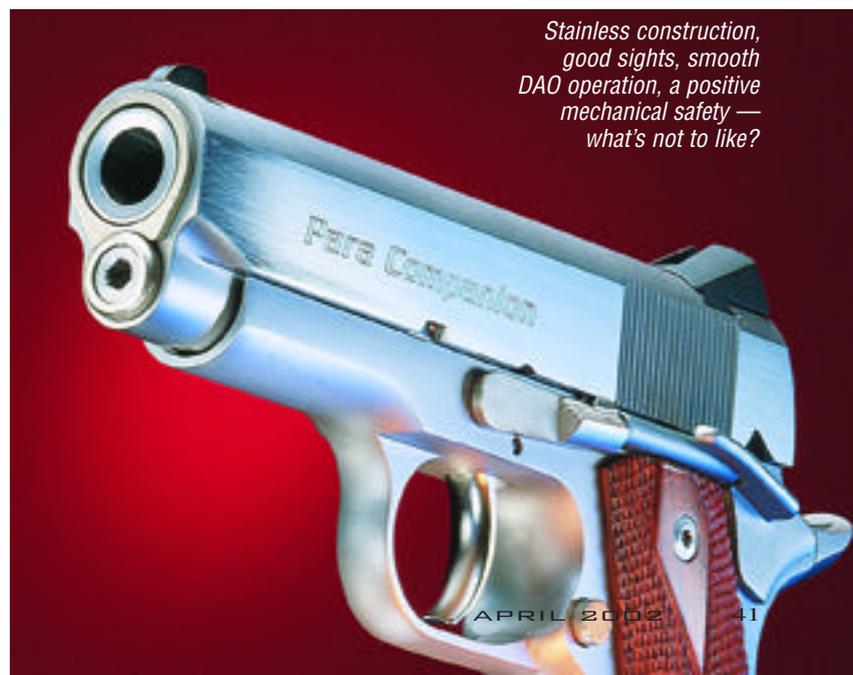
things do come in

small packages.

**E**ver since Para-Ordnance of Canada introduced its Lightning Double Action (LDA) double-action only 1911 pistol, it has been an unqualified success. The LDA was the first double-action 1911 that the shooting public liked, and the first such design which worked really well. Departments coast to coast have smiled upon it: San Bernardino County, Calif., Sheriff's Department has approved the LDA for all armed personnel, and the North Attleboro, Mass., Police Department has made it standard issue.

Private citizens like it, too. There are a lot of people who appreciate the ergonomics of a 1911 both for carrying and shooting but are uncomfortable with the cocked-and-locked carry of the traditional single-action models, or are appreciative of the more favorable civil liability posture afforded by a DAO autoloader.

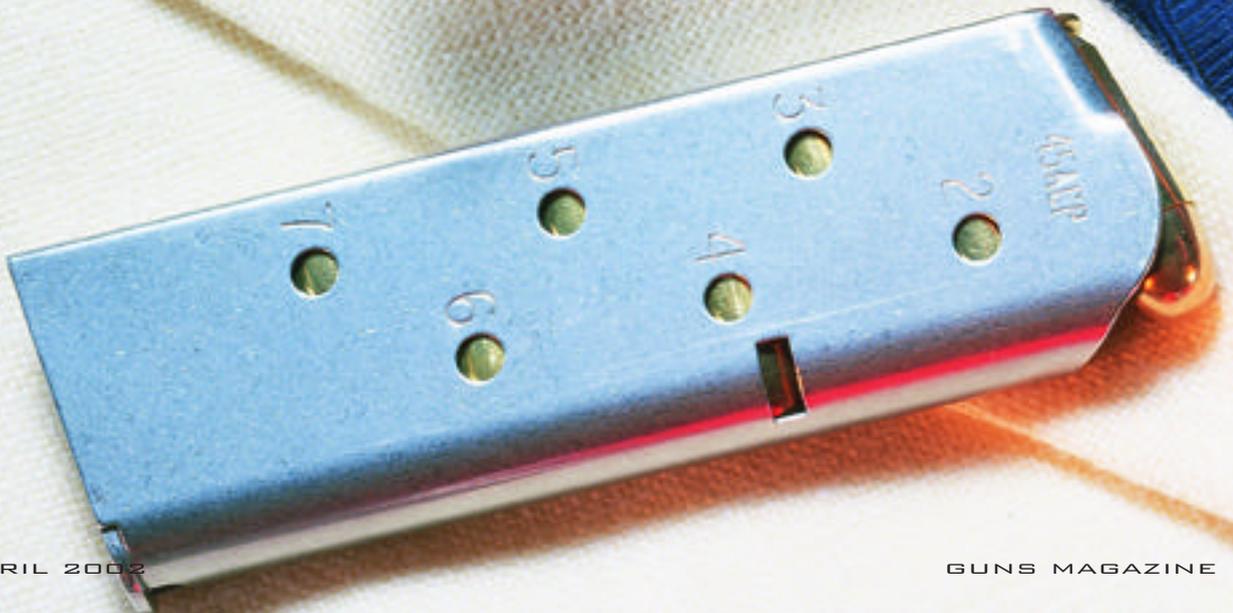
Almost immediately, Para made the LDA available in a slim-grip, single-stack model — the first offering by this company that is not built around a double-stack fat magazine. For most people who don't have large hands, the single-stack gun fits better in the hand. It's also somewhat more discreet and comfortable to carry concealed.



*Stainless construction,  
good sights, smooth  
DAO operation, a positive  
mechanical safety —  
what's not to like?*

Keeping Good Company

# THE PARA-ORDNANCE COMPANION





# GUNS

MAGAZINE

Just like the Cold Steel Ti-Lite, the sleek Para Companion is reliable and ready for any task.





The no-s snag rear sight offers white dots for low-light use, and the serrations reduce glare in bright light.



The tapered cone barrel and bushing of the Companion.



The Para-Ordnance LDA system is a marvel of expert engineering. Shown above are two views of the trigger draw-bar.

The recently introduced Para Companion is the single-stack LDA rendered in the same size format as the Colt Officers ACP.

## First Glance

The genius of Para-Ordnance designer Ted Szabo shows in functional details. The trigger guard is the same dimension as that of an ordinary 1911, which means that all your holsters for that type gun should fit the LDA of similar size. I tried this gun in holsters made for a Colt Officers ACP by Ted Blocker, Bianchi and Mitch Rosen. All fit fine. There was one caveat, however. I was using all open-top holsters. Most 1911 scabbards with thumb-straps are designed to fasten, for the most part, with the gun in cocked-and-locked condition. The hammer is always down on the DAO Para, and the hammer spur will block most fitted safety straps from securing. The Para can be special-ordered with a spurless LE (Law Enforcement) hammer. This will allow the safety strap of a holster made for a regular cocked-and-locked 1911 to fasten as intended.

The matte stainless construction of the test sample was appealing to the eye, and despite a goodly amount of carrying against bare skin in the waistband, it developed no signs of corrosion. The gun was pleasingly “edge free” and comfortable to handle in fast-shooting drills, as well as to carry. The good-looking cocobolo grips didn’t cause a rash when carried next to my bare skin, as some grips made of that wood have done in the past. The grip panels are inset with a gold company medallion, a motif that harkens back to old Colts and pleases some traditionalists, such as yours truly. The magazine well has been lightly beveled to make magazine insertion faster and more positive.

The trigger pull was typical LDA, which is unlike anything else. The stroke feels long but easy, running about 5.5 pounds total pull weight. Toward the end of the stroke, there is a light “stacking,” or increased resistance to the trigger finger, that is perceptible in slow fire but seems to disappear when you’re firing as fast as you can. At speed, it feels like a very fast, very light double-action revolver pull. In slow, deliberate work, it feels like “trigger cocking” — the two-stage pull that double-action wheelgunners who favored the Colt revolver preferred.

The manual safety is operated exactly as on a single-action 1911. Up is “safe,” down is “fire,” and operation of the frame-mounted lever is simple and natural for a right-handed shooter. This gun did not come with an ambidextrous safety, though Para-Ordnance products can be ordered or easily retrofitted with one. The lever was extended well forward and slightly outward, making it particularly easy to reach under stress. Operation was smooth and positive.

The grip safety is modern in design: beavertailed at the tang for fast and positive grasping, and to distribute the recoil and prevent bite at the web of the hand. It’s also extended at the bottom, to guarantee that it will be operated positively by any size hand or by any grasp, including the high thumb position that is widely taught. With a conventional 1911 or 1911A1 mil-spec grip safety, the high thumb position often pulls the web of the hand away from the grip safety and prevents the pistol from firing when the shooter wants it to. That won’t happen with this gun.

The Novak-style fixed sights have a pleasingly open rear and substantial front, allowing for a good traditional “post

*continued on page 56*

# BENCHREST

Handloading Editor Petty offers a quick overview of advanced handloading tools and techniques.

## LOADING TECHNIQUES

BY CHARLES E. PETTY



It wouldn't be hard to argue that benchrest shooters are compulsive. The lengths these folks go to in case preparation is really quite remarkable. The logic behind this work is that the more uniform the cartridge cases are, the better they will shoot. What I would like to do is go through some of these benchrest-style procedures and see if there are any that can be applied to the needs of the less-specialized reloader.

Benchrest shooters sort cases by weight, measure the neck thickness, true up the primer pocket, deburr the flash hole, and turn the case neck. Neck turning is a very time-consuming process, but it can produce dramatic results. Over the years I've tried to objectively evaluate these techniques.

### Weighing Cases

If you take a handful of cartridge cases and weigh them, it might not be unusual to find a spread of 5 or even 10 grains from lightest to heaviest. A heavier case probably has thicker walls, so it isn't going to hold quite as much powder. The volume of the case is important in terms of chamber pressure, so a case with a larger volume is going to generate less pressure than the same charge in a case that weighs several grains more. The consistency of pressure from one shot to the next should be desirable in terms of accuracy.

The quality of the brass manufacturer is obviously an issue here, and benchrest shooters are *very* picky about this. The quintessential benchrest cartridge these days is the 6mm PPC, and every shooter I've ever spoken to uses only Lapua .220 Russian brass that has been expanded up to 6mm. Of course, I didn't know that when I got my first 6mm PPC rifle, so I bought some Norma brass, which is already prop-

*Establishing the ideal seating depth is a snap with these excellent Stoney Point tools.*



erly sized for the PPC. I mentioned this to one of the guys and from his reaction expected that the Inquisition was going to come and burn me at the stake. I had done a *bad* thing. The only problem was that my rifle didn't seem to care at all and shot very nicely with them. I later weighed and compared the two makes and found them to be very similar.

My experience with American-made brass has been that there may be a little more weight variation. When you ask benchrest shooters about how close a tolerance they hold, many will say they want all the cases to be within a tenth of a grain. The majority of new cases will fall within a few tenths, and it is easy to sort them into matched groups. Unlike conventional loaders, benchrest shooters don't have hundreds of cases. They might only have 20 or 30, but they last a long time. And because benchrest shooters only resize a tiny portion of the neck — just enough to hold the bullet — the brass really isn't worked very much. We are always told to sort brass by make and lot, so sorting cases by weight is not going to take too long and may be beneficial.

### Primer Pocket "Uniforming"

Primer pockets are formed along about the middle of the case-drawing process. Some makers also punch the flash hole at the same time, while others do that as a part of the priming operation called "pierce and prime." It is not unusual for the bottom of the primer pocket to be a little less than square. It is desirable for the primer anvil to touch the bottom of the pocket, so benchrest shooters use a small cutting tool to remove a little brass and make the bottom of the pocket perfectly flat. The theory is that if the primer does not seat perfectly square, ignition will be erratic. It's not that complicated though. A primer is something that either works or it doesn't. One argument I've heard is that if the primer isn't perfectly square, ignition will occur around the circumference of the primer at a different rate and, therefore, powder ignition may vary. Now, I can see how one part of the priming pellet might go off before another, but please tell me why I should care about that? In the billionth of a second that this whole thing takes to happen, a variation out at the ninth decimal place probably doesn't matter. Besides, we have a primer that is many times larger than the flash hole. So if we have to squeeze the fire down to go through that little hole anyhow, is there any way the powder can know?

### Flash Hole Deburring

In most manufacturing, the flash hole is simply punched through the bottom of the primer pocket. Logic suggests that this operation might leave a burr on one side or the other of the flash hole. This burr *could* interfere with the even flow of fire and hot material through the flash hole. The ideal is that the primer output will go straight up through the powder column and ignite it uniformly. A burr on one side of the flash hole could direct the ejecta toward one side of the charge and cause less than uniform ignition. I can visu-

alize how this could — and probably does — happen, but I am far from convinced that this will have a serious effect on accuracy. Objective evidence is absent, but it's one of those "it can't hurt" things that only takes a moment to do.

### Primer Pocket Cleaning

I'm sure you've noticed a pattern of carbon residue at the bottom of the primer pocket when you knock out the fired primer. So to make sure the primer seats right (see uniforming), we are told to scrape the deposit out of the pocket before we seat a new primer. But if we look at this with a

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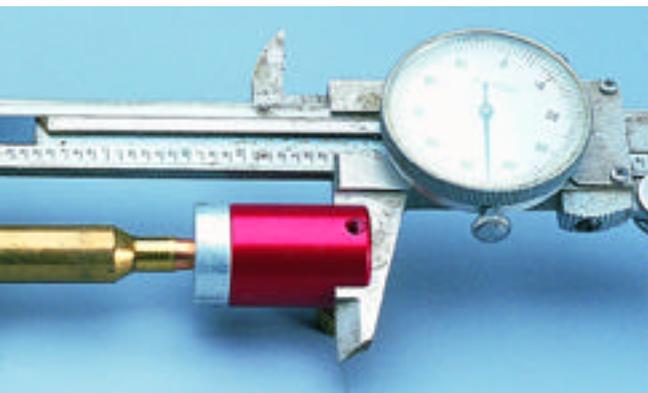
*In Petty's experience, case-neck turning can yield significant accuracy improvement.*



*For processing large numbers of cases, an adapter to utilize a power screwdriver will be appreciated.*



*A replaceable bushing-type neck sizing die, like this one from Redding, gives you complete control over the sizing process.*



*These simple hand tools make short work of deburring flash holes (left) and uniforming primer pockets.*

# The Leupold **MARK 4 CQ/T** TACTICAL SCOPE

By Charles E. Petty

**N**ot too long ago, anyone proposing a combat rifle that was in any way battery-dependent would have been seriously questioned. However, because of the proven performance of red-dot sights when used with handguns, it became logical

for people to begin trying them in other applications.

The first use of a red-dot sight on AR-type rifles may well have been for the three gun matches. One real advance that I remember was a mount that put the sight down over the handguard. This permitted

the use of the iron sights in addition to the red dot, and may well have been one of the prime factors in the growing acceptance of the system. Of course it still had that cussed battery, but serious users simply made frequent battery replacement a doctrine.

The arrival of flat-top receivers and the Picatinny rail made red-dot sights even more acceptable, and pretty soon the concept became standard. They even appeared on things like SAWs (squad automatic weapons). Soon there were all sorts of optical sights, lights and lasers hanging on the gun. But the bottom line was that red-dot sights substantially improved accuracy.

It really is neat to have that little red dot seemingly hanging in the air at optical infinity. But the way the dot gets there also accounts for one criticism. Somewhere in the tube is an LED (light emitting diode) that produces a red light. The front lens element of the sight has a special coating that reflects red light. That's how the dot seems to hang there. The coating allows all the other light wavelengths to pass through so that the shooter can see the target. But it is inevitable that there will be some losses. The shooter with both eyes open is going to see two slightly different images. I think we accommodate very well to this condition, but the light passing through the lens is cut down a little. Some shooters really don't like this and thus avoid these sights.

We've also seen the arrival of scopes



## LEUPOLD'S NEW **CQ/T**

AN OPERATOR'S PERSPECTIVE



By Barry Dueck

**M**16 variants are replacing the 9mm HK MP5 as the weapon of choice for Close Quarters Battle (CQB). This trend has emerged because of the need to defeat body armor as well as the flexibility to engage threats at close range, as well as threats in excess of a 100 yards. The M16's 5.56x45mm cartridge is an obvious choice.

### Multi-Mission Sighting System

This new multi-range capability has left a void in sighting systems to fully complement these short rifles. Electronic dot sights work very well for close engagements and in low light, but they leave a lot to be desired in terms of long-range precision. Traditional riflescopes have peak performance at longer ranges but are slow for close-range work. What is the ideal sight for engaging threats at these various ranges? This is a tough question. To solve this problem, the U.S. military asked manufacturers to design a scope that would bridge the gap. Leupold has stepped up to the plate with the introduction of its new Mark 4 CQ/T 1-3x14.

Leupold's Mark 4 CQ/T is specifically designed for use with the M16. The integral mount actually fits both the flat-top

with illuminated reticles. I really didn't pay much attention to these at first and still feel that their usefulness is limited. But after working with one in a night tactical-training exercise, I found that it was possible to shoot accurately in nearly total darkness. The drawback to this, of course, is target identification, and the illuminated reticle is of no help in that regard.

Even though they really aren't, red-dot sights are commonly called *scopes*. It's more correct to call them optical sights because they do not magnify the image — they just provide an aiming point. Now comes Leupold with its new Mark 4 CQ/T 1-3x14mm. It is an illuminated reticle variable magnification scope.

The design is the product of input received from all branches of the special operations community. Leupold held a conference with representatives of the various groups and incorporated the most requested features into the design.

At first glance, the CQ/T is almost Buck Rogersish; it does not look much like things we're used to. Compared to most red-dot sights, the CQ/T is much longer and smaller in diameter. Controls are conventional for windage, elevation and magnification. The CQ/T has a circle/dot reticle. For those accustomed to crosshairs, this is a bit different, but it is actually very quick and easy to use. The dot in the center is 3 MOA at 3X (9 MOA at 1X). It is surrounded by a circle



that subtends 18 inches at 25 yards when the magnification is set at 3X.

Both the circle and dot are illuminated by a set of amber LEDs that are embedded in the reticle. Power is provided by a single AA battery with a useful life of approximately 7 hours at maximum power. Since that setting would rarely be used, battery life will be considerably longer.

The illumination adjustment is located on top, just forward of the variable adjustment ring. There are two settings for use with nightvision and eight for normal use. On the top and the right side are two short Picatinny rails (MIL-STD-1913) where accessories can be mounted.

The scope may be mounted either to a rail or on the carrying handle of rifle. Both are provided with the scope and both are easily done. The rail mounting is done by the use of two "feet" on the scope that mate with slots in the rail. The scope is then clamped to the rail with two separate pieces held together by 1/2-inch hex screws. This is a very sturdy mount. A separate screw is provided that goes through the hole in the carrying handle of rifles so equipped. It only takes a moment to mount the scope either way.

The addition of magnification in a sight of this type has been questioned by some, but it can be a great asset in some circumstances.

*continued on page 50*

and traditional handle-equipped upper receivers. Mounted on the flat-top, the reticle is at the same height as the iron sights. This configuration allows co-witnessing of sights. Co-witnessing is a term describing two independent sighting systems that visually overlap if used at the same time. For example, mounting a low-powered scope or dot sight between the front and rear iron sights so that when sighted the scope's aiming point is visible on the tip of the front sight. The two independent sighting systems verify the other's zero. Then, if your rifle is so equipped, the iron backup sights can be folded down and out of view.

The CQ/T utilizes a circle dot reticle having a crisp 3 MOA dot centered inside a large outer circle when the scope is set to 3X. Reduce power to 1X and the dot grows to 9 MOA. Etched in optical glass, the reticle has the clarity Leupold scopes are renown for.

A single AA battery powers illumination for the circle dot reticle. The use of AA batteries is a big plus for the military. Finding a special battery can be impossible for soldiers deployed overseas. The AA battery, however, is plentiful in the military, and is used in most nightvision equipment.

Changing the battery required a simple turn of the one-piece battery carrier, and it popped into your hand, ready for replacement. This task is easily performed in the field, even when wearing gloves.

### Designed With NV In Mind

Rotating the illumination knob clockwise accesses nightvision settings at the first two positions. Not visible to the human eye, these settings can be seen through nightvision. Not having a NV monocular for weapons mounting behind the scope, I tested the NV settings without mounting by looking through the CQ/T with AN/PVS-7B NV goggles. I had no problem seeing the reticle and tracking targets, and I even found the 3rd visible setting dim enough for use with the goggles. The third and fourth setting gives dim orange illumination to the reticle. Continued rotation of the knob gradually increases the illumination intensity.

### Adaptability

Mil-spec 1913 Picatinny rails built into the top and right side of the scope body are a first as far as I know. With the variety of lights, lasers and nightvision, it seems as if you can't have too many accessory-mounting options. While I really like the rails, they need to have more offset from the scope body so that accessories can be mounted over the top of the windage and elevation adjustment caps. The Surefire M951 6-volt tactical light would only fit on the right rail due to this length issue. Being

*continued on page 51*



## PETTY CQ/T

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A Leupold spokesman used the example of fighting in Somalia where heavy street fighting took place and target identification became critical when it was necessary to engage targets at ranges of blocks rather than yards. Soldiers might have to go inside a building where magnification was the last thing they would want or need, but an illuminated reticle would be invaluable. And it is situations such as those — a very real tactical problem — that inspired the design. At 3X, it is much easier to tell good guys from bad on crowded streets, but a simple to turn of the ring to 1X and a switch of the reticle illumination allows for house clearing. For this test, the Leupold was mounted on a Rock River Arms LE Tactical CAR, an M4 type of the AR-15.

As with standard scopes, this one is best boresighted with a collimator. But instead of lining up crosshairs, I adjust the dot to the center of the collimator field. Once that was done, it only took a few shots to get a good zero. Since the purpose of the scope is for close quarters, it was zeroed at 50 yards. I've heard some argument over zero range with some favoring 100 yards, but with a 50-yard zero there is so little drop-out at 100 yards that it could easily be within the maximum point-blank range of most ammo. We're not talking about a target rifle here.

Adjustments are in 1/2 MOA increments.

Users of red-dot sights may have experienced some difficulty in getting a good zero, but since we're dealing with a reticle here, adjustment is really like a conventional scope. And Leupold tells me that the system is taken directly from its exceptional Vari-X III series of scopes. As I was zeroing the scope, the movement of the bullet strike seemed to be quite accurate. So, on a whim, I decided to try the old-time drill of "shooting the box" to test the accuracy of adjustments. With the 1/2 MOA increments, it takes four clicks to move an inch at 50 yards. So beginning with the rifle zeroed for point of aim/point of impact hits, I moved the windage 10 clicks to the left and fired a three-shot group. Then 10 up — three shots — 10 right — three shots and finally 10 down and three more shots. Measuring to the center of each group showed a precise 2½-inch movement at each stage. The last three shots plopped right into the starting group in the center of the target. How satisfying!

I've used the circle-dot type reticles before and have grown quite fond of them. For me they are faster to acquire than a red dot, and the circle was always right before my eye as the rifle came up. Sometimes red dots get lost if you don't do everything just right. Over the course of several trips to the range, I shot the combination at varying ranges and practiced some fast target-acquisition drills. This is very much a measure of individual training, and although I don't consider myself to be very fast at this stuff,

it really was easy to quickly hit targets at combat ranges with the scope set on 1X. With both eyes open and focused on a target, it seemed as if I was able to just superimpose the reticle before my eye and shoot quickly. It was very much like the flash sight picture technique used by IPSC shooters.

With the magnification turned up to 3X, I took potshots at a 12-inch diameter steel plate at 300 yards. You can't do this very fast, but with due care and a bit of holdover, the gong rang with regularity.

While the intended market for the CQ/T is the military and law-enforcement community, it really would be useful in any application that requires a low-magnification scope. The concern over battery life is greatly reduced because there is always a reticle to use, and illumination is required only in low-light settings.

As with anything different from accustomed practice, there will be those who don't like the new idea. And as one who has much more experience with red dots, that's where I found myself... at first. But the more I use the CQ/T, the more comfortable it becomes.



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## **DUECK 4 CQ/T**

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parallel to the bore, the rails offered a mounting solution that aimed the light perfectly. The high mounting location lets the operator fire from a lower position over the top of obstacles. Lights in lower mounting locations force the shooter to use a higher position to keep the light from being blocked by vegetation and other obstacles.

### **Putting It To The Test**

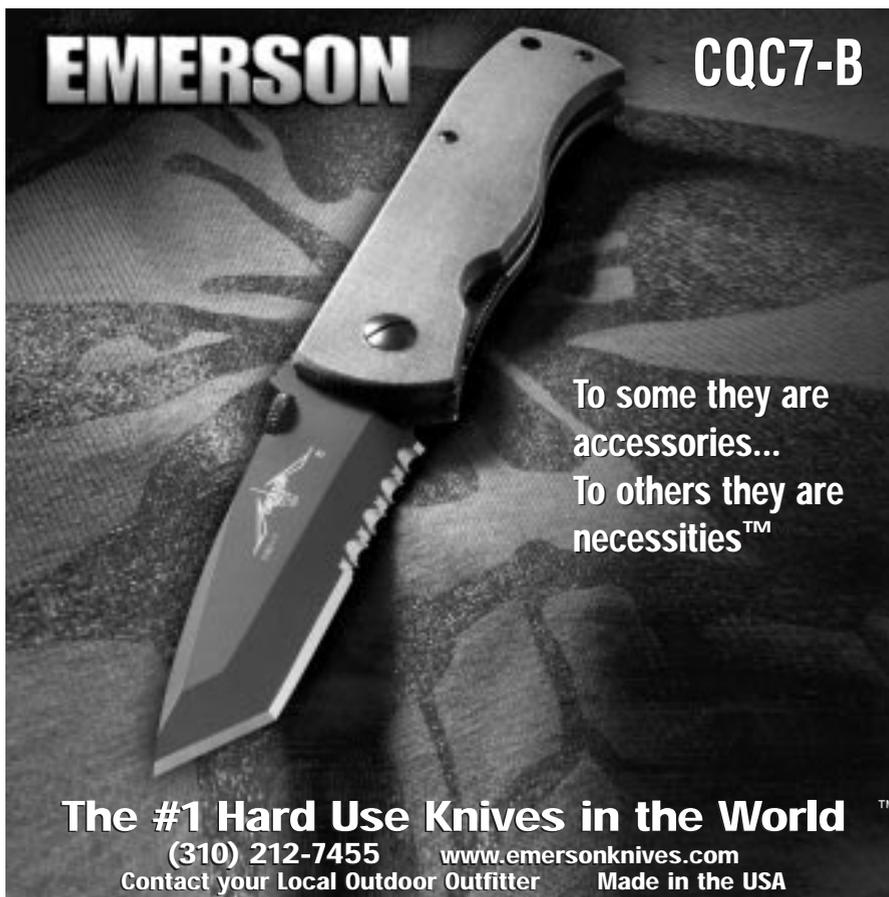
The CQ/T proved very fast at engaging targets at room-clearing distance. Although slightly slower than an electronic dot sight, it was still fast. The advantage came when going from close to intermediate range. Even at 1X, the scope offered precision shot placement better than open sights. With 1/3 turn of the eyepiece, power is increased to 3X, allowing much greater precision for longer range shots. Engaging targets from 7 yards out to 300 yards, the reticle was quick to pick up and fast to center on targets.

For CQB use, the scope was set to 1X and illumination adjusted to its brightest setting. Moving through buildings, the reticle is quick to pick up. The large outer ring catches the eye and draws it to the center. Fast hits on man-sized targets were achieved by focusing just on the outer ring.

Adjusted to the lower illumination setting, the reticle is dim enough that targets aren't washed out by the illuminated reticle. I used the higher settings for close-quarters shooting in daylight and the Surefire tactical lights to illuminate the target while firing in low-light conditions. Although the scope was illuminated adequately for most conditions, the addition of an ultra-bright setting would increase engagement speed when fighting at close range in brightly lit environments.

Leupold's Mark 4 CQ/T 1-3x14 proved to be a versatile tool, very capable of adapting to the wide range of missions that currently challenge those going into harms way. For increasing the performance capability of the M16 type rifle, this may be the direction of the future.

*Barry Dueck is a full time tactical consultant with the Surefire Institute. A former Marine, Dueck travels internationally training military and law-enforcement personnel in low-light CQB technique.*



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# METAL STORM

Firing prototype of the O'Dwyer Variable-lethality Law Enforcement handgun.



## GUNS

## SPECIAL

## TECHNICAL

## REPORT

**W**ith the dramatic video game/sci-fi/rock music name of Metal Storm, and more than \$400 million in government backing and private bankrolling, Australian inventor Mike O'Dwyer's patented new system seems poised to launch a revolution: overthrowing centuries of traditional firearm technology with the merest click of a computer mouse.

I first encountered Metal Storm at the prestigious 2001 NDIA Small Arms Conference where the company had an informational exhibit, and O'Dwyer himself was on line to give a technical presentation. Among several dozen attractive and expensive display booths highlighting the latest interesting but relatively small advances in traditional arms and ammo for military and police applications, the Metal Storm booth was almost continually crowded.

I was finally able to elbow my way up to watch the firm's impressive video presentation. I also got a close look at some photos of actual prototype hardware being fired and computer-generated graphics showing conceptions of future applications. Alas, there was no hardware on the tables to pick up and examine.

All set to walk away and mentally log the Metal Storm name for future reference in my "I told you so" files, I was approached by a small and friendly fellow who introduced himself as Mike. As it turned out this was Mr. O'Dwyer him-

*Below: An early test-bed for the stacked projectile Metal Storm system.*



BY ROBERT BRUCE

# WARNING!

self, the man behind all this whiz-bang gadgetry that was generating considerable buzz.

Ya gotta love it. In sharpest contrast to your average over-dressed, over-paid, over-cautious, and overly smooth government/industry product rep, the owlish O'Dwyer is on the road in person. Real life — whatcha see is whatcha get.

For the past couple of years he has been patiently explaining to audiences large and small around the free world about how he has taken the principle of a computer's printer and applied it to the job of launching slugs in ways previously unattainable due to the laws of physics.

## Dots of Death

Company promotional materials have attempted to make it easy for guys like me with limited brain capacity to grasp the Metal Storm operational principle by comparing it to that of an ordinary inkjet printer head for your desktop computer. The company has produced a video that uses eye-popping computer-generated graphics to show just how a printer head knows when to squirt a microburst of the right color ink at exactly the right time, and how it is made to do this at extraordinarily high speed. O'Dwyer seems to have adapted this technology to have a computer program electronically fire rounds at infinitely tailorable rates and sequences.

In his Metal Storm ballistic system, the only significant moving parts are projectiles from his uniquely designed caseless ammunition, loaded one in front of the other as many as practical, depending on the length and caliber of the launch tube. Tossed into the dustbin are all the parts and paraphernalia necessary in conventional multi-shot weaponry for feeding, mechanically firing, extracting and ejecting. Need more ammo? Just pull out the block of barrels and stuff in another.

*Scientific American* magazine reported on Bertha, the thirty-six barrel, 9mm prototype, successfully firing 180 rounds in about one one-hundredth of a second! Pause for a moment and think about one one-hundredth of a second to shoot 180 rounds. Even in the electric-powered, multi-barrel, 6,000 rpm Phalanx, it would take almost 2 full seconds to do the same thing.

Now, it should take no flight of imagination to see how the simple Metal Storm box of bullets in barrels could be a far more efficient way to knock out a supersonic, sea-skimming Exocet ship-killing missile than current stuff like the big, cumbersome, complex and expensive cannon caliber, super Gatling type Phalanx and Goalkeeper systems used on many free world warships. In fact, this very possibility is being seriously pursued in the United States and abroad.

## Sniper Storm

This and some other configurations, including a handgun, have been successfully demonstrated for high-level leaders in military and scientific communities in O'Dwyer's home country and in the United States. In fact, following a live-fire test in July 2001 at an Army



*Mike O'Dwyer, innovative originator of the Metal Storm system.*



*Bertha, an early prototype built by Mike O'Dwyer, belches flame in a firing demonstration.*

*Conceptual phantom view of Metal Storm's area denial weapons system.*

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Research Laboratory facility near Washington, D.C., Metal Storm received a contract from techno-gurus at Defense Advanced Research Projects Agency worth more than \$10 million of our American tax dollars to develop an "Advanced Sniper Rifle." Partners in this endeavor include U.S.-based Science Applications International and Alliant TechSystems. Alliant, it should be pointed out, is also the prime contractor on the American military's Objective Individual Combat Weapon. Hmm.

The conceptual prototype appears to be fairly conventional in layout, with the exception of a cluster of four barrels that may be of varying caliber. Each contains stacked caseless rounds with the likelihood of including different types of projectiles optimized for different applications.

Electronic fire control allows the gunner to program and launch the optimum combination and firing rate of projectiles packed in the quick-replace barrel cluster. An ultra-sophisticated sighting system is also planned, incorporating cutting-edge developments in target acquisition and tracking under adverse conditions, compensation for ordnance and environmental factors, and anything else to help gunners take out their target at extreme range.

**Electronic Handgun**

"Metal Storm now holds two official Guinness World Records for the fastest firing ballistic weapon and the world's most intelligent handgun" (*Storm Front Newsletter*).

Along the way, Metal Storm is also stirring up considerable interest in law-enforcement circles in what is currently called the O'Dwyer Vle Handgun, which stands for Variable Lethality Law Enforcement. Said to be the world's first 100-percent electronic pistol, the single-barrel, seven-shot, first working prototype features a user-recognition function that will deny anyone but the authorized police officer the ability to fire the weapon. Its computer chip "brain" also stores keypad instructions from the gunner, and when the trigger is squeezed, it fires in single shot (semiauto), double-tap, triple-tap, or high-energy modes. The maximum rate of fire for two rounds launched in this last setting is a mind-boggling 500,000 rpm!

Follow-on versions predicted in company promotional materials are likely to have multiple barrels holding a mix of ammo, from "less than lethal" stuff like beanbags and irritant powder to Terminator-style one-hit-you're-dead munitions. The sci-fi handgun is also said to be easily equipped with all sorts of two-way communications and controls such as a global position indicator and a supervisor-override to keep the combat-stressed peace officer from handling an immediate threat with a politically incorrect level of force.

## Over and Down Under

The American Joint Services Small Arms Program is expected to spend upward of \$150 million between now and 2008 in further development and initial fielding of the Objective Individual Combat Weapon (OICW). This is being done by a massive government/industry team featuring, as previously mentioned, Metal Storm partner Alliant TechSystems at the lead.

Meanwhile, the Australian Defense Science Technology Organization (DTSO) has the luxury of taking a more economical approach with what they call its Advanced Individual Combat Weapon, or AICW. The AICW's Technology Demonstration Program is funded at a relatively modest \$3.2 million over 3 years and is expected to produce a trio of operational prototypes for further development.

Both systems feature multifunction computer-aided fire control for aiming a bullpup 5.56mm assault rifle as the "kinetic energy" component, plus a multi-shot grenade launcher mounted on top. Shooting parts of the American OICW are products of Heckler & Koch's superb German engineering; a chopped select fire G36 under a mag-fed semiauto 20mm version of its innovative but ill-fated Close Assault Weapon System. These are basically conventional mechanical systems of traditional design and manufacture.

Meanwhile, the Aussies at DTSO are using their tough and effective license-built Austrian Steyr AUG assault rifle as the platform for the AICW and have placed a Metal Storm grenade-launcher barrel on top. Much engineering detail will have to be worked out, but the multi-shot big-bore component is expected to be somewhere between 20 to 40mm in diameter.

As with its Yank counterpart, the weapon is expected to have highly sophisticated computerized day and night sights that will video link to a helmet mounted display. Also, rapidly advancing micro-miniature smart fuze technology is likely to give very accurate airburst capability to the AICW's high-explosive (HE) grenades. This can greatly increase the range and lethality of the weapon system by denying enemy troops the protection of foxholes and bunkers unless they have substantial overhead cover.

O'Dwyer is enthusiastic about how fielding of this hybrid weapon, capable of firing both conventional NATO standard 5.56mm cartridges as well as a variety of special Metal Storm grenades from HE to riot control beanbags, should give infantrymen of the near future a far more effective shoulder arm for a wide range of missions.

"I believe the AICW has the potential to become a mainstay of the next generation of western infantry weapons," the Metal Storm system inventor says quite matter-of-factly.



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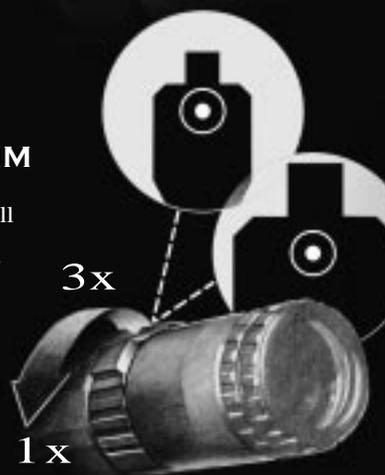
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## PARAORDNANCE

continued from page 45

in notch" sight alignment. They also come with three large, highly visible dots for those who prefer that faster but slightly coarser approach to sight alignment.

In firing, recoil is not bad at all. The .45 ACP is not a particularly high-pressure cartridge. With a +P load, there's some snap to be felt, but it's nothing you can't control with a proper firm grasp.

### Reliability

This is a defensive pistol. With a gun like this, reliability is the non-negotiable baseline that must be met before any other features have any real-world relevance.

Para-Ordnance has a really good history of meeting this baseline. The firm began manufacturing paint guns and then went to high-capacity 1911 frames that would be assembled as part of a kit into a whole gun. They quickly learned that the function of the completed pistol would be dependent upon not only the workmanship of whomever put the kit together, but the quality of the superstructure that was mated to the frame. When someone badmouthed a Para-Ordnance conversion in the old days, people in the know realized that the frame wasn't at fault, but people who hadn't figured that out badmouthed Para. Thus, when it began manufacturing whole pistols, Para-Ordnance was acutely sensitive to the reliability issue.

From the start, Para has used state-of-the-art CNC machining and carefully specified tolerances. As a result, its pistols have been recognized as among the best made 1911s currently available and, indeed, among the best made ever. This is saying a lot, particularly now. There are more top-quality 1911s available today than ever: Les Baer, Kimber, Wilson, Colt and the current Springfield Armory guns, to name just five. Para-Ordnance is right up there with them in the front rank.

Para has also, from the beginning, used ramped barrels and frames mated to them accordingly. This is one reason they generally work so well with hollowpoints. The only exception I ever found was the ultra-short P10-45, which just didn't seem to have enough length in its cycle to guarantee the high order of reliability found in its bigger brothers. The Para Companion is about the length of the single-action P12-45 high-cap that the company has produced for some time, and these have always been reliable guns.

.45 autos of this size go back to the General Officers' Pistols made by U.S. Army armorers after World War II. The .45s were popularized among civilians by the reduced-size custom 1911s of Armand Swenson, George Sheldon, Lyn Alexiou, Austin Behlert, and many other master pistolsmiths. Detonics tried to mass-produce a gun like that and failed to make it as reliable and longlasting as it should have been. Colt followed with its own version, named the

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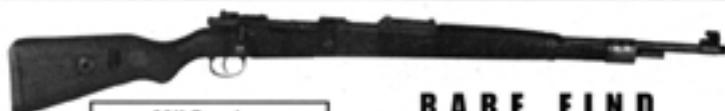


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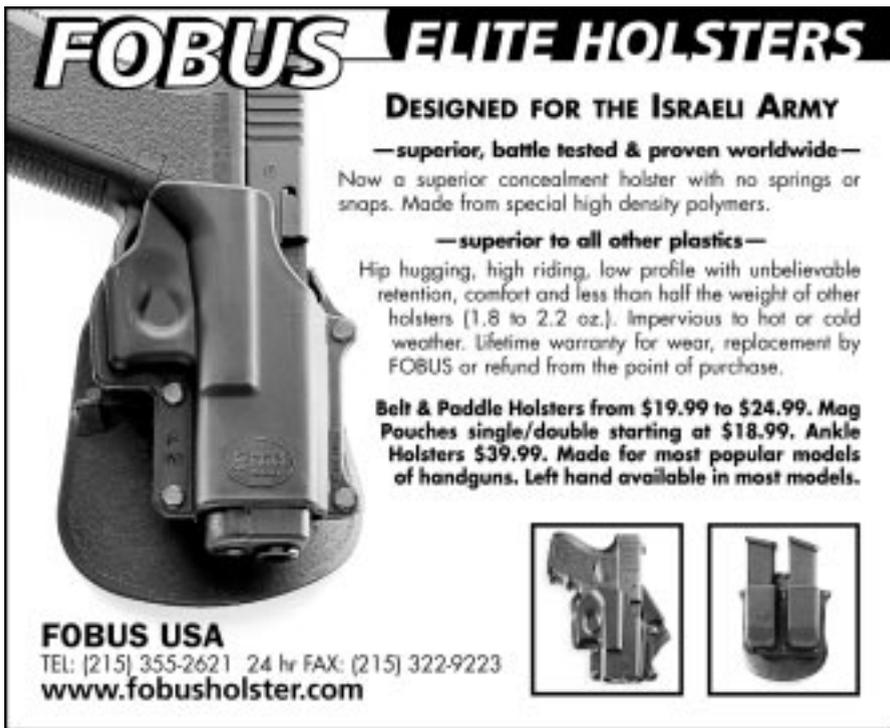
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Officers ACP, in homage to the work of the military armorers. The early models only fed reliably with hardball or Remington jacketed hollowpoint, unless they were customized. Their barrel bushings also had a tendency to break. King's Gun Works picked up on this, creating a heavy-duty bushing for the Officers that custom gunsmiths have done a land-office business retrofitting to customers' Colt Officers pistols.

Para-Ordnance CEO and Chief Engineer Ted Szabo knows a helluva lot about 1911-design subtleties and has tapped into a wide range of outside consultants who are just as knowledgeable. I suspect some elements of the King Gun Works technology went into its P12-45 bushings, which did not become notorious for breakage despite being visually similar to those on the Officers. Kimber went to bushingless, belled barrels that mated with the front of the slide on its subcompacts, and Colt wisely took the same road with its smaller-than-Officers size Defender, which in turn draws largely from the Adventurer subcompact 1911 pioneered by Bill Laughridge at Cylinder & Slide Shop.

I had no problems with the bushing on the test gun. I expect it to continue to work well. Frankly, this design (the small bushing) makes the gun easier to take down and reassemble than the full-length guide rod necessitated by a bushingless design.

Several testers — big and small, young and old, male and female — put hundreds and hundreds of assorted .45 ACP rounds through the test Companion. It never failed to cycle. This was impressive because test ammo included lead semi-wadcutters and two rounds that are infamous for jamming even full-size 1911s that haven't had their feedways custom-throated. These rounds are the button-nosed 185-grain mid-range target semi-wadcutter loads and the CCI 200-grain "flying ashtray" jacketed hollowpoint, which tends to be short in its overall length and have a very wide mouth.

On one occasion, when loading a fresh magazine from slide-lock, a CCI Blazer flying ashtray hung up on the feed ramp. A quick tug of the slide solved the problem. In actual firing, this stuff perked right through the gun. The mid-range target loads, with velocity in the low 700 foot-second range out of this short barrel, occasionally failed to lock the slide open on an empty magazine, but they never failed to cycle during actual firing. This was impressive: A lot of .45 autos simply won't run with this stuff unless you put in a special light spring.

The short magazines supplied with this compact pistol appeared to have McCormick followers, allowing them to hold a full seven rounds, the same complement as standard magazines for the bigger-gripped Government and Commander models. Magazine followers like the McCormick that allow an extra round are a hot topic of debate among 1911 aficionados. In the full-size mags, going up to eight in the magazine pushes things to the limit. There is no longer any spring flex in the cartridge stack inside

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the loaded magazine, and you really have to slam it into the pistol to make it lock in place if the slide is forward. Also, some of us have found that if the magazines are kept loaded for a year or more, the springs can start to take a set, and reliability can suffer.

This doesn't seem to be true of the Officer's size magazine, as used in the Para-Ordnance Companion. To the best of my knowledge, it was pistolsmith Ed Brown and shooting champion Ray Chapman who first figured out that when the McCormick follower was put in the short six-round magazine for the Officers, it went up to seven-rounds capacity without any of the negative effects that had been seen in full-length magazines. It seems to be simply the nature of the relative amount of space available in each magazine housing. Thus, while I have some concerns with constantly carrying eight rounds in a Government Model magazine originally sized for seven, I have found no problems at all with carrying seven rounds in an Officers magazine originally sized for six.

Para has wisely engineered the Companion to take the huge number of Officers ACP size magazines that are already out there, including the excellent aftermarket magazines produced by Wilson. I shot the test gun with its own magazines and with one from a Colt Officers, and all worked just fine.

One warning for any short-butt, short-magazine 1911 applies here: If the slide is locked back and a full-length magazine is inserted with any serious degree of force, it can over-travel and lock up the gun. Don't rely on the strategy of counting your rounds and always swapping magazines with the slide forward on a live, chambered cartridge. History shows us that even the best shooters lose count of their shots when under pressure. When carrying this or any similar short-butt 1911, carry ONLY magazines of the appropriate size! Wilson makes a nice aftermarket unit that is full-length with a stop on it to work with these short-handled 1911s. But in turn, you must take care not to get them mixed up with your regular 1911 magazines, because they won't work in a full size pistol. Also, when reloading any short-grip auto, remember to get the lower finger of the firing hand out of the way so it won't be pinched between the bottom of the frame and the lip of the incoming fresh magazine.

The reliability was there. How straight would the gun shoot?

## Accuracy

The barrel/slide construction of the Para-Ordnance Companion follows the general structure and concept of the Colt Officers ACP. The latter gun has never been famous for good accuracy. On the other hand, the same concept as rendered by Para in its established P12-45 has proven surprisingly accurate. Thus, we knew the accuracy could go either way. I was not surprised by the contradictory results. On the one hand, the overall

groups were occasionally disappointing. On the other, the best three shots of each group showed promising inherent accuracy.

I observed a long time ago that when a pistol was solidly hand-held at the 25-yard bench and all the shots broke cleanly, the best three hits out of a five-shot group were usually very close to a five-shot group from the same gun when fired from a Ransom machine rest. Factoring out the two worst shots — "giving the gun a mulligan," as it were — seemed to allow for human error in delivering a good idea of the pistol's mechanical accuracy potential. Richard Grassi and some other gun writers I respect have since picked up on the practice. In 2001, at the behest of *American Handgunner* Editor Cameron Hopkins, Charlie Petty and I tested the same four guns with the same ammo at 25 yards. One used a Ransom Rest and measured only the five-shot groups; the other fired from the bench, measuring both all five and the best three. I felt the results validated the "best three" hypothesis.

Auto pistols in general, and 1911s in particular, seem prone to "4+1 syndrome," in which the first hand-chambered cartridge shoots to one point of impact, and subsequent automatically cycled rounds cluster at a separate point. This was true for most loads fired from the Para Companion.

Testing was done from the 25-yard bench on a pleasant day at the Pioneer Sportsman range in Dunbarton, N.H. Nine proven .45 ACP loads were used. They encompassed five brands, five bullet weights, and velocities ranging from mild to "Plus-P" wild.

The three loads with the lightest bullets were all Winchester brand. The 170-grain Non-Toxic, a type of ammo being demanded at more and more indoor ranges, put all five shots in 5/8 inches, and the best three in 2 inches. Cheaper 185-grain BEB (brass-enclosed base) truncated cone rounds under the generic USA banner delivered a 4/8-inch group for five shots, with the best three in 2/8 inches. The softest load, the famously accurate 185-grain mid-range Match jacketed semi-wadcutter, delivered a 3/8-inch five-shot group, with the best three shots in 1/8 inches.

200-grain is a medium-weight range for the .45 ACP and, historically, an efficient one. The 200-grain hollowpoint pioneered by CCI is famous for street-proven stopping power, and the Hensley & Gibbs #68 lead semi-wadcutter is a long-time favorite among match shooters in disciplines ranging from bullseye to IPSC. The latter slug in the Black Hills factory load put five shots into 1/8 inches, the best three in a cluster of three-quarters of one inch. This was the best accuracy of the test, in both five- and three-shot grouping.

CCI's old "flying ashtray" JHP, though tough to feed, was always a manstopper and always accurate. CCI's inexpensive Blazer version grouped into 4/8 inches (all five) and 1 inch (best three). The improved Gold Dot version of that bullet, loaded to +P velocity in the Pro-Load Tactical round,

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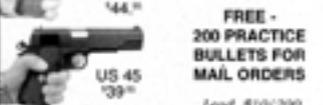
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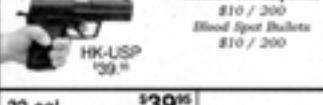
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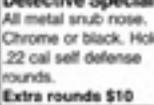
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put all five into 6 $\frac{1}{16}$  inches (suffering heavily from "4+1 syndrome"), but the best three went into 2.0 inches.

230-grain is the historically "natural" bullet weight for the .45 ACP round. Black Hills' round-nose lead offering in that weight delivered a 3-inch five-shot group, with the best three in 1 $\frac{1}{8}$  inches. Sellier & Bellot's humble, inexpensive round-nose full-metal jacket hardball gave the second best accuracy of the test in both five- and three-shot measurements: 2.5 inches and 1.25 inches, respectively. Honked up to +P velocity with the Gold Dot hollowpoint in the Pro-Load Tactical cartridge, the most powerful 230-grain load of the test delivered 3.5 inches for all five shots, with the best three into 1.5 inches.

In summation, we see Pro-Load's powerful 230-grain +P JHP grouping into 3.5 inches at 25 yards, and the best three in 1 $\frac{1}{2}$  inches; cheap S&B hardball in an inch tighter than that for all five, and the best three less than an 1 $\frac{1}{4}$  inches apart; Black Hills' outstanding 200-grain lead SWC in just over 1 $\frac{1}{4}$  inch for the entire five-shot string, and the best three into less than 3/4 inch. This is very satisfying accuracy. Add to this the excellent reliability and you can see that the Companion has all the right qualifications for its mission as a concealed carry self defense gun.

## Conclusions

With a suggested retail of \$824, the Para-Ordinance Companion is right in the middle of the competitive price range and a good buy. Measuring 5 inches high, 7 $\frac{1}{4}$  inches long, and weighing 32 ounces, this slim eight-shot .45 auto is well suited to concealed-carry. It has more than adequate accuracy for that purpose and a high order of reliability.

What the Companion brings to the table that its competitors of similar size do not is the double-action only mechanism. Many find this reassuring in terms of safety, peace of mind, and civil liability. It is certainly a manageable gun in accurate rapid fire.

The wise people who carry a gun in harm's way know that in any number of strenuous circumstances, through no fault of their own, a defensive handgun may be dropped or struck. It is imperative, then, to carry a gun that is "drop-safe" — immune to "inertia fire" from such an impact. Like all complete pistols made by Para-Ordinance, the Companion LDA is drop-safe, factory-fitted with the "Series '80" internal firing-pin lock licensed from Colt.

For many who liked everything about a compact 1911 .45 auto for self-defense except the cocked-and-locked part, the Para-Ordinance LDA Companion is not only a viable alternative, but a desirable one.



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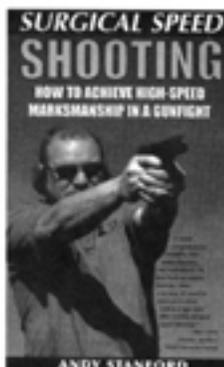
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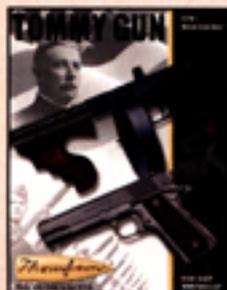
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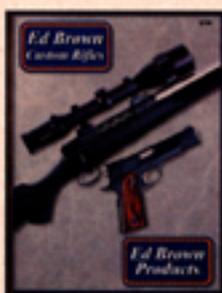
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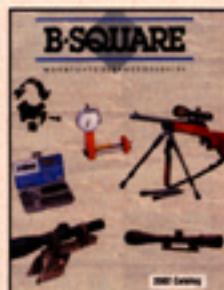
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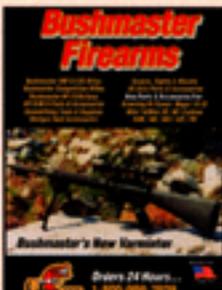


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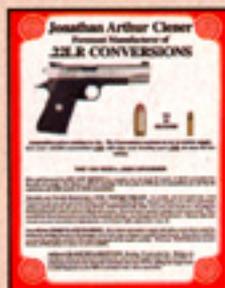
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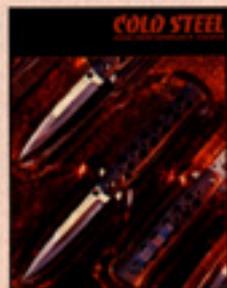
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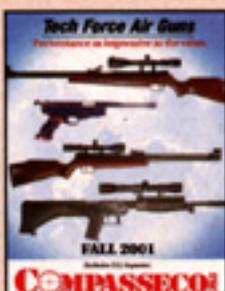
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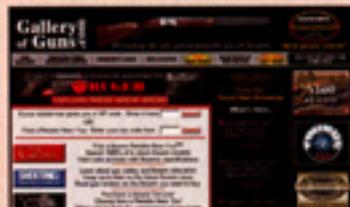
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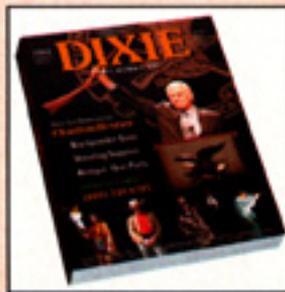
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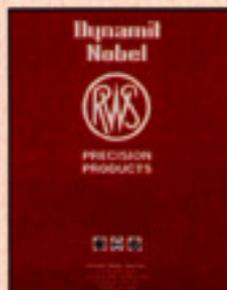
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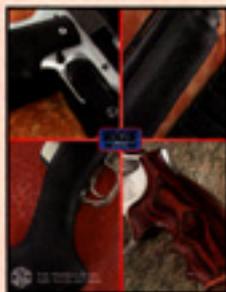
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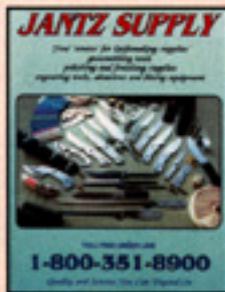
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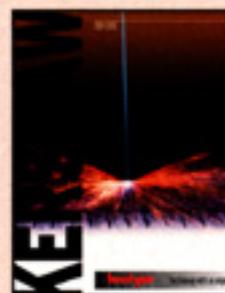
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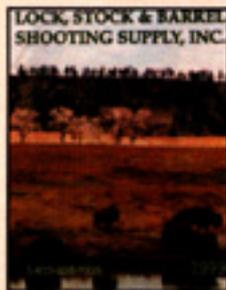
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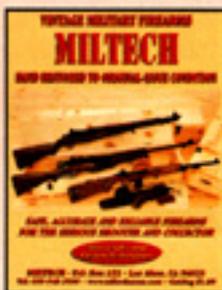
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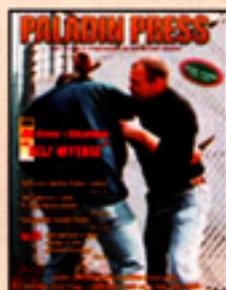
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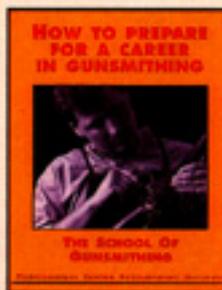


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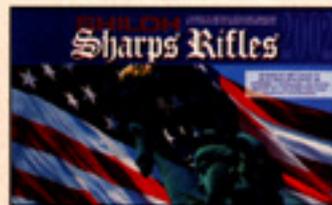
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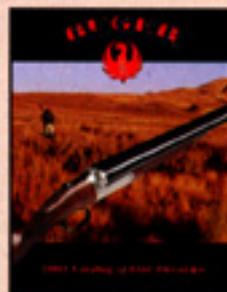
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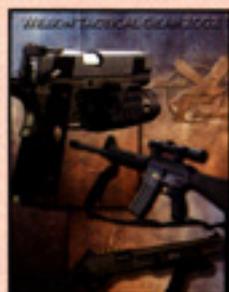


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can also be adjusted for horizontal and vertical pitch. This allows operators to optimally position the trigger for their individual finger reach. Trigger travel is very short, with no over-travel. A safety notch is designed in to prevent a discharge from occurring after a sudden impact. The manual safety is a Garand-style and located to the front of the trigger inside the triggerguard. I feel that this is the optimum position with this type of pistolgrip design. Otherwise, a conventionally located thumbsafety would be very difficult to manipulate, especially if prone in a firing position. Applying the safety locks the trigger mechanism, blocks the firing pin, and locks the bolt. Interestingly, the trigger mechanism can be removed without having to disassemble the rifle.

### The Right Gear For A Great Rifle

I received a TRG-22, bipod, muzzlebrake and quick-release scope mount for testing. The quick-release scope mount attaches securely to the rifle's receiver and allows operators to easily replace their day optics with a nightvision device by simply throwing a lever. Seeing as this was a sniper rifle and not a target or varmint rig, I mounted an I.O.R. Valdada 2.5-10x42 Tactical scope in the Sako mount. Featuring German glass, Zeiss lens coatings, an etched Mil reticle and repeatable adjustments, I.O.R.'s scope was a perfect match. Onto the scope tube, I mounted an Allison Tool Pathfinder Ballistic Chart. This handy little gem does away with taping ballistics cards to the butt-stock. Operating like a tape measure, it contains elevation and windage data out to 1,000 yards. The steel bipod attaches/detaches easily and simply slides into a rectangular slot in the front of the forend where it locks in place. The legs adjust for height, and the whole unit swivels for uneven terrain. The muzzlebrake is a large three-chamber unit that screws onto the muzzle and then is locked in place via a set screw. If an operator doesn't wish to utilize the brake, a muzzle nut protects the barrel's threads. Also available from Sako are back-up iron sights and a sling. The sling is designed to be used either as shooting sling for support or biathlon-style, which allows operators to carry the rifle on their back like a backpack with a strap over each shoulder.

Sako's TRG-22 is by no means cheap. So I was interested in seeing just what you got for your hard-earned money. To evaluate the rifle, I carried it in the field and used it to engage targets at both known and unknown distances. For testing purposes, I utilized four well-respected Match loads. The first was Sellier&Bellot's 168-grain HPBT load. Manufactured in the Czech Republic, this ammunition is monotonously consistent. My other two favorite .308 Match loads are PMC and Winchester's 168-grain HPBT loadings. These are both proven performers in my book. For long-range use, 175-grain bullets have become very popular, so I included Black Hills Match loading in this weight as

well. Lastly, I included some British surplus 147-grain Radway Green FMJBTs.

### Road Test

A sniper rifle needs to be capable of much more than just shooting small groups, so I didn't simply test it off the bench. Instead, I zeroed the rifle at 300 yards and proceeded to become familiar with it while shooting prone off the bipod. Magazines loaded easily and locked securely in place with a simple upward push. Working the bolt, I was impressed by the small amount of force required to open it, how smoothly rounds fed, and the action's overall feel. In a word, it's "slick." The safety is easily manipulated, either ON or OFF, from a firing grip. Take a breath, let half out, settle the I.O.R.'s crosshairs, squeeze lightly on the trigger, and a baseball size rock disappears off the 300-yard berm. Groovy.

Recoil is extremely light thanks to the effective muzzlebrake. There is so little scope movement during recoil that you can actually spot your own hits. Shooting it side by side with a Sako .223 Varmint rifle with 68-grain Match loads shows the TRG-22 to actually move less under recoil. A flick of the wrist sends an empty case spinning through the air and loads a fresh round into the chamber. It's an impressive machine.

Firing on widely spaced multiple targets as fast as possible brought the Sako into its own. Here the amount of thought and work that went into every component of the Sako design became apparent. The wide-footed and low-slung bipod allowed easy traversing from target to target. The muzzlebrake kept muzzle rise and recoil to a minimum allowing fast follow-up shots. The action requires very little effort, and its short throw makes it extremely quick. The stock design is both comfortable and ergonomic. Due to its lack of recoil and extremely fast action, I feel that this rifle, in skilled hands, is probably as fast or faster than a semiauto for precision fire from the prone. Getting up out of the dirt and firing offhand showed how well-designed the stock was. Even head shots on an IPSC target were easily made firing offhand at 300 yards. Later, during a night fire, I checked the weapon's flash signature. While evident due to the muzzlebrake, it was less than expected.

Having a feel for the Sako, I came down eight 1/2 MOA clicks on the I.O.R. Tactical scope and proceeded to fire for groups at 100 yards. All groups were fired prone, from the bipod. During testing two five-shot groups were fired, then the bore brushed and allowed to cool. A total of four five-shot groups were fired with each type of ammunition. Here the rifle proved my better. The Sako consistently put three rounds into .2 to .3 inch with all five coming into .5 inch at 100 yards. Top performance came with Sellier&Bellot's Match load, which averaged .42 inch. Remember, this is an out-of-the box rifle firing factory ammunition, and these are five-shot, not three-shot, groups we're talking about. To put it mildly, this

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rifle shoots! To be honest, though, I was not surprised. Sakos have a reputation for being superbly accurate. As an example, I have a friend who's stock TRG-21, using handloads, has put 10 rounds into 4.25 inches at 800 yards. I would expect similar performance from this rifle.

With a retail price of \$2,415, the TRG-22 is not for everyone. However, for someone interested in a serious rifle that's both well-engineered and well-made, the Sako deserves a look. A custom long-range rifle will cost you at least this much from any of the well-known builders, and

you won't have to put up with the 2-year wait. Me? Well, to be honest, I sold my faithful Remington 700PSS to help buy a new TRG-22, and I couldn't be happier.



### REFERENCES:

Lapin, Terence W.. THE MOSIN-NAGANT RIFLE. North Cape Publications, Tustin, California. 1998.

Taylor, John D.. MINUTE OF ANGLE. World Publishing Corp., Apache Junction, Arizona. Volume 1 Issue 4 July 1999.

Walter, John. RIFLES OF THE WORLD. Krause Publications. Iola, WI. 1998.

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## BENCHREST LOADING

*continued from page 47*

critical eye, we've got to ask one question: How important can this be? Is the thousandth of an inch of carbon enough to make any difference at all? Objective tests don't show it. Well, what about the accumulation over time? Doesn't happen. This is one of those self-limiting phenomena that cause concern where none is needed.

### Neck Turning

Neck turning is the singularly most important loading technique to improve accuracy. There are two ways to do it. Most true benchrest rifles have chambers that have *tight necks* which require the case neck to be turned to a specific dimension. Most of the time a standard case won't even begin to chamber otherwise. The second technique is to simply turn the neck enough to make it more uniform in diameter. When you turn a neck, you'll almost always see the cutter touch one side before the other. This happens with even the very best brass because it is difficult — since we are working with a malleable metal — for it to be made absolutely, precisely round every time. This isn't a criticism, it's just a fact.

When a cartridge is fired, pressure builds until it forces the bullet out of the case neck and into the leade of the rifling. Now if the case neck is thicker on one side that area will contact the chamber neck sooner and impart a tiny

irregularity to the bullet's movement. If there is an overwhelming requirement in the search for accuracy, it is that everything happens the same way every time. Anything that inhibits uniformity is going to have an impact. Neck turning is a lot of work and requires some special equipment. There is no reason or need to turn the necks of cases fired in your average hunting rifle, but if you shoot varmints or just like to try to shoot tight groups, neck turning can have a dramatic effect.

It is easy to jump to wrong conclusions about accuracy, and we have to try to reach statistically valid conclusions. If one load shoots a group that's .5 inch and another does .45 inch, we can't say with authority which load is better — or worse — based on one group. Now if we take the average of 10 groups, that makes the result much more significant. Some time ago I set out to see if I could measure the effect of neck turning. I chose a Remington 700P in .308 Winchester that I knew well. With good ammo it would shoot groups that averaged around .75 inch. My experiment involved 100 once-fired Federal cases that had been shot in the rifle. I carefully full-length sized them and trimmed them to a constant length. Then 50 had their necks turned, just sufficiently enough to make them uniform. Adjusting the cutter was done by using some spare cases and carefully observing the turning of a number of them so that the cutter removed the least amount of brass possible to accomplish the goal. With some cases, brass was removed all the way

around the circumference, but on others the cutter might barely touch one side. With the cutter finally adjusted and locked down, I went to the test batch of cases and turned those 50 necks. And just to do the job right, I also went through the uniforming, cleaning and deburring of primer pockets and flash holes on all 100 cases.

The ammo was then loaded using a recipe that I knew to be accurate using the Sierra 168-grain Match King, Federal Match primers and IMR 4064 powder. Seating depth was carefully controlled by using a Redding Competition seating die to a length that left the bullet .02 inch off the rifling. This had been established as ideal by earlier testing. For the purpose of the test, I mounted a Leupold 36X target scope.

The shooting was done in a ritual fashion. Two fouling shots were fired followed by two five-shot groups. The rifle was cleaned and cooled and the ritual repeated until I had 10 five-shot groups. The neck turned cases gave a 30 percent reduction in group size. Now folks, *that* is significant. Of course those results apply only to that one rifle with that one load, but I have yet to find a situation where gentle neck turning did not help.

### Seating Depth

We often set our seating die to the overall length published in the loading manual and go shoot. And for the most part that's just fine. But if we have a rifle that is capable of

good accuracy, we can almost always make it shoot better by seating the bullet out closer to the rifling. And the only way we can do that is to use a tool that allows us to determine a precise measurement with each type and make of bullet we want to use. They are not all the same. This measurement must be made on the bullet ogive where it first contacts the rifling.

With few exceptions accuracy will be improved by seating the bullet closer to the rifling. The problem is that there are no rules for this. Some guns will shoot best with the bullet touching the rifling. Others won't. It is a trial-and-error process. If we use factory ammo as a starting point and measure how far away the bullet is from the rifling, we can design a simple test to see what happens when we move it closer. All we really need to do is divide the difference between the length of factory ammo and the length needed to just touch the rifling into reasonable increments and load some ammo with seating depth as the only variable. We need to remember that making the bullet touch the rifling can increase pressure, so I never go that far without backing off on loads a bit. For the initial work, I'll just load five rounds (three for rifles that heat up quickly) and shoot groups. As a general rule, the small calibers such as .22 or 6mm will do best with the bullet very close to the rifling, but larger ones — like the .30s — may work best with the bullet .02 inch or more off the rifling. It is very much a trial-and-error process, but it is one where the results will be obvious pretty quickly.

### Neck Sizing

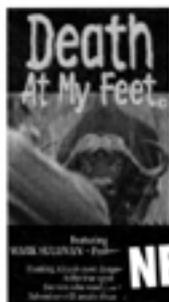
While neck sizing may have a beneficial effect on accuracy, it definitely will increase case life and reduce the need for trimming. The limitation is that it cannot be done for semiautomatic or pump-action rifles, because cases that aren't full length sized probably won't feed reliably. I have become fond of the bushing style of neck sizing dies because you can more carefully control the amount of sizing you do. Standard neck sizing dies are great, but the bushing dies give a degree of flexibility not otherwise available. Again, by trial and error you can find a sizing diameter that gives the best accuracy with the least amount of working of the brass. I like Redding's Competition bushing dies because they also have a micrometer adjustment for the length of the neck you size. I've found that you really don't even have to size the whole neck as long as you size enough to ensure good concentric seating of the bullet.

So are any of these techniques applicable to someone other than a benchrest shooter? Very much so. Determining the optimum bullet seating depth will help any rifle as long as we don't run into making the round too long for the magazine. Bolt actions can almost always benefit from neck turning if

*continued on page 74*

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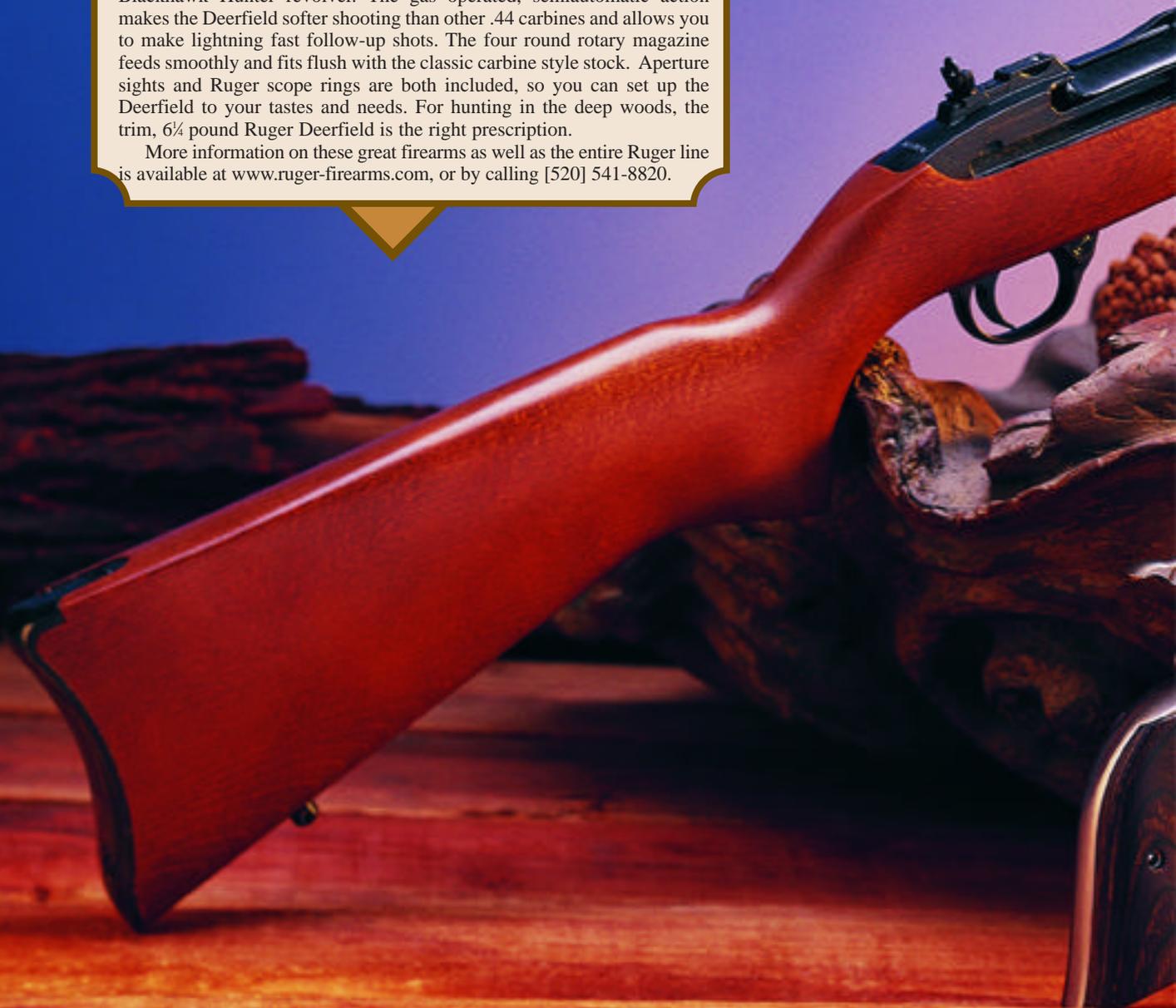
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The Ruger Deerfield carbine is an accurate, compact woods gun that will accept the same hard-hitting ammunition that you use in your Super Blackhawk Hunter revolver. The gas operated, semiautomatic action makes the Deerfield softer shooting than other .44 carbines and allows you to make lightning fast follow-up shots. The four round rotary magazine feeds smoothly and fits flush with the classic carbine style stock. Aperture sights and Ruger scope rings are both included, so you can set up the Deerfield to your tastes and needs. For hunting in the deep woods, the trim, 6¼ pound Ruger Deerfield is the right prescription.

More information on these great firearms as well as the entire Ruger line is available at [www.ruger-firearms.com](http://www.ruger-firearms.com), or by calling [520] 541-8820.





TO ENTER CONTEST: Use A postcard (no envelopes, please) and follow sample. Send to GUNS Magazine, GOM APRIL, P.O. BOX 639033, San Diego, CA 92163-9033. Entries must be received before MAY 1, 2002.

Limit one entry per household.

**QUESTION OF THE MONTH:**

How important is editorial coverage of new products in GUNS Magazine?

- (A) Very important
- (B) Moderately important
- (C) Not important

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**CIRCLE ANSWERS TO QUESTION OF THE MONTH:**

(A) (B) (C)

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**QUESTION FOR INFORMATION ONLY; ANSWERS HAVE NO BEARING ON YOUR CHANCE OF WINNING. WINNERS CHOSEN BY RANDOM DRAWING.**

To protect the privacy and security of winners, their names will NOT be made public.  
Contest void where prohibited by law. Winners must undergo a background check and comply with all other federal, state and local laws.  
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No manufacturer in the world has won more Olympic competitions, and no other manufacturer but ANSCHÜTZ understands the intricacies of building accuracy into .17 caliber rifles. The Olympic and World cup medals prove it. So it was natural for ANSCHÜTZ to build the world famous 1700 series sporters in the hot new .17 HMR. Olympic winning accuracy. ANSCHÜTZ quality and performance are now available in the new model 1717 D Classic Sporter and Heavy Barrel.

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**Accuracy International's AWP...**



the rifle has the accuracy potential. I really don't see the need to do this for a rifle that will only be used to hunt deer at a reasonably close range, but the groundhog hunter can see the benefit.

But, as is true with most good things, there is a price. You will need a few specialized tools. Simple cutters to do the primer pocket stuff are inexpensive, but it will take a bit more cash to get the stuff you need for the two most important efforts: neck turning and determination of overall length. In order to do that accurately, you need a comparator. My favorite system is from Stoney Point. With it, you use a modified cartridge case to insert a bullet into the chamber of your rifle until it touches the rifling. With the comparator, you can then measure the overall length with that bullet. This process must be repeated for each different bullet.

Neck turning is done with a relatively simple tool, and if all you want to do is true up the necks a bit, it doesn't need to be too sophisticated. But if you want to go to a specific neck diameter, it's probably better to get one with precise adjustments. The one thing you'll notice if you turn very many case necks is that your hands and wrists often wear out before you're through. Manually turning necks can be a literal pain. A simple shell holder that lets you use a cordless screwdriver is a real help. There are more than a few sources of this type of gear, but Sinclair International is a great place to start. Its catalog and instruction book go into far more detail than I can here and is pretty much a one-stop shop for everything the precision shooter needs.

The good news is that this case preparation works only needs to be done once. All of the work on primer pockets can be done either with hand tools or motorized with tools like the RCBS Case Preparation Center. Neck turning can be done with hand tools, accessories for case trimmers, or sophisticated stuff more suitable for production work. Even though I'm not a big believer in cleaning primer pockets, that is easily done with a simple tool, so it really doesn't add much time to the normal loading routine. The bottom line here is that the cartridge case is a vital part of the shooting equation and there are things we can do to make it work even better.



**FOR MORE INFORMATION:**

**Sinclair International**  
2330 Wayne Haven St., Dept. G  
Fort Wayne, Ind. 46803  
[260] 493-1858  
www.sinclairintl.com

## HANDLOADING BUDGET

continued from page 39

who want to begin with a more traditional bench-mounted press, Lyman offers the Crusher II Pro Kit with the Crusher II heavy-duty press, Pro 500 Scale, case lube kit, loading block, powder funnel, primer tray, powder scale, and also a copy of the Reloading Handbook. Dies must be ordered separately with all Lyman Kits. This handbook offers a great variety of information for both beginners and experienced reloaders, including data using both cast and jacketed bullets as well as a variety of different powders. Lyman also offers an introduction to reloading video that can help answer a lot of questions as well as prevent potential problems.

**REDDING-HUNTER:** Redding offers a complete line of reloading equipment, including case forming dies, special dies, powder measures designed for the serious competitive shooter, and the excellent SAECO line of bullet molds. The three basic presses offered are the single-stage Boss, the superstrong and extra-large Ultramag, and the heavy-duty Turret with six die stations, which allow you to set up dies for three bottleneck cartridges or two straight-wall cartridges at the same time. Redding's Boss Pro-Pak Kit consists of The Boss Reloading Press (a solid cast-iron "O" frame press), primer catcher, Model 2 Powder and Bullet Scale, powder trickler, case lube kit, deburring tool, case prepping kit and powder funnel. And since Redding does not publish a reloading manual, its kit comes with a copy of the excellent *Metallic Cartridge Reloading*, by Mic McPherson. This should be in every reloader's library anyway.

Most reloading kits offered by manufacturers require that the dies be ordered separately. Not so with Redding, and reloaders have a choice of 29 rifle cartridges or 15 handgun cartridges that can be ordered with the Boss Kit. Redding Premium rifle and pistol die sets are some of the best in the business, and I have been using Redding's Titanium Carbide die sets in both .44 Magnum and .357 Magnum extensively for the past couple of years. They are true precision dies.

**RCBS:** This manufacturer of the "Green Machines" offers a most extensive lineup of reloading presses, including the Pro 2000 progressive press, the RCBS Turret Press, the now legendary Rock Chucker Press, as well as the Reloader Special-5, the Partner, the AmmoMaster and the Piggyback III. I wore out one of the old RCBS Jr. presses, and I wouldn't want to try to figure out how many thousands upon thousands of rounds I have loaded on the Rock Chucker. My "professional" loading bench consists of an RCBS 2000 Progressive setup for Cowboy Action loads for the .45 Colt, .44-40, and .38-40; a

Hornady Lock-N-Load Progressive for .38 Specials and .357 Magnums; three Dillon presses, an AT550 for .44 Magnum and .44 Special; a Square Deal for .45 ACP, and a AT500 for precision rifle reloading. I still find myself, however, using three single-stage presses extensively: the Rock Chucker, the Hornady Lock-N-Load, and the Lyman Crusher II for dozens of reloading chores. Remember, I started with the #310. However, that was 45 years ago, and the reloading bench just seems to get larger and more fully equipped decade by decade. One who starts reloading should expect to experience the same situation, if perhaps not on as large a scale.

For the entry-level reloader on a budget, RCBS offers two reloading kits that are of special interest. There is the Partner Press Reloading Kit with the budget-sized Partner Press, RC-130 Scale, loading block, case lube, primer tray, deburring tool, powder funnel, and the excellent Speer Reloading Manual. Moving up a stage, we come to the slightly larger and stronger Reloader Special-5 Press Kit, which in addition to the Reloader Special-5 Press also includes the 5-0-5 Scale, loading block, case lube kit, primer tray, powder funnel, deburring tool, and, of course, Speer Reloading Manual #13. In either case, dies must be ordered separately.

### Essential Equipment

Whatever equipment you choose to begin reloading with, all of the modern offerings are very good and will get the job done. There are, however, some other essentials. First and foremost are reloading manuals. Yes, that is manuals with an S. I recommend that every reloader — whether brand new to the science or with a half-century of experience — have at least three loading manuals and READ them. Manuals from Hornady, Nosler, Sierra and Speer all provide loading data with various powders using their particular bullets. The Accurate Arms manual contains information with its line of powders and several brands of bullets. And Hodgdon's not only showcases its powders, but it also gives data on other brands, with both cast and jacketed bullets. Lyman's manual carries data on both its cast bullets as well as commercial jacketed bullets with several powders. And both Oregon Trail and RCBS give shooters cast-bullet information with machine-cast and home-cast bullets, respectively. Richard Lee's book *Modern Reloading* is a large volume with 11 how-to-do-it chapters as well as extensive reloading information gleaned from all the other manuals. This is another book that should be on every reloader's library shelf.

Everyone starts reloading with the same idea in mind — to save money. Don't count on it! If you shoot the same amount of reloads as you have been doing with factory

ammo, money will be saved. But surely at least 90 percent of those who start reloading actually spend more. This is simply because they not only shoot a whole lot more, but they also continually add equipment to their reloading bench.

### Satisfaction

About 50 years ago — and for handgun hunters, as little as 20 years ago — it was necessary to reload to get the quality of ammunition desired. That is no longer true. We now have a great assortment of excellent factory-loaded ammunition to choose from for just about any purpose, including handgun hunting. However, there remains the great personal satisfaction that comes from winning a match, taking a trophy animal, or simply nailing yonder tin can with personally loaded ammunition. This can come from ammunition loaded on the most sophisticated of equipment, the simplest hand-held tool, or anything in-between.

In an article of this size and scope, I am able to just barely scratch the surface of what is available for all types of reloaders. Each and every manufacturer's catalog is a virtual shopping mall of reloading equipment. For further information, contact the manufacturers listed below.



#### FOR MORE INFORMATION:

##### Dillon Precision Products

[800] 762-3845

www.dillonprecision.com

##### Hornady Manufacturing

[308] 382-1390

www.hornady.com

##### Lee Precision

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##### Lyman Products

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[800] 22-Lyman

##### RCBS

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www.rcbs.com

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www.redding-reloading.com

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www.midwayusa.com

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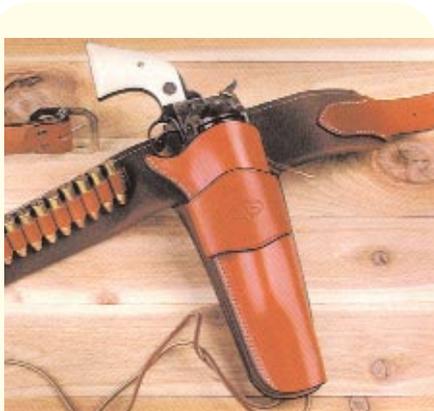
## New 8mm MatchKing From Sierra Bullets

Sierra announces the addition of the new 8mm, 200-grain to its popular line of MatchKing bullets. The 8mm HPBT measures .323 inches in diameter and combines optimum bullet configuration with extremely tight quality control. Designed for the 8x57 Mauser, it's also a superb long-range match bullet for larger 8mm's. This bullet features a 13-degree boat tail, 7.28 ogive and a bearing surface of nearly .400 inches. Contact Sierra, P.O. Box 818, Sedalia, MO 65301, telephone: [660] 827-6300, FAX: [660] 827-4999, e-mail: sierra@sierrabullets.com, Website: www.sierrabullets.com



## New Antelope Boot From Wolverine

The new Antelope hunting boot from Wolverine is designed specifically for hunters stalking big game in close-range situations. Available in both 6- and 8-inch models for men and women, the non-insulated Antelope features a rubber lug outsole and camouflage wrapped EVA midsole. The upper is a combination full-grain Havana brown leather and 1000-denier Cordura in a choice of Hardwoods green mini print or Maxi brown. The waterproof Gore-Tex Supprescent lining enhances the boot's effectiveness. Contact Wolverine, 9341 Courtland Dr., N.E., Rockford, MI 49351, telephone: [616] 866-5500, FAX: [800] 845-4865, e-mail: communications@wwwinc.com, Website: www.wolverinebootandshoes.com



## The Duke Holster Rig From Hunter Co.

The Duke Model 1086 holster for large frame single-action revolvers is crafted from top-grade bridle leather. The single loop cartridge belt is made of supple chap leather for a perfect fit and maximum comfort. The belt also features a hidden compartment for currency. Both the holster and belt come in chestnut brown color. Available for both .38 and .45 caliber. Contact The Hunter Co., 3300 West 71st Ave., Westminster, CO 80030, telephone: [303] 427-4626, FAX: [303] 428-3980, e-mail: debbiehunter@worldnet.net, Website: www.huntercompany

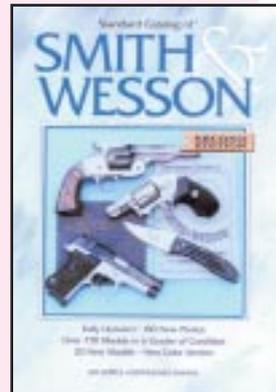
## New .22LR Cartridges From Wolf Performance

Wolf Performance has a new line of .22 Long Rifle cartridges in Match Gold, Match Extra and Match Target grades. The combination of Vihtavouri powder, premium priming and precision loading delivers extreme consistency and precise accuracy. Contact Wolf Performance Ammunition, 7235 Bermuda Rd., Suite E, Las Vegas, NV 89119, telephone: [702] 837-8506, FAX: [702] 837-9250, e-mail: info@wolfammo.com, Website: www.wolfammo.com



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The Standard Catalog of Smith & Wesson 2nd edition is now available from Krause Publications. The comprehensive softcover 320-page reference book lists and prices nearly 800 S&W firearms and accessories. Readers can track S&W product codes to learn original configurations, year of manufacture and special features. A 15-page color section showcases rare, collectible, engraved and semi-custom models. \$34.95, plus \$4 shipping & handling. Contact Krause Publications, P.O. Box 5009, Iola, WI 54945-5009, telephone: [800] 258-0929, Website: www.krausebooks.com



## Comfort Grip Folder From Meyerco USA

The Comfort Grip one-hand opening folding knife from Meyerco USA comes with a lifetime warranty. The 3 1/4-inch blade is constructed from 420 stainless steel. The knife measures 7 1/4 inches overall and weighs 2.68 ounces. Contact Meyerco

USA, 4481 Exchange Service Dr., Dallas, TX 75236, telephone: [214] 467-8949, FAX: [214] 467-9241, e-mail: meyerco@usa.com, Website: www.meyercousa.com



## MagPro Powder From Accurate

Accurate Arms' new MagPro smokeless powder is designed specifically for the current generation of short magnum rifle cartridges. MagPro produces optimum velocities at nearly full capacity with an unsurpassed burn rate for maximum efficiency. The uniformity of shape delivers the flow required for progressive reloading machines. Contact Accurate Arms Co., 5891 Hwy 230 West, McEwen, TN 37101, telephone: [931] 729-4207, FAX: [931] 729-4211, Website: [www.accuratepowder.com](http://www.accuratepowder.com)



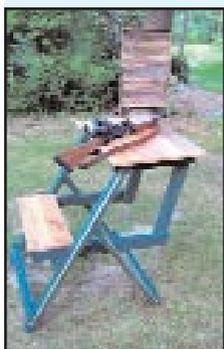
## The "Secret Ninja" From Katz Knives

Katz Knives announces the arrival of the new Kagemusha, which translates from Japanese to "Secret Ninja." The 3.5-inch model is available with either a plain blade or a 60 percent serrated edge and comes with a pocket clip. The 3-inch model comes with a plain blade only. Both knives feature stainless steel construction, scaled Kraton handle, one-hand opening function and sturdy liner lock. Contact Katz Knives, P.O. Box 730, Chandler, AZ 85224-0703, telephone: [480] 786-9334, FAX: [480] 786-9338, e-mail: [katzkn@aol.com](mailto:katzkn@aol.com), Website: [www.katzknives.com](http://www.katzknives.com)



## New Gun Bench From RMS

The new portable Gun Bench provides a stable and reliable rest for target and long-range shooting. Designed for both right and left handed shooters, the Gun Bench



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hunter green satin paint. The hardware consists of three-inch heavy-duty hinges and dual safety latches. Contact Ric Smyers at RMS, 255 Cornell Rd., Everett, PA. Telephone: [814] 652-5579

## New Mini-Predator Binocular From Steiner

Pioneer Research is importing the new Steiner ultra-light Predator binocular from Germany. The 10x26 Predator weighs less than 10 ounces and fits easily into a hunting vest or field jacket pocket. The green-tinted lens coating filters the indistinct colors of haze and foliage and amplifies the visibility of colors common to birds and game animals. Contact Pioneer Research, 97 Foster Rd., Ste.5, Moorestown, NJ 08057, telephone: [856] 866-9191, FAX: [856] 866-8615, e-mail: [info@pioneer-research.com](mailto:info@pioneer-research.com), Website: [www.pioneer-research.com](http://www.pioneer-research.com)



## Osprey Miniatures From Al Mar Knives

The miniature Osprey is the latest addition to the Al Mar Knives family. The Osprey has the famous Al Mar Front Lock mechanism and such traditional elegant design features as stainless steel bolsters and brass liners. The blade measures 1.6 inches and an overall open length of 4 inches. Handle options include black Micarta, Mother of Pearl, Abalone shell and Stag horn. Contact Gary Fadden at Al Mar Knives, P.O. Box 2295, Tualatin, OR 97062, telephone: [503] 670-9080, FAX: [503] 639-4789, e-mail: [garyfadden@msn.com](mailto:garyfadden@msn.com), Website: [www.almarknives.com](http://www.almarknives.com)



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## CAMPFIRE TALES

continued from page 22

kids while K'Lev was on duty. Every family should have a K'Lev while the kids are growing up.

As happened with all families, our kids grew up, left the nest and started their own families, all of which have dogs now, and we were without dogs for the first time in our lives. This lasted about 15 years before I decided we needed another dog. In fact, I had always dreamed of having not just one large beautiful purebred, but a matched pair. So when I found out that a fellow I knew raised Malamutes, I made arrangements to purchase two male littermates. From the time they were 6 weeks old, Red and Wolf have been part of our family. Wolf is a perfect name for dogs that resemble those magnificent beasts. However, you might wonder at the name Red. All I can say is my 2-year-old grandson named them, and he must have had his own reason for naming a tan and white dog Red.

I knew two puppies would be more trouble than one puppy, and I expected double trouble — but not all the trouble I went through for the first couple years. No matter what type of fencing I used, they would dig out from under it. Wolf got out once and was hit by a truck, and I thought we would surely lose him that time, but he came through. We had to put an electric wire all around the fenced-in backyard to keep them from digging out. Another time, Wolf bit down on the cord to the electric saw and he was lying on his side shaking when I turned the power off.

Now they are mature dogs and the best possible companions. As a writer, I spend much of my time alone in the company of these two beautiful animals. I would not want anyone to record me talking to them during the day. They are extremely intelligent animals, so I'm sure they understand everything I say. It's amazing to me how devious they can be and what great lengths they go to when playing tricks on each other, just like a couple of kids. They are also a great "help" while I am taking pictures, always lying right there in the way, forcing me to step over them at every turn, and they do make a large lump to step over as they stretch out on their side totally relaxed. It is hard to get perturbed at dogs that simply want to be with me while I am working. Malamutes are not supposed to bark, but somehow Red learned how. He only barks to tell me he is hungry. They also let me know they're hungry when I'm typing. They get on each side of me and push my arms away from the keyboard. I need the breaktime anyhow.

They are great musicians! Well, I think they are. They often revert to their ancestry and howl beautifully in unison. At the other end of the spectrum, they somehow have the mistaken idea that they are lap dogs and try to put their 130 or 140 pounds in my lap. Normally, they are the most mellow of animals. In spite of that, again just like kids,

they sometimes get on each other nerves and the fight starts. Over the past 8 years, I've had to wade into them more than once with a large board swinging to break them up and keep them from really hurting themselves.

I like to think that these are my dogs, but the reality is that their major vocation in life is protecting my wife. Wherever she is, there they are. When we eat, one is under the table in front of her feet and the other is lying behind her chair. They do not like to go into our bedroom as I feel somehow they think that they are too confined in that space. But if my wife is sick and home in bed, Red will be lying up on the bed beside her and Wolf will be lying directly below her on the floor. They are totally devoted to her, especially to her safety and well-being. I feel sorry for anyone that would try to harm her in their presence. Somehow, she does not believe that. I've tried to explain to her that these dogs are smart enough to know when they need to be aggressive and when they don't.

We were traveling through Canada after having taken an Alaskan cruise and I noticed that our bus driver was wearing a bolo tie with a scrimshawed Malamute inscribed. He turned out to be a retired Mountie. When I asked him about the Malamute, he choked up and related to me that he had just been forced to put his longtime loyal companion down the week before. We talked about Malamutes in general and what great dogs they were. I mentioned to him that my wife thought they were so mellow and gentle that they would never protect her. He smiled and said his dog had the same gentle disposition, except for one occasion.

He had gone on vacation, leaving the dog in the house. A neighbor placed fresh food and water in through a little swinging door on the closed in back porch every morning. This was done the first morning, and when a neighbor came back the second morning, neither food nor water had been touched. The neighbor figured the dog was simply lonely and not eating. However, when the same thing appeared on the third morning, the neighbor called the police.

The police arrived, entered the home, and found the dog in the kitchen sitting in front of the refrigerator. He was not alone, and he certainly wasn't hungry. However, the intruder who had taken refuge on the top of the refrigerator begged the police to get him away from that vicious dog.

Yes, most dogs are extremely intelligent and understand the situation. Red and Wolf are very powerful, with extremely strong neck and chest muscles and jaws that can pulverize the largest of bones. My wife may think that they are too gentle to be of value in protecting her. I know better. I hope and pray we never have to find out for sure which one of us is right.



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# Got Dogs?



I feel so very, very badly for kids growing up today. They are so disadvantaged compared to those of us who grew up in the '30s, '40s and '50s. Oh, they do have big-screen color TVs with the choice of hundreds of channels, sophisticated computers that can do almost anything for them, and games — endless electronic games — in which children are mental spectators instead of physical participants. Kids of today have been robbed of the joy of a Saturday afternoon matinee at the movies with two cowboy features, a cartoon, popcorn and pop at prices that didn't bankrupt the family budget. Kids never seem to play outside anymore. When I was in grade school, you only went home to eat and to sleep. The rest of the time, no matter what the weather, you had wonderful things to do outside.

Probably the greatest advantage my generation enjoyed were the dogs. Today, so many kids live in areas where they can't even have a puppy, let alone a full-grown monster of a dog. Fifty years ago, all kids had a dog that was an important part of their lives. For myself, there was Spike the little beagle; Ike, the Heinz variety hound of hounds; and the beautiful white Snowball. When I was married and the kids came along, there was Rusty, the Irish Setter, who often shared his food dish with our firstborn as she learned to crawl around the floor. Then there was Frosty, who we rescued from a mountain stream; and Pudda, the little Terrier who rode beside me for 5,000 miles as we went across the country and back. But above all, there was K'Lev. This huge animal was half German shepherd and half black Labrador. He was the best animal I have ever seen with kids. They could do absolutely anything to him and he would just lie there. But pity the poor soul who would try to do anything to those kids. Even harsh words would put K'Lev in protective mode, and I always had to warn visitors to not even think about correcting their own

*continued on page 81*





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(Feb. 2001, Guns & Ammo)

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(Dec/Jan, 2001 Handloader)

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(Feb. 2001, American Hunter)

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