



WIN A FREE COLT NEW FRONTIER **.44 SPECIAL** AND MORE!

GUNS MAGAZINE

GUNS

\$4.95
OUTSIDE U.S.
\$7.95
JANUARY
2012

AWESOME AR
LES BAER
MATCH
.308

BONUS!
LIGHTS & HI-TECH

SPECIAL!
ACADEMY OF
EXCELLENCE
AWARDS

LEGEND RETURNS
WINCHESTER 94
.30-30 & .38-55

BENELLI
SUPER VINCI
12-GAUGE 3-1/2"

AR POWER BOOST
WILSON COMBAT'S
NEW **7.62x40**



IT TAKES MINUTES FOR
A THREAT'S EYES TO
RECOVER AFTER BEING
BLINDED BY THE NEW
Z2-S WITH TACTICAL
STROBE. IT'LL ONLY TAKE
YOU TWO SECONDS TO
DRAW YOUR WEAPON.



Blinding a threat gives you a huge tactical advantage. The new Z2-S CombatLight® delivers a massive 160 lumens of output with two hours of runtime, a disorienting tactical strobe option, and the ability to discern friend or foe at greater distances. With a high-efficiency LED and Mil-Spec anodized aluminum body, it's virtually unbreakable. The CombatGrip is ideal for flashlight/handgun techniques even with gloved or wet hands. The beam shaped by its micro-textured reflector enhances peripheral vision. And the tailcap switch gives you instant, intuitive access to the strobe option—just press rapidly three times in a row to switch from manual momentary-on operation to automatic strobe—because having to remember a secret handshake when your life is on the line, sucks. Dominate, prevail.

SUREFIRE®

XD SUB-COMPACT POINT & SHOOT ERGONOMICS™



THE 9MM SUB-COMPACT COMES WITH A
13 ROUND FLUSH FITTING MAGAZINE™
AND A 16 ROUND MAGAZINE WITH
XD GEAR® MAG X-TENSION™ (USPAT.7191556)

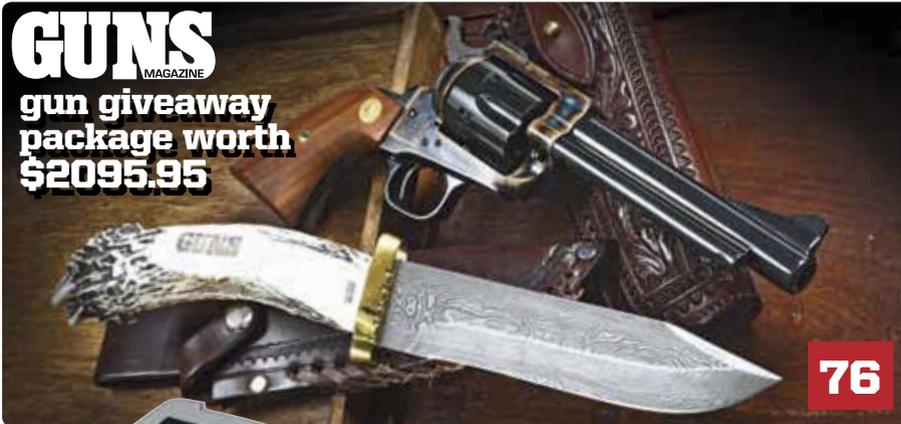
1.800.680.6866
WWW.SPRINGFIELDARMORY.COM

GUNS

MAGAZINE

JANUARY 2012

Vol. 58, Number 1, 672nd Issue



COLUMNS

- 6** CROSSFIRE
LETTERS TO THE EDITOR
- 8** RANGING SHOTS™
CLINT SMITH
- 12** RIMFIRES
HOLT BODINSON
- 16** HANDLOADING
JOHN BARSNESS
- 20** HANDGUNS
MASSAD AYOOB
- 22** RIFLEMAN
DAVE ANDERSON
- 24** MONTANA MUSINGS
MIKE "DUKE" VENTURINO
- 26** UP ON ARs
GLEN ZEDIKER
- 62** KNIVES
PAT COVERT
- 64** VIEWS, NEWS & REVIEWS
RIGHTS WATCH: DAVID CODREA
- 78** ODD ANGRY SHOT
JOHN CONNOR
- 82** CAMPFIRE TALES
JOHN TAFFIN

DEPARTMENTS

- 28** SURPLUS LOCKER™
THE SIAMESE MAUSER
HOLT BODINSON
- 32** OUT OF THE BOX™
• **WILSON COMBAT 7.62x40**
MARK HAMPTON
- 34** QUESTIONS & ANSWERS
JEFF JOHN
- 70** QUARTERMASTER
Featuring GUNS Allstars!
THIS MONTH:
• **JOHN CONNOR**
- 72** NEW PRODUCTS
- 74** GUNS CLASSIFIEDS
- 74** CUSTOM CORNER
- 76** GUN OF THE MONTH
- 80** ADVERTISER INDEX



LES BAER AR MATCH .308



40



56

FEATURES

36 THE SUPER VINCI
Benelli's self-loader delivers.
JOHN BARSNESS

40 AR POWERHOUSE
Les Baer's AR Match .308 delivers power and accuracy.
DAVE ANDERSON

46 ACADEMY OF EXCELLENCE WINNERS
20 years of high standards!
ROY HUNTINGTON

48 THE NEW WINCHESTER 94
The storied rifle returns in both .30-30 & .38-55.
MIKE "DUKE" VENTURINO

52 INCLINE SHOTS
Methods for solving angled shots using the Angle Indicators from Sniper Tools.
JACOB GOTTFREDSON

56 THESE ARE THE NEW "NEW VARMINTERS"
The smallbore Freedom Arms Model 97 revolvers.
JOHN TAFFIN



48

NEW ONLINE EXTRAS!
WWW.GUNSMAGAZINE.COM

Online Feature!
SAVAGE ARMS ACCURACY
SO... THAT'S HOW THEY DO IT!
ROY HUNTINGTON

See what you're missing in the 2012 GUNS Annual!

EXCLUSIVE ONLINE MANUFACTURERS PRODUCT INDEX:
www.gunsmagazine.com/product-index

WARNING: FIREARMS ARE DANGEROUS AND IF USED IMPROPERLY MAY CAUSE SERIOUS INJURY OR DEATH. DUE TO THE INHERENT VARIABLES IN THE RELOADING OF AMMUNITION, BE SURE TO VERIFY ANY PUBLISHED LOADS WITH MANUFACTURER'S DATA. PRODUCTS MENTIONED OR ADVERTISED MAY NOT BE LEGAL IN ALL STATES OR JURISDICTIONS. OBEY ALL FIREARMS LAWS. ALWAYS CONSULT A PROFESSIONAL GUNSMITH WHEN MODIFYING ANY FIREARM. BE A SAFE SHOOTER!

GUNS Magazine (ISSN 1044-6257) is published monthly by Publishers' Development Corporation, 12345 World Trade Drive, San Diego, CA 92128. Periodicals Postage Paid at San Diego, CA and at additional mailing offices. SUBSCRIPTIONS: One year (12) issues \$24.95. Single monthly copies, \$4.95. CHANGE OF ADDRESS: Eight weeks notice required on all changes. Send old address as well as new. SUBSCRIPTION PROBLEMS: For immediate action write GUNS Magazine, Attention: Circulation Dept., 12345 World Trade Drive, San Diego, CA 92128 or call (858) 605-0250. CONTRIBUTORS submitting manuscripts, photographs or drawings do so at their own risk. Material cannot be returned unless accompanied by sufficient postage. PAYMENT will be made at rates current at time of publication and will cover reproduction in any or all GUNS Magazine editions. ADVERTISING RATES furnished on request. Reproduction or use of any portion of this magazine in any manner, without written permission is prohibited. All rights reserved. Title to this publication passes to subscriber only on delivery to his address. The opinions and recommendations expressed by individual authors within this magazine are not necessarily those of Publishers' Development Corporation. POSTMASTER: Send address changes to GUNS Magazine®, ATTN: Circulation Dept., 12345 World Trade Drive, San Diego, CA 92128. Copyright © 2011 by Publishers' Development Corporation.

CROSSFIRE

LETTERS TO GUNS

GUNS

MAGAZINE
THE FINEST IN THE FIREARMS FIELD SINCE 1955

BOARD OF DIRECTORS Thomas von Rosen, CEO; Thomas Hollander, Randy Moldé, Marjorie Young

PUBLISHER Roy Huntington

Editor Jeff JoÚ

Managing Editorial Assistant Stephanie Jarrell

Editorial Assistant Megan Reed

Art Director/Staff Photographer

Joseph R. Novelozo

Art Assistant Jennifer Lewis

Advertising Sales Director Anita Carson

Advertising Sales Assistant Dana Hatfield

Production Manager Linda Peterson

Website Manager Lorinda Massey

Promotions Coordinator Elizabeth O'Neill

CONTRIBUTING EDITORS

JoÚ Taffin, Holt Bodinson, Dave Anderson,

Clint Smith, Massad Ayoob,

Mike "Duke" Venturino

FIELD EDITORS

Sam Fadala, David Codrea, JoÚ Morrison,

Glen Zediker, JoÚ Sheehan, Jacob

Gottfredson, Mike Cumpston, JoÚ Barsness,

Dave Douglas

GUNS Magazine® welcomes letters to the editor. We reserve the right to edit all published letters for clarity and length. Due to the volume of mail, we are unable to individually answer your letters or e-mail. In sending a letter to *GUNS Magazine*, you agree to provide Publisher's Development Corp. such copyright as is required for publishing and redistributing the contents of your letter in any format. Send your letters to *Crossfire*, *GUNS Magazine*, 12345 World Trade Dr., San Diego, CA 92128; www.gunsmagazine.com; e-mail: ed@gunsmagazine.com

Rights Watch

In the Rights watch column, I was amazed at how these judges and officers of the law disregarded our constitutional rights. If I didn't know better I would say they have never even touched the Constitution. They swear to uphold the Constitution but they completely disregard it. Don't get me wrong there are many judges and policemen and women who actually care about our rights; but there are always those few who don't.

Alec Mrochek
via e-mail



A friend of Jeff's is serving at FOB Shindand, Afghanistan, and the amenities are, shall we say, limited. He and his mates desired popcorn, but lacked anyway to make it conveniently. Your humble editor sent a couple of cases of Jiffy Pop, which seems to have gone over quite well. Here, Soldiers with the 838 AEAG, have a Jiffy Pop popcorn party. God bless them. Sarge asked all names be withheld. Want to do something? Go to gunsmagazine.com and check out Connor's November Christmas Gift Guide in the digital editions.

Small Primers

A friend of mine was picking up .45 ACP brass at the range and found Federal and other brands with small primers. He emailed Federal for an explanation, and here is what he got:

"There is no SAAMI spec for primer size for the .45 ACP. To keep costs down we are loading a small pistol primer in the .45 because performance from the large primer to the small primer is the same."

Since this could complicate reloading, and I hadn't seen anything in the press about it (though I admit I can't read it all), perhaps this should be explored and strongly disseminated.

Jan Gerstner
Delafield, Wisconsin

We covered Federal's switch to small pistol primer pockets for use with lead-free primers in our "Ammo" column in May 2005's issue. A reprint is available at www.gunsmagazine.com/archive for

\$.4. It would seem Federal has chosen not to load .45 ACP brass with both sizes of primer—logical for them if a pain for reloaders. Now is a good time to mention it again. Thanks!—Editor

Thank A Vet Shirt

I hate to bother you with such a mundane request, but a year or so ago Conner had some T-shirts in his column for memorial day, I have searched my stacks but I can't come up with that issue. The tag line was something along the lines of, "Freedom is not free...I paid for it." Thanks for any help.

Russ
via e-mail

It's the "Freedom Isn't Free" T-shirt from Ranger Up, www.RangerUp.com, (919) 682-1475.—Connor

GUNS

FMG PUBLICATIONS

SHOOTING INDUSTRY

shootingindustry.com

Publisher & Editor: Russ Thurman

Advertising: Delano Amaguin, 888.732.6461

email: delano@shootingindustry.com

COP

americancopmagazine.com

Editor: Suzi Huntington

Advertising: Phil Mendelson, 800.426.4470

email: phil@americancopmagazine.com

HANDGUNNER

americanhandgunner.com

Publisher & Editor: Roy Huntington

Advertising: Steve Evatt, 800.533.7988

email: steve@americanhandgunner.com

GUNS

gunsmagazine.com

Editor: Jeff JoÚ

Advertising: Jason Moreau, 866.903.1199

email: Jason@gunsmagazine.com

Special Editions

fmgpublications.com

Editor: Sammy Reese

Advertising: Scott McGregor, 800.553.7780

email: scott@gunsmagazine.com

ONLINE ADVERTISING MANAGER: Tracy Moore,

TEL: 888.651.7566, FAX 858.605.0205

tracy@fmgpublications.com

NATIONAL ADVERTISING: 12345 World Trade Dr.,

San Diego, CA 92128, TEL: 866.972.4545, FAX 858.605.0211,

anita@shootingindustry.com

CLASSIFIED ADVERTISING: Lori Robbins,

TEL: 800.633.8001, FAX 858.605.0247,

classads@fmgpublications.com

FMG EAST COAST SALES: Sig Buchmayr, Buchmayr &

Associates, 28 Great Hill Rd., Darien CT 06820,

TEL: 203.662.9740, sigbuch@optonline.net

CUSTOMER SERVICE

www.gunsmagazine.com

SUBSCRIPTION SERVICES 858.605.0252

Express Service www.gunsmagazine.com and click "contacts"

EDITORIAL 858.605.0243

Email: ed@gunsmagazine.com

PRODUCTION 858.605.0216

Email: production@gunsmagazine.com

BOOKS/MERCHANDISE 888.732.2299

Email: lori@fmgpublications.com

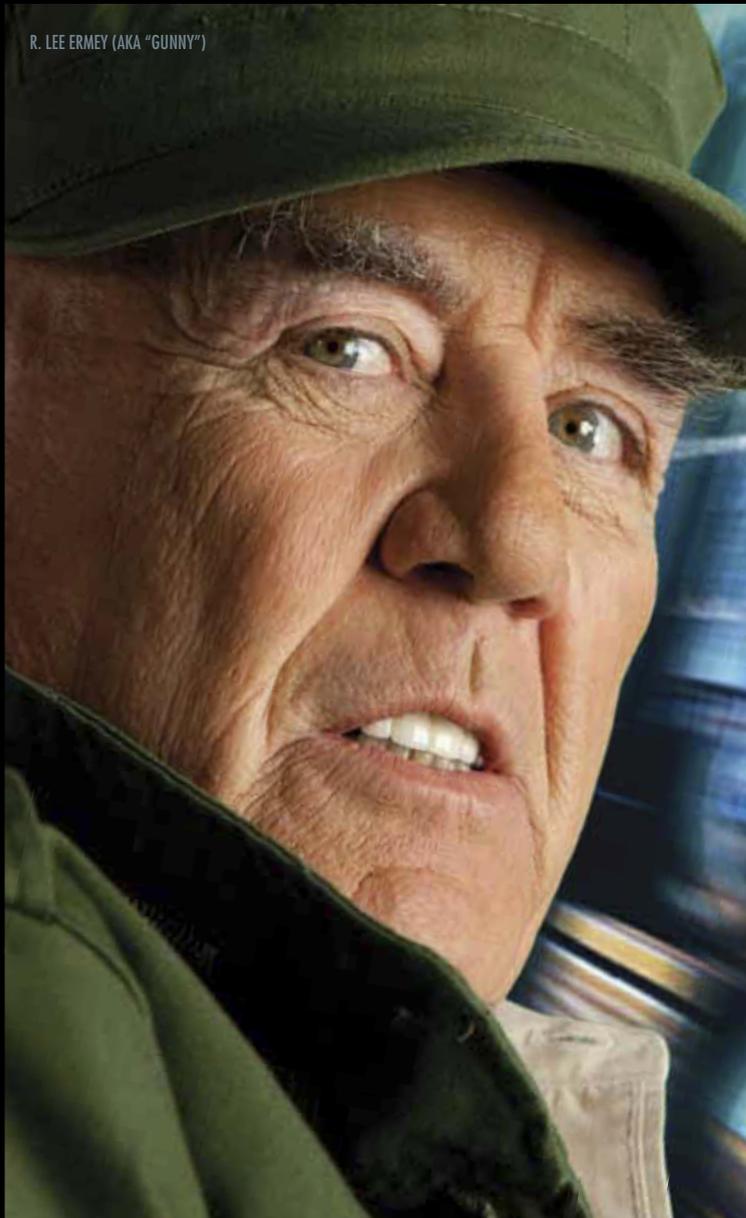
General Counsel/Legal Affairs: Steele N. Gillaspay

Email: sng@g-jlaw.com



PRODUCED IN THE U.S.A.

Check out www.gunsmagazine.com for our digital edition, news, our exclusive Product Index, Web Blasts, online features, to enter the Giveaway Package and more! And if you have any news about hot new products you've found, or anything you think we need to know about, drop me a line at ed@gunsmagazine.com!



R. LEE ERMEY (AKA "GUNNY")

GLOCK™
AMAZING
STORIES

**WHAT DID THE GLOCK SAY
AFTER IT FELL OFF A TRUCK,
BOUNCED ON THE HIGHWAY,
SKIDDED ACROSS ASPHALT,
GOT HIT BY A CAR, AND RUN
OVER BY AN 18 WHEELER?
"DON'T TREAD ON ME."**



Can't say I'm happy that some dillweed left a GLOCK on the roof of his pickup truck. But isn't it nice to know that GLOCK "Safe Action" pistols can stand up to just about anything—even an eighteen wheeler?

Safe. Simple. Fast. = Confidence.

Get the complete story from Gunny.
Scan this tag with your smartphone.

© 2011 GLOCK, Inc.

To see more of these amazing stories and the new GLOCK website go to teamglock.com



RANGING SHOTS

STORY: Clint Smith PHOTOS: Heidi Smith

THE LONG-RANGE RIFLE Who says it isn't affordable?

Equipment has evolved quite a bit since I used my first scoped rifle—a Remington 700 ADL in .308—in my official capacity as a SWAT rifleman / sniper / countersniper / precision rifleman / designated rifleman in 1975. And yeah, all of those nomenclatures were correct based on what era of political correctness we were in or what was required by the agency.

From a precision rifle school perspective in the '70s, except for some in the military, there weren't many rifles available in the civilian market, as Vietnam was winding down and everyone was in the peace and love mode... sort of.

Cop Stuff

The best rifle shooters were the benchrest guys of the era who shot

custom rifles. Thinking I needed one, I had my first custom rifle for LE applications built by Fred Sinclair of New Haven, Ind., in 1975 on a Remington 700 in .308. I took a lot of heat over that rifle as it only had a 20" barrel and I was often asked, "Where's the rest of your rifle?" Then again, it turns out now my thoughts for a shorter compact rifle for police applications might have been a correct



A 1975 SWAT photo showing many of the not-so-exotic firearms used in times past. The second from left sniper rifle is a stock Remington 700 with a Leupold scope mounted to it.

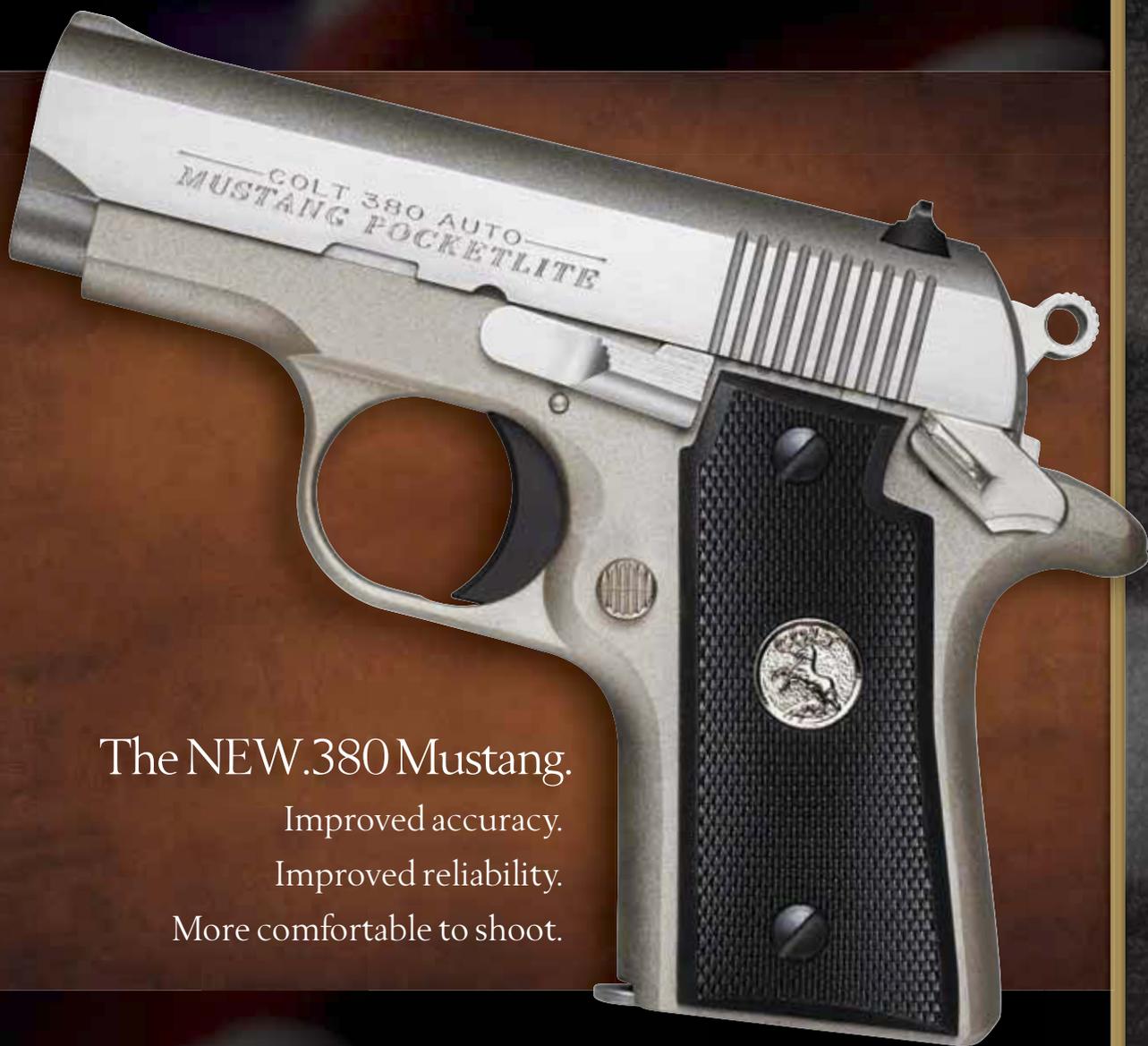
one. Most of the Sinclair work was in the stock and the truing of the action and barrel. I mounted a Leupold fixed 4X scope, and it was a solid rifle for the world I was in, where I needed to positively identify targets and justifiably engage them.

I taught Countersniper (or sniper) skills starting in 1983 for private students before it was the rage it is today. The rifles of that era were

The only upgrade to this Remington 700 LTR was a large bolt knob and a fancy paint job to the stock.



SAME **SMALL** PACKAGE.
SAME **BIG** PUNCH.
BRAND **NEW** ATTITUDE.



The **NEW** .380 Mustang.

Improved accuracy.

Improved reliability.

More comfortable to shoot.

The Legend Continues.



Visit your dealer or go to www.coltsmfg.com MADE IN THE USA



The SOG Trident Mini uses our well-proven means of delivering a knife blade to the open position with S.A.T. (SOG Assisted Technology™). Now using our patent pending Arc-Actuator™, the Trident Mini locks stronger and releases easier. What also makes the Trident Mini so unique is the patent pending Groove™ in the handle, which allows the operator to cut paracord, fishing line, etc. without having to open the blade with a sliding button.

SOG
Specialty Knives & Tools
www.sogknives.com

888-SOG-BEST

mostly Remington 700s or Winchester Model 70s either of the Varmint Special or Match versions. Some military match ammunition was available but a lot of people just shot ammunition that they loaded. The scopes were OK, but there was nothing to get too excited about and absolutely nothing like the high-zoot optics we have today.

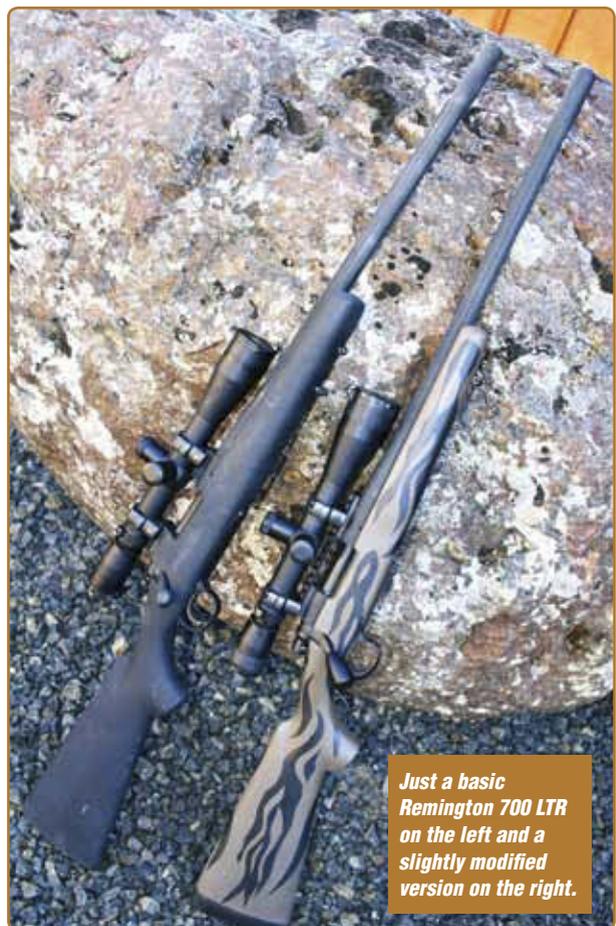
Moving forward to 1993, Thunder Ranch, Texas, had three levels of precision rifle applications. They were pretty solid schools and often served as a foundation for other schools to set up programs. After 9/11, as everybody knows, everyone opened a sniper school as it was now cool again. Many people compensated for basic rifle skills by adding a scope to the top of everything from the 5.56mm M4 to the .50 BMG semi-automatics. So the money wars began in military, civilian and other circles to see who could sling the most money at solving the problem of aligning the sights and pressing a trigger correctly—give or take some wind drift.

Today

So if you called me on the phone today and stated, “I am new at this rifle gig. I don’t have a lot of money, but I would like to buy the best stuff affordable to me. I am willing to wait a bit and save some money to get working equipment.”

My standard response to this request (of which I get a nominal four to eight times a month from callers) is pretty much as follows: I would buy a Remington 700 LTR Light Tactical Rifle in .308. The barrel quality is good and the rifle will shoot very well. By the time a new shooter learns how to shoot the rifle pretty well—5,000 to 7,000 rounds—the barrel will open a bit to maybe a 2-minute group... so you’ll still hit a paper plate at 600 yards.

The flaw is the internal magazine, but only in the sense you need to load it carefully, even under duress, and that can be awkward. The cure is simple and money well spent: convert the rifle



Just a basic Remington 700 LTR on the left and a slightly modified version on the right.

to Badger bottom metal and use the Accuracy International magazines. Good rifle people like G.A. Precision can replace the bottom affordably, but be very guarded, as I have had people want to charge \$900 for this service. That is BS and affordability goes out the window with the bathwater and the baby!

Bases & Rings

Buy the very best bases and rings you can afford! Cut corners if you like but *not* here. I use either Badger or Leupold bases and rings. Another excellent choice are Seekins. *Do not* save money here. Get good stuff and 20- or 30-MOA bases if you like and if you need it for true long-range shooting applications. Nothing will ruin a day faster than to find a scope sliding in rings or a loose base allowing the scope to move after we’ve spent three days and 700 rounds of match ammo getting dope to 1,200 yards and just then have the scope go clunk on the ground while you run the bolt.

Scopes

This is scary. There are some scopes so complicated you need to have a degree from MIT to read the darn things. KISS... KISS... KISS... by now you get it. Mils, minutes centimeters, it doesn’t matter. Just get

something you understand and are willing to learn how to understand. Make sure you know what you are buying and what the reticle is and reads in (mils or minutes) I think a Mil-Dot scope is good, even a minute adjustment with a mil reticle, but you better know how to use it—well.

I like Leupold M5s and Schmidt & Bender PM II scopes with TMR reticles or Mil-Dots whatever; I know how to read them what they subtend downrange so they work for me. *More complicated* reticles are *not* better, they simply clutter the application downrange. Deer hunting, who cares? (Except maybe the deer.) If you are in a fight, you better have this stuff wired up or someone will give you the bullet version of an arrow shirt. After all this, know and have a baseline zero and zero for windage and elevation.



Rock-solid Badger rings and bases securing a Schmidt & Bender PM II scope. Sturdy rings and bases are one of the must-haves. Less expensive glass will get you started.



The monster Seekins rings (above) might be overkill. Then again, this scope has never come loose—ever. The Accuracy International magazine (below) set in the Badger bottom metal functions perfectly.



For real world applications, know your comeups and be able to use elevation hold offs out to at least 400 yards. The windage knob I could do without at all after the initial zeroing of the rifle, because wind will be held off at long range.

Ammo

Shoot the best ammunition you can afford or make the best ammunition you can. There is *no* excuse for a lack of knowledge today about ammunition. If reloading, err on the side of being conservative.

Shopping & Stuff

Slings: Brownells, bipods: Harris or Atlas. All this is OK and good stuff. Cosine dial things, computerized spindrift readers, whatever other stuff: It's your money.

If you shop around, spend your money on the best you can afford. You'll probably wind up with a precision rifle that often exceeds your expectations and just as often shoots as well as systems that cost \$5,000 or \$6,000 to the effective range of your cartridge.

Bottom line, an accurate rifle for long-range work simply doesn't need to be a "you fell down a diamond mine" proposition. **GUNS**

ACCURACY INTERNATIONAL RIFLES
TAC PRO SHOOTING CENTER
35100 N. STATE HWY. 108
MINGUS, TX 78463
(254) 968-3112
WWW.GUNSMAGAZINE.COM/
TAC-PRO

BADGER ORDNANCE
1141 SWIFT ST.
NORTH KANSAS CITY, MO 64116
(816) 421-4956
WWW.GUNSMAGAZINE.COM/
BADGER-ORDNANCE

BROWNELLS
200 S. FRONT ST.
MONTEZUMA, IA 50171
(641) 623-4000
WWW.GUNSMAGAZINE.COM/
BROWNELLS

REMINGTON ARMS
P.O. BOX 700
MADISON, NC 27025
(800) 243-9700
WWW.GUNSMAGAZINE.COM/
REMINGTON

SEEKINS PRECISION
1708 6TH AVE. N., STE. D
LEWISTON, ID 83501
(208) 791-8741
WWW.GUNSMAGAZINE.COM/
SEEKINS-PRECISION

FENIX
Fenix Flashlight. Eliminate Your Adventure.

TK15
Max 337 Lumens

The TK15 throws a max output of 337 Lumens which is powered by two CR123A Lithium batteries. It is made from durable aircraft-grade aluminum with a Type III hard-anodized anti-abrasive finish and waterproof to IPX-8 standard. It also features a reflector with high efficiency and focus for far throw and wide lighting range. It has a max lifespan of 50,000 hours and five types of output levels to provide reliable lighting for your duty work.

Visit www.fenixlight.com to learn more details

Tel: 1 (888) 775-9996
E-mail: info@fenixlight.com

RIMFIRES

STORY: Holt Bodinson

VARMINTS BEWARE!

Mitchell's Black Lightning .22 WMR delivers power and accuracy.

It's a rarity in the gun world when the name of a new model captures the spirit of the firearm. There are just too many A7s, 7s, 70s, 75s, 77s, 700s, 750s and 770s out there. What is this industry fixation with assigning non-descriptive numbers to their firearms, particularly if the model number is derived from the root of 7? That's why it was refreshing to see Mitchell's Mausers market a sleek, ultra-modern, semi-auto .22 WMR with the fast-stepping name, "Black Lightning." Composed of stainless steel cloaked in black polymer, it does indeed give the impression of a fast, flashy, potent little rimfire, and indeed, it is.

Long known as a unique source for pristine condition Mausers, Lugers, P-38s, 1911s and military sniper rifles, Mitchell's Mausers has earned a solid

reputation for marketing unusual, interesting and classy firearms. Well, the Black Lightning certainly has class and style. It's a racy, spacey-



The toggle safety and bolt release button are handy, but not "thumb handy."

looking rimfire magnum and frankly, it's been too long since we've seen a new, semi-auto chambered for the hot-performing .22 WMR.

Improved Performance

The .22 Winchester Magnum Rimfire, as debuted in 1959, was designed at Winchester to do one thing well—kill something. It's not a plinking round. It's not a target round. It's not cheap. Loaded with jacketed hollowpoints, softpoints, polymer tipped missiles and even solids, shot



Varmints and predators: beware the Black Lightning. Mitchell includes a handy-dandy magazine loading tool (below, left) that depresses the follower and spring. While rather unconventional in style, the pistol grip stock (below, right) proved to be a comfortable, stable platform.



and lead-free projectiles, the .22 WMR is more accurate, faster and more versatile than it's ever been in the 52 years of its existence. In power and performance, the .22 WMR is closer to .22 Hornet than it is to the .22 Long Rifle. The little Maggie is a terrific cartridge to be chambered in Mitchell's Black Lightning.

Looking at this combination, it's a good marriage between a gun and

a cartridge. The Black Lightning is designed as a sporter with target rifle leanings. The first quality of the rifle to catch your eye is its 18" fluted, stainless steel bull barrel. According to my micrometer, has a diameter of .880" from chamber to muzzle, and the flutes extend about 5-1/2" from just behind the muzzle to just aft of the fore-end tip. In short, the barrel is heavy, stiff and designed to deliver

top-drawer accuracy from the .22 WMR, which it did.

The remainder of the action and fire control system is composed of 17-4 stainless steel as well, but you don't see much more than the loading port and the bolt because the barreled action is encased in both a durable, glass reinforced, polymer, pistol grip stock and a wrap-around, aluminum Picatinny rail.

The solid, 18" Picatinny rail lends versatility to the Black Lightning unusual in the rimfire world. With Mitchell's high rings, the Black Lightning can be set up with a normal scope sight or outfitted as "scout rifle" with a long-eye-relief scope. Add a detachable bipod to the front sight swivel stud, and you're ready for some long-distance varminting.

New Look

Swapping out the optics with Mitchell's M-16-type carry handle and rear sight matched with Mitchell's M-16-type front sight, the Black Lightning takes on a completely new tactical look. Adding Mitchell's integral laser to the M-16 front sight, converts the Black Lightning into a full dress, little tactical machine. God bless the ordnance engineers who developed the Picatinny rail!



In a minute, the Black Lightning can be switched from a conventional rifle into a "Scout" (top) or into racy, tactical AR-type firearm (bottom). The 18" Picatinny rail of the Black Lightning provides a wide choice of sighting options.



SmartReloader

Reloading & Shooting Products

SmartReloader-USA.com - Store.SmartReloader-USA.com

NOT JUST A GUN VISE



SR5000 Modular Gun Vise

Accepts EVERY Kind of Long Gun

Rubber Inserts on both Front & Rear Supports to Protect the Stock & the Barrel

Rear Supports' Clamps Bi-Directionally Adjustable Excellent Stability on the Bench thanks to 10 Rubber Feet on the Base

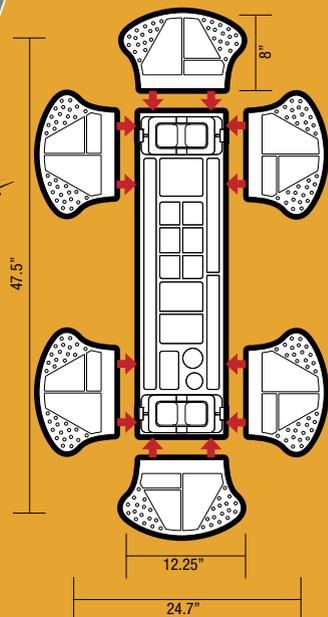
Multi-Purpose Accessories & Can's bins on the SR5000's body

Comes with 2 M.E. (Modular Ends) which can be adjusted on 6 different positions around the SR5000's body No tools needed for assembling

Every part is made of hard and durable polymer resistant to chemicals and solvents

More Modular Ends can be bought separately

M.S.R.P. \$57.95



All of the SmartReloader® products are covered by a 2 Years Warranty
SmartReloader-USA.com
Contact Us
Learn Where to Buy
Request a Free Catalogue

Buy online at Store.SmartReloader-USA.com
or find all of our Dealers at
Smartreloader-USA.com

The fire control system of the Black Lightning works well. The bolt is held open after the last round fired, alerting the shooter the magazine is empty. Just forward of the trigger, a bolt release cycles the bolt forward when depressed. The toggle-type, manual safety on the left side just forward of the trigger is just a bit too high to manipulate with your thumb when your hand is wrapped around the pistol grip, but it functions perfectly as does an integral firing-pin block.

BLACK LIGHTNING

MAKER: MITCHELL'S MAUSERS

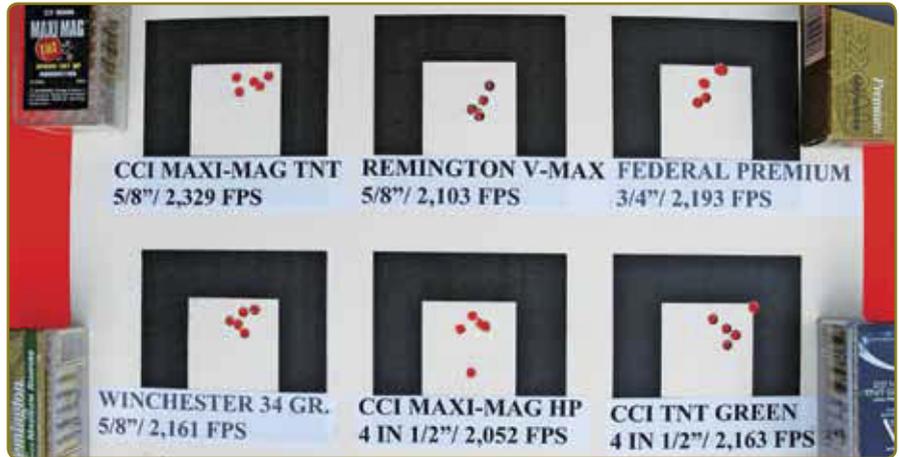
P.O. BOX 9295, FOUNTAIN VALLEY, CA 92728
(800) 274-4124

WWW.GUNSMAGAZINE.COM/MITCHELLS-MAUSERS

ACTION TYPE: Semi-auto, blowback, **CALIBER:** .22 WMR, **CAPACITY:** 9, **BARREL LENGTH:** 18", **OVERALL LENGTH:** 33", **WEIGHT:** 6 pounds, 14 ounces (w/o sights), **FINISH:** Stainless steel, **SIGHTS:** None; Picatinny rail provided, **STOCK:** Black, glass reinforced polymer, **PRICE:** \$595

The 2-stage trigger is a bit mushy and measured 8 pounds on a Lyman electronic scale, but the rifle's wide trigger shoe helps in making it manageable in letting off the shot.

The Black Lightning proved to be one of the most consistently accurate



.22 WMRs I have ever worked with. It didn't matter what the bullet design or weight was or what the velocity was. At 50 yards, it was capable of grouping most brands within 5/8" for five shots, and if yours truly hadn't pulled two shots on the comparison target, there were have been some 1/2" groups to brag about.

Three loads were rather interesting. CCI's Maxi-Mag TNT was the absolute speed champ at 2,329 fps. Winchester's inexpensive 200 round, bulk pack with its 34-grain HP bullet produced the most uniform 5/8" groups, so never pass up a big-box

The Mitchell Black Lightning proved very accurate at 50 yards with a wide variety of .22 WMR ammunition.

store bargain. CCI's TNT Green surprises me every time I shoot it. It is one of the most accurate .22 WMR rounds available and more than passes muster for use in those restricted, lead-free zones.

The Black Lightning really delivers, especially as a semi-automatic rifle. It's a classy, accurate, high-quality rimfire with an inherent flexibility to fulfill multiple roles. It's certainly a worthy addition to the Mitchell's stable of fine firearms.

GUNS

Improving Accuracy and Reducing Felt Recoil.

Think about ITT.

ITT Enidine, a market leader in hydraulic energy absorbers for the defense and aerospace markets, manufactures hydraulic recoil buffers currently employed in US and NATO forces weapons. These recoil buffers have a proven history of performance benefits to the police officer, such as improved accuracy and target acquisition, recoil reduction, and lower firing rates.

Features and Benefits:

- Improve Accuracy & Target Acquisition
- Control Firing Rate
- Conserve Ammunition
- Improve Weapon Reliability
- Easy Stock Buffer Replacement
- Reduce Felt Recoil
- Available for .308 caliber, AR15 style rifles and Various Shotgun Applications

To find out more go to www.enidine-defense.com or call us at: 1-800-852-8508



ITT, the ITT Engineering Block symbol and Engineered for Life are registered trademarks of ITT Manufacturing Enterprises, Inc. ©2010, ITT Corporation.

MTM SPECIAL OPS



BLACK COBRA

ALSO AVAILABLE IN BRUSHED STEEL FINISH

WWW.SPECIALOPSWATCH.COM

The MTM Special Ops line of tactical time pieces is exclusively available through **MTM**.
Toll free at 1 800 284 9487 outside of USA 1 213 741 0808 1225 South Grand Ave. Los Angeles, CA. 90015.

GSA FOR MILITARY, FEDERAL AGENCY, GOVERNMENT AND GSA PURCHASES, PLEASE CONTACT US DIRECTLY.

HANDLOADING

STORY: John Barsness



Most handloaders want all the velocity they can get, even if they won't admit it.

PERFECT POWDERS It's a horn o' plenty for reloaders.

Most handloaders want all the velocity possible from their rifle loads. Oh, there are still some “woods hunters” who prefer moderation, either because slower bullets chew up less venison, or the ancient falsehood that lumbering roundnoses plow through branches without deflecting. A few Luddites say things like, “The .30-06 has been taking big game just fine for over century, so what's the point of more velocity?” By and large, however, most of us think more zip is better, even if we won't admit it in public.

Luckily, powder manufacturers keep inventing new formulas, most intended to produce more feet per second. Many of these powders are developed specifically for one cartridge (not a new trend, by the way) but also turn out to breathe new fire into other rounds.

This serendipity occurs over and

over again. Perhaps the most famous example is Hodgdon's H4831 and the .270 Winchester. Originally, H4831 was developed for 20mm cannons, and just happened to work about perfectly in the .270. A more recent military powder that turned civilian is Ramshot TAC, developed by a Belgian company for use in automatic

rifles. TAC also happens to work perfectly in commercial rounds from the .17 Remington Fireball to the .350 Remington Magnum. (Oh, and it's also great in the .223 Remington and .308 Winchester, not too surprising since it was developed for the military versions of both rounds.)

Not all accidentally-perfect-powders are military, however. Hodgdon Lil'Gun was developed for the .410 and 28-gauge shotguns, but also transformed the .22 Hornet, one of the reasons the Hornet has seen a resurgence over the past decade or so. Combining Lil'Gun and any plastic-tip, 40-grain bullet, and the old Hornet basically matches the trajectory of original 50-grain load in the .222 Remington—with half the powder.

So yes, there may be a perfect powder out there, even for older rounds. If you want more speed (c'mon, admit it) one recent invention can really help when researching the latest powders. Once upon a time all handloading data was printed on paper, then only updated every few years when a company finally got around to publishing a new loading manual, when it still lacked data for any powders introduced since the manual was sent to the printer. These days most loading data is instantly accessible on something called the Internet—though a few companies hold back some or all of their info, in order to continue to make money selling printed manuals.

Sniffing Around

I recently went through just about every source of loading data available, looking for perfect powders for many popular rifle cartridges. Actually, this has been an ongoing process,

A NOTE ON PRIMERS

The general rule followed in my handloads is to use standard primers in any cases up to and including the .30-06 in powder capacity, and magnum primers in any larger cases. An occasional exception

occurs in .30-06 and smaller cases with ball powders. Sometimes a standard primer doesn't result in the accuracy I'm expecting and a switch to a magnum primer often solves the problem. I've ended up using magnum primers in cases as small as the .220 Swift with ball powders. Another primer to try with ball powders in .30-06-sized cases is the Winchester

Large Rifle, probably the hottest of the standard primers.

Occasionally, a match or benchrest primer makes a noticeable difference in accuracy even in hunting rifles. These are simply more consistent versions of any company's regular primers. The CCI BR-4 is a particular favorite in small varmint rounds, and the Federal 215M in cartridges with more powder room than the .30-06.

GUNS



ONESHOTONEKILL

They say having a rabbit's foot brings good luck. Explain that to the unlucky bunny that has four of them on the wrong end of a Savage rimfire.



MARK II FV-SR

"Suppressor-Ready" threaded barrel



Savage Arms

SAVAGEARMS.COM SAVAGEACCURACY.COM

DATA (SOURCE)	BULLET (GRAINS WEIGHT)	POWDER (BRAND)	CHARGE (GRAINS WEIGHT)	VELOCITY (FPS)	BARREL LENGTH (INCHES)
.204 RUGER					
RAMSHOT	32	TAC	28.5	4,100	24
NOSLER	32	TAC	29.0	4,154	26
BARSNESS	32	TAC	29.0	4,139	24
.22 HORNET					
SEVERAL	40	Li'l Gun	13.0	3,000	22-24
BARSNESS	40	Li'l Gun	13.0	3,117	26
.223 REMINGTON					
NOSLER	40	Benchmark	28.0	3,860	24
BARSNESS	40	Benchmark	28.0	3,843	22
NOSLER	50	Benchmark	26.5	3,540	24
NOSLER	55	Benchmark	25.0	3,302	24
.243 WIN					
HODGDON	75	Superformance	49.0	3,510	24
BARSNESS	75	Superformance	49.0	3,474	22
NOSLER	100	N560	44.5	3,144	24
BARSNESS	95	N560	44.5	3,058	22
ALLIANT	100	Reloder 17	41.0	3,128	24
BARSNESS	90	Reloder 17	41.0	3,284	26
.257 ROBERTS					
HODGDON	100	Hybrid 100V	48.0	3,205	24
BARSNESS	100	Hybrid 100V	48.0	3,225	22
HODGDON	115	Hybrid 100V	46.0	3,056	24
BARSNESS	115	Hybrid 100V	46.0	2,963	22
.25-06 REM					
NOSLER	100	Reloder 19	54.5	3,361	24
NOSLER	120	Returnbo	57.5	3,175	24
RAMSHOT	100	Hunter	55.3	3,324	24
RAMSHOT	117	Magnum	60.5	3,123	24
BARSNESS	115	Magnum	60.0	3,198	24
ALLIANT	100	Reloder 17	53.0	3,390	24
ALLIANT	115	Reloder 25	56.0	3,155	24
6.5X55					
RAMSHOT	140	Magnum	49.8	2,778	24
BARSNESS	140	Magnum	49.8	2,677	21
.270 WIN					
ACCURATE	130	Magpro	65.0	3,234	24
BARSNESS	130	Magpro	65.0	3,031	22
ACCURATE	150	Magpro	61.5	3,000	24
BARSNESS	150	Magpro	61.5	2,977	22
.30-30					
HODGDON	150	LEVERevolution	38.5	2,512	24
BARSNESS	150	LEVERevolution	38.5	2,623	28
HODGDON	170	LEVERevolution	36.3	2,332	24
BARSNESS	170	LEVERevolution	36.0	2,477	28
.308 WIN					
NOSLER	150/155	Varget	48.5	3,001	24
BARSNESS	150	Varget	46.5	2,911	24

DATA (SOURCE)	BULLET (GRAINS WEIGHT)	POWDER (BRAND)	CHARGE (GRAINS WEIGHT)	VELOCITY (FPS)	BARREL LENGTH (INCHES)
.30-06					
RAMSHOT	150	Big Game	60.7	3,038	24
NOSLER	150	Big Game	58.0	3,056	24
BARSNESS	150	Big Game	58.0	3,074	24
NOSLER	165/168	Reloder 22	63.0	3,002	24
ALLIANT	165	Reloder 22	62.0	2,725	24
NOSLER	180	Reloder 22	61.0	2,872	24
ALLIANT	180	Reloder 22	62.0	2,721	24
RAMSHOT	180	Hunter	60.0	2,852	24
BARSNESS	180	Hunter	58.0	2,819	24
.300 WSM					
HODGDON	150	Superformance	74.0	3,410	24
HODGDON	165	Superformance	72.0	3,273	24
NOSLER	165/168	N550	64.5	3,181	24
BARSNESS	165	N550	64.5	3,125	24
RAMSHOT	165	Hunter	70.0	3,172	24
BARSNESS	165	Hunter	70.0	3,233	24
.300 WIN.					
ACCURATE	180	Magpro	85.3	3,169	24
BARSNESS	180	Magpro	85.0	3,226	24
ALLIANT	180	4000MR	75.0	3,100	24
BARSNESS	180	4000MR	75.0	3,132	24
.338 WIN.					
NOSLER	200/210	Reloder 15	65.5	2,940	24
BARSNESS	200	Reloder 15	65.0	2,955	22
ALLIANT	225	Reloder 17	78.0	2,944	24
BARSNESS	225	Reloder 17	78.0	2,811	22
.350 RM					
BARNES	200	TAC	64.0	2,943	20
BARNES	225	TAC	62.0	2,764	20
BARSNESS	225	TAC	59.5	2,700	22
BARSNESS	250	TAC	57.0	2,440	22
.35 WHELEN					
NOSLER	225	Varget	65.5	2,800	24
BARSNESS	225	Varget	60.5	2,773	22
9.3X62					
NOSLER	250	Varget	56.5	2,525	26
BARSNESS	250	Varget	60.5	2,651	23.6
BARSNESS	286	Big Game	66.0	2,475	23.6
.375 H&H					
NOSLER	260	Reloder 15	73.0	2,793	24
BARSNESS	260	Reloder 15	73.0	2,799	24
HODGDON	300	H4350	81.5	2,645	24
BARSNESS	300	H4350	80.0	2,652	22

These loads were safe only in the firearms tested. Be responsible. Reduce loads and work up to maximum for your rifle. Due to the inherent variables in the reloading of ammunition, be sure to verify any published loads with current manufacturer's data. Be aware, and be safe.

something done several times a year for a few of those rounds, since anybody writing about handloading is supposed to know this stuff.

I've even come up with a few perfect combinations myself, through daring experimentation without "published data." One discovery combined Ramshot Big Game with 286-grain bullets in that ancient German medium-bore, the 9.3x62 Mauser. Now, several modern powders perk up all bullet weights in the old 9.3, including Reloder 15 and Varget, but Big Game turned out to be absolutely perfect with 286s. Eventually I worked up to 66.0 grains, getting around 2,500 fps from 23" to 24" barrels, and then had the load tested. It turned out to develop around 60,000 psi, the same conservative maximum pressure

SAAMI lists for the .30-06. Cool!

The chart will no doubt provide some ideas, but some comments are in order. Nosler has been listing Alliant Reloder 22 as a super-fast powder for 165- and 180-grain bullets in the .30-06 in their past several manuals, but nobody else in the known universe has gotten the same results. No doubt they did occur with one particular lot of powder in Nosler's ballistics lab, but that doesn't mean your .30-06 will get 3,000 fps with 165s. In fact I'd bet good money that it won't—the reason Alliant's data is also listed.

I completely understand why Nosler still lists the older data: There isn't time to go back and retest old data when so many new powders—and Nosler bullets—keep popping up like mushrooms after a spring

rain. The same thing happens to me, and for this column I tested several loads that had been on my to-do list for quite a while, especially Hodgdon Hybrid 100V in the .257 Roberts.

Another combination was LeveRevolution in my oddball .30-30, an outside-hammer Sauer drilling more than a century old. Its barrels are 28" long and even "conventional" 170-grain .30-30 loads normally get over 2,300 fps. LeveRevolution essentially turns my drilling into a .300 Savage.

The new companion powder for bolt-action rounds, Superformance, did exactly what it was supposed to do in the .243 Winchester with 75-grain bullets, given the 2" difference between my rifle's barrel and Hodgdon's test barrel. (Please note that my test



With all those rifle powders, there's got to be one that provides the most zip for your load.

shooting of the .243 took place in two different barrel lengths, because I have two .243s, a light sporter and a heavy-barreled varmint rifle. This is also why I list two different barrel lengths for my .375 H&H testing.)

Most of the powders performed pretty much as advertised when I tested them in my rifles, though there were anomalies. Accurate's MagPro, for instance, lived up to its data with 150-grain bullets in the .270 Winchester, but not with 130-grain bullets. MagPro also lived up to its billing in the .300 Winchester Magnum, though the test loads didn't group as accurately as the same 180-grain Sierra GameKing and the slightly slower Alliant 4000 MR.

This brings up the point that more velocity isn't the only desirable characteristic of a powder. A few of the loads listed are examples of extreme accuracy. The .338 Winchester Magnum load combining a 200-grain bullet with Reloder 15, for instance, isn't quite as fast as loads using slower powders, but it has shot very well in every .338 I've ever tried it in, and other shooters report similar results.

If you hunt in both warm and cold weather it helps to use a powder that's temperature-resistant, because not only velocity but accuracy can be affected. While many newer powders are temp-resistant, many are not. Hodgdon calls their temp-resistant powders Extremes, but you might want to contact other manufacturers if you want to know whether one of their powders might be more suitable for use in cold or hot weather.

One thing is certain, however: Today's powders continue to improve, and with the enormous selection available, there's one out there that just might improve your handloads. **GUNS**

WILL YOU BE READY?

**Uncomfortable holster
keeping you from carrying as much
as you would like?**

**Why not try a
CrossBreed TODAY!**

"ABSOLUTELY the most comfortable holster I have ever worn." Semper Fi

**Lifetime Warranty!
Try-It-FREE Guarantee!**

CrossBreed Holsters LLC.

www.crossbreedholsters.com • 888.732.5011

THE SMALLEST, MOST POWERFUL PERSONAL PROTECTION YOU CAN CARRY!

50% OFF

Buy a Bond Arms handgun this month & get your 2nd barrel for 1/2 price!

MADE IN TEXAS BY TEXANS!

4.25 inch

3.5 inch

3 inch

With just a quick turn of an allen wrench, you can change it to one of 16 barrels & 22 different caliber combinations!

CALL FOR FREE BROCHURE!

817-573-4445 • www.BONDARMS.com
Not available in California or Massachusetts.

GUNS MAGAZINE ONLINE!

www.gunsmagazine.com

HANDGUNS

STORY: Massad Ayoob

GUNS FOR GALS

Some good choices are found within conventional wisdom, and others are hiding “outside-the-box.”

A *GUNS* reader suggested a story on which handguns might be best for a defense-minded woman. Our editor agrees. Shortly after receiving the assignment, I was teaching a MAG-40 class at the Firearms Academy of Seattle, and eight of the 29 students and three of the training staff happened to be female. Sometimes, things just work out....

The old saw that autoloaders aren't for women because they aren't strong enough to retract the slides, is bunk. There are multiple ways for a person with limited upper-body strength to manipulate a semi-automatic pistol. First, if it's an outside hammer design that's not double-action-only, cocking the hammer will alleviate the additional resistance of the mainspring, leaving only the tension of the recoil spring for the shooter to work against.

Choices And Adaptations

If the shooter prefers the American GI tecYique, she firmly grasps the frame (keeping trigger finger clear of the guard) with the dominant hand, then bring the other palm down atop

the slide with the thumb on the inside and pointed toward herself. Holding the slide hard with her support hand, she digs in her heel on the gun-hand side and, turning her hip forward into the movement, drives the dominant hand forward, running the frame under the slide and letting the slide come back and then snap forward.

Or, the shooter can grasp the slide Israeli style—the thumb pointing toward the muzzle—and turn her hips like a karate practitioner performing a reverse punch. That is, the support hand brings the slide back as the gun hand drives the frame forward. This puts the whole body into the tecYique, and makes slide manipulation almost effortless.

Rather than wrestle with slides and recoil springs at all, some women prefer the double-action revolver and its swing-out cylinder—and that's OK, too.

The 1911 pistol works remarkably well for small-handed folks, none better than the Springfield Armory EMP 9mm, which is scaled down for its cartridge. Championship shooter Gila Hayes, administrator at FAS, carries one of these and she's deadly with it. Among the students, Melissa shot great with a Kimber Classic 1911 .45, and petite Jennie alternated between an STI Trojan 9mm 1911 with short reach trigger, and the S&W Chief Special 3"-barreled revolver she prefers for concealed carry because of its lesser size and weight.

Another who appreciated the



Chris Cunningham (above) carries her Glock 26 inside the waistband in a holster she designed and made herself (below).



Female staff and students (below) at the Firearms Academy of Seattle class trained with a cross section of firearms comprising revolvers and autos from .38 Special, 9mm to .45 ACP.



revolver was tiny Kathi, who earned the Most Improved Shooter award with her little Ruger LCR .38 Special sporting Crimson Trace LaserGrips. Its size and fit are right for her concealed carry needs; she simply prefers a revolver and she's willing to put up with more kick than a 9mm auto to get the attributes she wants in a personal defense handgun.

Polymers

The majority of distaff shooters at this class had polymer-frame autos, all chambered for the adequately powerful but easy to shoot 9mm. On staff, Gail Pepin was carrying the Glock 34 she'd used to win the Florida/Georgia Regional Woman Champion IDPA title, and author Kathy Jackson shot a Glock 19.

Among the students, Jean and Glenda both shot Glock 17s and did quite well. Helene, new to the handgun, quickly became



A big dog and a small 9mm (left) make a good combo for pistol champ Gila Hayes, here carrying Springfield EMP with Crimson Trace LaserGrips. Jennie Van Tuyl (right) likes a J-frame S&W revolver for daily carry.

comfortable with her subcompact Gen4 Glock 26. The Glock's slide is easy to manipulate and its trigger reach adapts well to small hands, particularly the 4th Generation models.

Petite Maiko chose a little Kahr P-series, appreciating its thinness

for concealment as much as the lightweight polymer receiver. She had no problem mastering its long, smooth, double-action-only trigger pull. Cerisse, 24, was the top female shot in the class and tied for 3rd overall with a Smith & Wesson M&P9. The interchangeable backstraps of the M&P have made it increasingly popular among female shooters.

With not a single .25-caliber Nancy Reagan Signature Model "cute little gun" among them, these role model women are proof armed females have some eminently suitable fighting handguns from which to choose.

GUNS

MAG 40 CLASS
 MASSAD AYOOB
 P.O. BOX 1477
 LIVE OAK, FL 32064
 MASSADAYOOBGROUP.COM

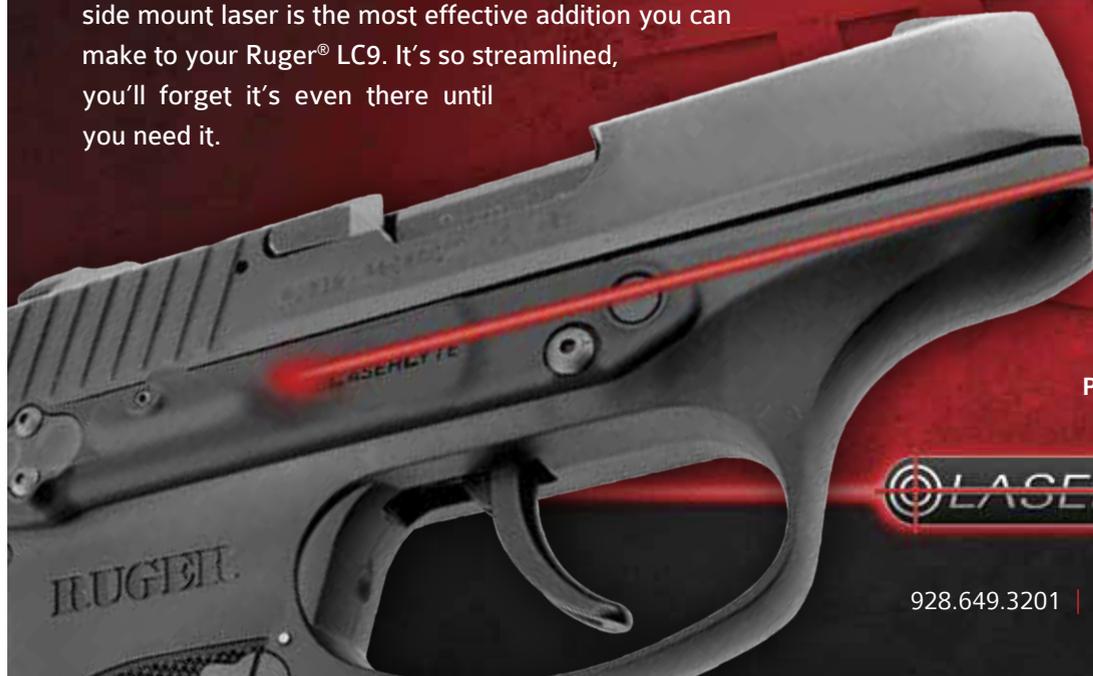
FIREARMS ACADEMY OF SEATTLE
 P.O. BOX 400
 ONALASKA, WA 98570
 (360) 978-6100
 WWW.FIREARMSACADEMY.COM

KATHY JACKSON
 WWW.CORNEREDCAT.COM

AIMING INSURANCE.

Integrated laser control for your LC9

At less than half the cost of a leading competitor, LaserLyte's® side mount laser is the most effective addition you can make to your Ruger® LC9. It's so streamlined, you'll forget it's even there until you need it.



MSRP: \$99.95
 Part # CK-AMF9



928.649.3201 | LaserLyte.com

RIFLEMAN

STORY: Dave Anderson

SPEED READING The chronograph is one of the most valuable tools.

My first chronograph was an Oehler Model 12, acquired around 1980. Simple though it was by current standards, I absolutely loved it. Today I can't imagine getting along without a chronograph. I hardly need recount the benefits for handloaders. For long-range shooters, even using factory ammunition, it is critical to know velocity from your barrel in developing drop and wind-drift tables.

As with virtually anything electronic, chronograph technology moved quickly in the '80s and '90s. Chronographs offered far more features such as memory, statistical analysis, printers, data transfer ports, even voice technology. And as they improved prices went down.

CED Millennium

For the past decade or so my most-used chronograph has been a CED Millennium. This wasn't the result of any methodical testing; it just seemed to select itself by being so handy and dependable. It is light and compact and sets up quickly and packs away easily. It provides all the data I want, and just generally has proven to be very well designed and made.

Battery life has been excellent, a feature I appreciate as I sometimes forget to bring a spare. It has been very reliable. I found only two shortcomings: in low light, say the last half-hour or so before sunset, it would sometimes miss small bullets, such as from the .22 LR match cartridges I use as a check.

My Millennium is the first version. I understand the current M2 version has much-improved low light performance. The other

"shortcoming"? Well, the software/data transfer is designed for PC computers. I'll be darned if I'll give up my Macs.

Oehler 35P

If there is such a thing as a classic, legendary chronograph it is the Oehler 35P. It established its reputation over years of use by demanding customers; bullet and powder

manufacturers, police and military organizations, competition shooters and handloaders. Our local club has a 35P set up with artificial lights for use on our indoor range.

The most obvious feature of the 35P is the proof screen. The system uses three skyscreens. The primary screens are 4' apart, with the third screen centered between them. Primary velocity (the one displayed, and printed on the right-hand column of the printout) is measured over the 4' spacing. Proof velocity is read over the 2' spacing from the first to the middle screen.

If the two readings are not identical, or nearly so, the processor assumes there was some sort of problem (muzzle blast triggering the first screen, for example) and rejects the reading. If a reading is accepted, you can have a high degree of confidence in it.

The unit provides all the usual statistical functions (average, extreme spread, standard deviation) on the display and prints the data (on standard cash-register paper, incidentally). I know numbers on paper are anathema to the computer-savvy, data-download crowd. It is still very convenient for this old-timer to print the data and staple it to the corresponding target. What the heck, I still buy books.

The 35P has always been made to very high standards, using the best available components, carefully assembled. A few years ago, it was discontinued due to lack of printers of the quality Oehler demanded. I regretted not buying one. When it was reintroduced a year or so back I wasn't going to miss the chance again. Currently it is sold only as a complete package with screen rail and stands, all packed in a hard case.

Competitors like to say the 35P is "old technology," which maybe it is. Another way of putting it is "proven technology." It provides



Dave repeated the velocity test (see chart) placing the Millennium screens ahead of the 35P screens. The difference was insignificant between the two. Oehler believes the orange diffusers provide more reliable bullet detection over a range of light conditions. All Dave knows is the 35P never missed a reading, even a few minutes before sunset.



These are Dave's time-proven Oehler 35P (left) and original version of the CED Millennium. He's happy with either one and even happier with both. These are well-designed, well-made, durable and reliable workhorses.

everything I need in a chronograph, and does so reliably. The 35P deserves its legendary reputation.

I was curious to compare results from the 35P with the Millennium, which I've relied on for years. I set the two units up to give simultaneous readings. The results are shown in the charts. I can summarize by saying the results justify my high regard for both units. Shooting on a day with light overcast in the afternoon, both units

VELOCITY (FPS) OF 5 SHOTS

AMMO: BLACK HILLS .38 SPECIAL 125-GRAIN JHP
GUN: S&W M-13, 3" BARREL

CHRONOGRAPH: OEHLER PROOF	OEHLER PRIMARY	CED
826	825	820
825	825	821
829	828	824
826	825	820
814	814	811
CHRONOGRAPH:	OEHLER 35P	CED
Average Velocity (fps):	823	819
Extreme Spread (fps):	14	13
Standard Deviation (fps):	4	4

Notes: Oehler screens in front, CED screens behind. First screen set 10' from the muzzle.

VELOCITY (FPS) OF 5 SHOTS

AMMO: WINCHESTER .270
130-GRAIN BALLISTIC SILVERTIP

GUN: BIESEN CUSTOM,
PRE-'64 WINCHESTER 70, 22" BARREL

CHRONOGRAPH: OEHLER PROOF	OEHLER PRIMARY	CED
2,909	2,905	2,899
2,954	2,949	2,943
2,990	2,986	2,979
3,015	3,013	3,007
2,953	2,949	2,941
CHRONOGRAPH:	OEHLER 35P	CED
Average Velocity (fps):	2,960	2,953
Extreme Spread (fps):	108	108
Standard Deviation (fps):	41	41

Notes: Oehler screens in front, CED screens behind. First screen set 10' from the muzzle.

picked up every shot fired over the screen.

I tried again about 20 minutes before sunset. Both units reliably picked up 125-grain bullets from a .38 Special, and 130-grain bullets from a .270. With 32-grain bullets in my .204 Ruger the Millennium screens didn't detect the bullets while those of the 35P did. This is interesting to me but irrelevant to current buyers, since my older Millennium is discontinued and the current M2 version has improved low-light detection.

Matter of fact I'm going to buy one of the new Millennium M2 versions, maybe even adding the optional laser screens for indoor use (they can be used outdoors too, if there's a power source). Now if they would just make it Mac compatible....

I haven't tried the other current chronographs available. Actually chronographs are fairly simple tecYology; I doubt there's really a bad one out there. I can recommend both the Oehler 35P and the CED Millennium with confidence. Both are dependable, reliable, durable workhorses.

GUNS

OEHLER RESEARCH, INC.
P.O. BOX 9135
AUSTIN, TX 78766
(800) 531-5125
WWW.GUNSMAGAZINE.COM/
OEHLER-RESEARCH

COMPETITIVE EDGE DYNAMICS USA
P.O. BOX 486,
OREFIELD, PA 18069
(888) 628-3233
WWW.GUNSMAGAZINE.COM/
COMPETITIVE-EDGE-DYNAMICS

Have a Dillon Christmas!



Visit our website
gm.dillonprecision.com
for a free catalog.

MONTANA MUSINGS

STORY: Mike "Duke" Venturino
PHOTOS: Yvonne Venturino

THE BROWNING AUTOMATIC RIFLE The .30-06 BAR 1918A2 & A3.

Last year after my article titled "Guns Of The Pacific", a reader wrote in saying I had short-changed the BAR (Browning Automatic Rifle). Editor Jeff rightly replied it wasn't I who gave BARs short shift in the HBO mini-series, but rather the moviemakers themselves.

Due to lifelong reading, I did know the Model 1918A2 BAR was indeed the most prized infantry weapon carried into combat by the US Marine Corps in both World War II and the Korean War. I also judge the same to be true, but perhaps to a lesser extent, with US Army infantry troops in both conflicts.

Browning Comes Through

Designed in a hurry during World War I by America's most famous firearms inventor, JoY M. Browning, the BAR was first adopted by the US Army as the Model 1918. It fired the standard American .30-caliber cartridge (.30-06) from a 20-round detachable box magazine and was select fire. That is, it could be switched from semi-auto to full-auto by the flick of a finger. As with most full-auto military weapons of that time, BARs fired from an open bolt. Its weight was about 16 pounds.

Then it got heavier. Ordnance officers decided the BAR needed a bipod and for some reason the select-fire capability was changed. Instead the shooter was given the option of two rates of full-auto fire. Those were nominally 350 and 550 rounds per minute. Now about a 20-pound, shoulder-fired weapon, BARs were re-designated Model 1918A2.

Interestingly, Model 1918 BARs had been made by Winchester and Marlin-Rockwell, and until the beginning of 1943 all Model 1918A2s in the hands of troops were converted Model 1918s. However it must be noted there exists many photos of un-converted Model 1918 BARs being used in combat in WWII. Also worthy of mention is that most photographs of BARs in action in WWII show

the bipod is missing. Being so overburdened anyway, BAR-men often just tossed them. Aside from the weapon itself, a fully-loaded BAR ammo belt with 12 magazines holding 20 rounds each weighed 25 pounds.

The A2 Arrives

By 1943 two firms took up production of new BARs in the "A2" form. They were IBM and an outfit named New England Small Arms Corporation. When production ceased for each, the former company had produced only 20,017 BARs while the later one made 163,363. (Figures taken from the book *Rock In A Hard Place, The Browning Automatic Rifle*



Firing the full-auto BAR brought a look of pleasure to Duke's face.

by James L. Ballou.) Compared to over 4 million M1 Garands, 6-1/4 million M1 Carbines and 1-1/2 million Thompson submachine guns made during the war years, BAR production was relatively small.

Deployment

The manner in which the US Marine Corps and the US Army handed out their Model 1918A2s is also interesting. In the army one BAR was issued per squad of about nine men but by the latter half of WWII, Marine squads consisted of three BAR fire teams of four men each. There was the gunner, the assistant gunner and two ammo carriers. The latter three marines carried M1 Garand rifles. It has been written that when a marine rifleman was hit, his M1 was placed on the stretcher with him and carried to the rear for refurbishment and reissue. Conversely when a BAR-



In the spring of 2011 Duke finally got to shoot a "real" World War II vintage BAR Model 1918A2.

man was hit the weapon stayed and the assistant took it, and if he was hit also it was passed on down the line. BARs were considered that valuable to frontline troops.

M1918A3

Now what about the A3 in the title of this column? Vintage BARs that can be legally owned by individuals are extremely valuable. So back in the mid-1990s Ohio Ordnance Works set about to introduce semi-auto BARs for the shooting public. The hearts of these are newly manufactured receivers so different internally from original Model 1918A2s that full-auto parts can't fit in them. In short, they are not candidates for illegal conversions. Outwardly the OOW 1918A3s are duplicates of the originals and even wear many military surplus parts such as barrels, bipods, stocks, etc.

Early in '09 after investing in six vintage WWII (and Korean War) submachine guns for my blossoming collection, I just plain did not have money available to add an original Model 1918A2. So, I took a good look at the OOW replica and liked



Like original WWII BARs, the Ohio Ordnance Model 1918A3 weighs over 20 pounds.

what I saw except that OOW was in an 18-month backorder situation. Never has such a thing stopped me in one of my quests so I turned to the Internet firearms auction sites. One was soon in my hands and it has not been a disappointment.

Being semi-auto only, it fires from a closed bolt and I have found it very accurate. Once after a BPCR Silhouette match I laid down with it, bipod extended, and started shooting

metal pigs at 300 meters. After I got its rear peep sight set properly, 10 of those pigs fell in 10 shots, made as quickly as I could realign sights and pull the trigger. With the BAR's 20-pound weight, .30-06 recoil is about like a .22 centerfire varmint rifle. In firing nearly 1,000 rounds of military surplus and handloads through it, not once has there been a stoppage.

But that isn't the end. In April 2011, a friend showed up with his original WWII New England Small Arms Model 1918A2 BAR and lots of .30-06 ammo. It was a hoot! Firing ram silhouettes at 500 meters, we soon learned where to hold so that a burst "walked across" the target, knocking it over.

I'm plenty happy with my OOW semi-auto Model 1918A3, but I'm also really glad that I finally got to try a full-auto Model 1918A2.

GUNS

OHIO ORDNANCE WORKS
P.O. BOX 687, 310 PARK DR.
CHARDON, OH 44024
(440) 285-3481
WWW.GUNSMAGAZINE.COM/
OHIOORDNANCEWORKS

Kahr's Most Popular 3" Barrel 9mm Model is Now Available in a Value Priced Package featuring Kahr's seven patents

Kahr Arms is pleased to kick off their newest series of Kahr pistols - the CM series. The new line begins with the Kahr CM9093 which is based on Kahr's most popular 3" barrel 9mm model the PM9093.

The CM9 slide is only .90 inch wide and machined from solid 416 stainless steel slide with a matte finish, each gun is shipped with one 6 rd stainless steel magazine with a flush baseplate. Magazines are USA made, plasma welded, tumbled to remove burrs and feature Wolff Gunsprings. The magazine catch in the polymer frame is all metal and will not wear out on the stainless steel magazine after extended use.

Kahr offers the CM series at a great value price but did not compromise on the features, accuracy or reliability found in all Kahr pistols.

100% made in America!!

American Owned • American Operated • American Made

Model: CM9093
MSRP: \$565.00

KAHARMS

Factory: 130 Goddard Memorial Drive, Worcester, MA 01603
Sales & Service: 508-795-3919 / Fax: 508-795-7046
Web Address: www.kahr.com

7 rd. Extended magazine optional

Made in the U.S.A.

UPON ARs

STORY: Glen Zediker

MAGAZINES

When the followers lead....

A magazine is a rifle part, and it's a moving part. The magazine is a critically important component to function. If the magazine isn't doing its job, there's no noise at the muzzle.



A "follower," well, follows the rounds up from the magazine. These are (left to right) Brownells' stainless steel, "green," Magpul, and newer Colt plastic. There's not a lot to gain from a different tray surface design; most are virtually identical in function. The guide ridge is there to orient the cartridges correctly as they "stack" into the box. The real improvements have come in changes to the front and rear guides or skirts. The old-style (Colt original, and similar) had virtually no support at the bullet end. The newest, greatest designs, like the Magpul, make it just about impossible for the follower not to sit level throughout its travel. (Magpul followers go in all my magazines now, except for the old ones that already work.)

I get a whopping lot of correspondence from folks complaining about magazine problems. I was never proud of the answer I gave them. Honest as it was, it wasn't what anyone wanted to hear. I have been drawing from the same Kroger-sack full of Vietnam-era aluminum mags I bought 35 years ago for \$2 apiece. "Well, I use really old aluminum mags with metal followers, and never have had a problem..." Now, I have plenty of new magazines. I have had to fix some so they will work. So now I have some better answers.

I once had a callous perspective on magazine function. The first malfunction was the last for that magazine. I literally threw it in the trashcan. I don't do that anymore. It's usually possible to fix them now. I say "now" because of numerous available "upgraded" internals pieces-parts.

When an AR-15 magazine malfunctions, it's rarely the box itself. It's usually because the follower (the tray the rounds sit atop) didn't behave and the nose of the round got stuck down. When the bolt pushes that round out of the box, the bullet nose may not point itself into the chamber. Sometimes the follower sticks so the case-head-side is down and the bolt rides right over the top of the waiting round. Newer follower designs have taken big steps toward preventing

those miscues.

If you take a finger (should use your own for reasons I won't go into here) or the eraser-end of a pencil and push indiscriminately down and around on a follower, you sometimes can make it stick either end down. When you can't make a follower stick from pushing on the front or rear of it, that magazine should function. The newer follower designs, when they are correctly oriented atop the spring, lick that problem.

The motivation behind the "green" follower the armed forces changed to was to solve a common problem of failures to feed the last two rounds from some bum 30-round magazines. The solution was to add a skirt to the front end of the follower and extra length to the skirt at the rear to help stop the follower from tilting. These extended skirts ride against the inside front and rear magazine box walls. This follower is better. Get a dozen in a baggie for very little money. There's one designed for 20-round box mags (the 30-round version won't easily install in all 20-round boxes).

I say, however, there may be fewer follower problems and more spring problems in a malfunctioning magazine. A follower is spring-driven, and there are differences in springs. Chrome silicon (CS), when exploited to its capacity by the spring maker, is better than music wire. CS magazine



The top spring coil orientation is critical. That's the one that loops into the follower. The turned-in end of the top of the coil should be level with the straight section on the opposite side of the spring. If it's angled down, it shouldn't be. This one (above) is ugly, but common. It's dead nose down. Now (bottom), it's fixed, plus a little. Bending the wire to support the follower at its nose just about prevents it from tipping that direction.



Sometimes you have to get creative. The eyelet location on this follower is not standard. Notice the top loop orientation between spring and follower. Glen had to wind it around this way to get the correct orientation for the top loop (toward the bullet-tip end of the follower) and still keep the correct orientation for the bottom of the spring.





Fixing up an AR-15 magazine is easy. Remove the base plate (how varies), pull out the old spring and follower, clean the inside of the box, replace with a new spring and follower. Check the top coil orientation with the follower, fix if needed. Do not neglect this! It ought to work now, especially if you got the zoot-capri parts (such as these). This is a Brownells' green follower and chrome silicon spring package, both built for a 20-round box, and comes in a 3-pack. Brownells will also sell you a magazine ready to go with these parts installed.

springs put a more consistent, constant load on the follower and—this is big—they just don't change over literally years of use. They can be left sitting compressed without getting "soft." This is a real concern and potentially disastrous circumstance for a tactical pro. If you want to check a spring for adequate load, put two rounds in the magazine and push them down only about 1/8". They should spring right and fully back up. If they don't, the spring is sacked.

The correct orientation for the follower sitting atop the spring (before either is installed into the box) is either dead level or with the

bullet end sitting a little higher than the primer end. Dead level is OK. If you install enough different springs in enough magazines, you'll notice that not all springs will provide this. You have to help. Pliers are the tool, and the idea—again—is to get the follower sitting flat or a little nose-up. That's done by tweaking the top spring coil. I hate to use such technical terms, but it's really just a matter of gently bending on the top coil until the follower is sitting correctly atop it.

It's common in many mags I've disassembled to see the follower nose down when it's installed onto the

spring. When it gets back into the box and buttoned up, that orientation can return. Even if it seems there's plenty of coil pressure against the follower to keep it up and sitting level against its stops, when the rounds are dealt in and the follower goes down, the shift or tilt happens. The design of the top coil on the spring itself, the attachment point for the spring onto the follower, as well as the installation orientation itself all factor greatly in attaining a proper follower attitude.

The preceding is a specially-adapted excerpt from the book The Competitive AR15: Builders Guide by Glen Zediker and Zediker Publishing, www.ZedikerPublishing.com, (662) 473-6107.

GUNS

BROWNELLS
200 S. FRONT ST.
MONTEZUMA, IA 50171
(641) 623-5401
WWW.GUNSMAGAZINE.COM/
BROWNELLS

.....
SUPERIOR SHOOTING SYSTEMS INC.
800 N. 2ND ST.
CANADIAN, TX 79014
(806) 323-9488
WWW.GUNSMAGAZINE.COM/
SUPERIOR-SHOOTING-SYSTEMS-INC

NOW AVAILABLE

THE GSG-522 COMPLETE SERIES

- GSG-522 Carbine
- GSG-522SD Carbine
- GSG-522P Pistol
- GSG-522PK Pistol

Full line of firearms and upgrades/accessories available, industry leading customer service through ATI, and the most fun you will have with a tactical .22LR!



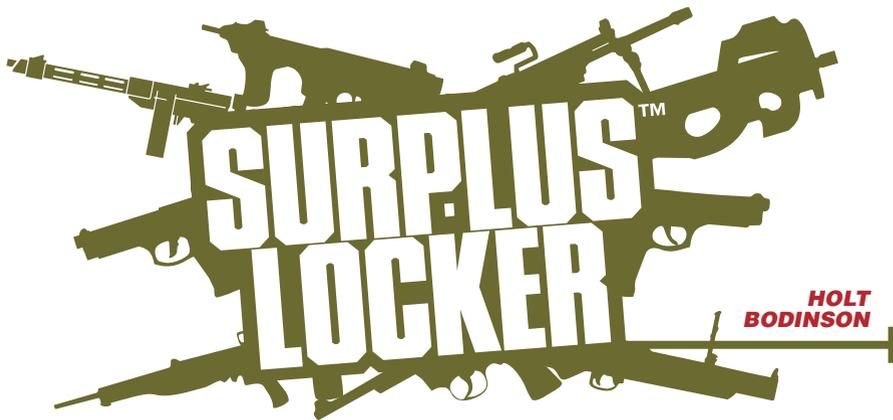
TAKE A LOOK ONLINE AT
WWW.AMERICANTACTICAL.US

100 AIRPARK DRIVE · ROCHESTER, NY 14624
800-290-0065 · FAX 585-328-4168

WWW.AMERICANTACTICAL.US



AMERICAN TACTICAL



THE SIAMESE MAUSER

This Japanese-built rifle is one of the stronger military bolt actions ever made.

My introduction to the Siamese Mauser was a comical calamity. In September, 1975, CBS television, with Dan Rather as narrator no less, aired a vicious, anti-hunting program called *The Guns of Autumn*. So immediate and strong were the protests from the hunting community, CBS caved to the pressure and immediately began filming what was to be a pro-hunting sequel titled, *Echoes of the Guns of Autumn*.

Working for the state Conservation Department at the time, I was elected to go on film with CBS to tell the real story of modern sport hunting. Everything was going along fine on the morning of the filming at our local rod and gun club, that is, until a good friend asked if I would like to step over to the rifle range and try out his new Siamese Mauser rebarreled in .45-70. CBS was still setting up so how could I resist!

The setting was impressive that morning. CBS semis parked all over the club grounds, cables strung here and there, cameras, light stands

and reflectors being set in place, a million minions running around doing their thing and so, dressed in my mandatory and immaculate red checkered shirt and pressed jeans, I sat down at the bench and loaded the Siamese sporter, topped with a steel, Weaver K-4 scope.

Dressed Up

I paid no attention to the load. I was thinking about what I was going to say on national television in a few minutes. The .45-70 load turned

out to be a 500-grain clone of the .458 Win Mag, and when it was torched off, that Weaver scope slammed back and opened up my right eyebrow like a can of tuna.

Now, I admit to having had a "Weatherby eye" before, but there was something really special about the foreshortened mounting distance of the bell of that K4 combined with that little atomic bomb of a handload, because suddenly there was blood everywhere. Fortunately, the CBS crew was so focused on their work they didn't catch me making a mad dash for the club house to bury my head in the old, red Coke cooler filled with 5-pound blocks of ice.

Three-quarters of an hour later, the swelling was under control and with the help of a woman's make-up kit, I pulled off my debut on CBS without a hitch; however, ever since that memorable day, I've had the utmost respect for Siamese Mausers.



Seen with the .308 Win (right), the 8x52R Siamese cartridge (left) is distinctly modern in design, albeit of rimmed design, which was soon obsolete after its original adoption.

Unique Mauser

Being chambered for a rimmed 8mm round, it's a unique Mauser with a distinctive, slanted magazine box to insure faultless feeding of a rimmed case. Back in the early 1970s, Siamese Mausers in great condition flooded our milsurp shores. Imported from Thailand (formerly Siam), it was a rare model very few had ever heard of. What didn't come ashore was 8x52mmR ammunition to feed them, so with our typical ingenuity, we tore them apart for their rimmed cartridge actions and rebarreled them in .45-70, .30-40, .348 Win. and

who knows what. I even rebarreled one for the .458 American, a 2" version of the .458 Win Mag.



The big, long Siamese Mauser is a rarity today since many were sporterized soon after they hit our shores.



To permit the use of smaller stock blanks, the buttstock is composed of two pieces.



A unique, sliding cover reveals a well in the butt where a sight/muzzle protector was stored.



The mark of the Koishikawa Arsenal is four stacked cannon balls.

With stripped actions selling for \$15 to \$25 back then, Tucson, Ariz., gunsmith Brian Murphy recalls the Siamese Mauser sporter conversion as being one of the most popular student projects at the gunsmithing schools. A measure of the action's popularity is that Frank de Haas in his quintessential book *Bolt Action Rifles*, devotes a complete chapter to the Siamese Mauser. Since not many Siamese Mausers survived our ravages untouched, treasure the ones you still find intact. Being considered somewhat of an oddball, the ones you do stumble across are relatively inexpensive.

The Model 1903 Siamese Mauser, commonly referred to as the Type 45, which refers to the corresponding Siamese calendar year of 2445, a calendar beginning with the day of Buddha's birth. The model was produced from 1903 to 1908. Approximately 400,000 were manufactured, and they served on in

Baikal's Back!

With the MP161K!

MP161K is the perfect Semi-Auto 22LR Rifle for Target, Plinking, Small Game Hunting and Shooting Sports Fun.

Features Include:
Adjustable (Length of Pull, Cheek Piece, & Sight); Cocking Indicator; Picatinny Rail; Light Weight Polymer Stock and Ambo Mag Release at a Reasonable Price.

Baikal MP 161K
BBL-19.5", OAL-39"
Wt-6.25 lb
.22 LR, 10+1 rounds
\$387 MSRP

If your dealer cannot get you a Baikal, have them call us at 321-639-4842 or write us at:
P.O. Box 560746, Rockledge, FL 32956.
Imported for EAA by USSG

SEE IT ALL

EAA CORP

AMERICAN ARMORY CORPORATION

www.eaacorp.com

HOGUE

WWW.GETGRIP.COM

Grips in G-10, Soft Rubber, Aluminum and Exotic Hardwood

OverMolded® Rifle and Shotgun Stocks in Black, OD Green and Camo

AR-15/M16 Grip and forend with our exclusive cargo management system

Less Lethal orange and 12" length of pull shotgun stocks for use with body armor

Recoil pads - Slings, Swivels and other fine firearm accessories.

For the Location of your nearest dealer and a free catalog call 1-800-GET GRIP

HOGUE INC. P.O. BOX 1138 PASO ROBLES, CA 93447 - 805-239-1440

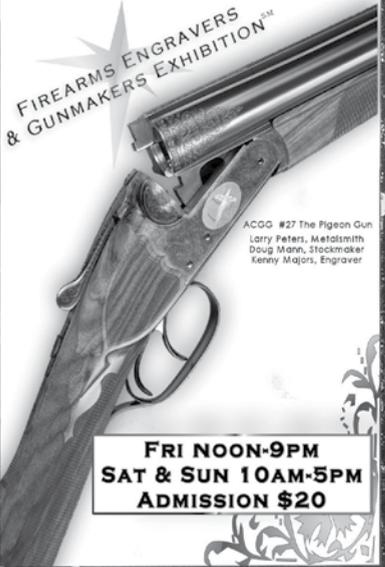
REWARD YOURSELF

ISN'T IT TIME FOR A CUSTOM GUN?

JOHN ASCUAGA'S NUGGET
RENO|SPARKS, NV

JANUARY 20•21•22, 2012

FIREARMS ENGRAVERS & GUNMAKERS EXHIBITION™



ACGG #27 The Pigeon Gun
Larry Peters, Metalsmith
Doug Mann, Stockmaker
Kenny Majors, Engraver

FRI NOON-9PM
SAT & SUN 10AM-5PM
ADMISSION \$20

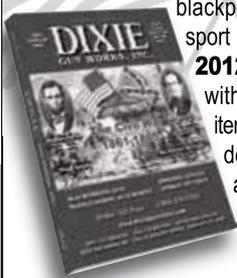
ACGG.ORG | FEQA.COM

DIXIE 2012 CATALOG STILL \$5.00!

DIXIE

**Honoring The Civil War
150 Year Anniversary**

Dixie's legendary catalog offers the world's largest selection of Civil War replica arms and accessories for re-enactment enthusiasts and history buffs... PLUS a huge selection of the latest blackpowder hunting and sport equipment... **Dixie's 2012 catalog** is packed with more than 10,000 items including blackpowder shooting supplies, antique gun parts, and accouterments.



PROFESSIONAL SERVICE AND EXPERTISE
GUARANTEED

VIEW ITEMS AND ORDER ONLINE!
www.dixiegunworks.com

Major credit cards accepted

FOR ORDERS ONLY (800) 238-6785

DIXIE GUN WORKS, INC.

P.O. Box 130 Dept. 2 Union City, TN 38281
INFO PHONE: (731) 885-0700 FAX: (731) 885-0440
E-MAIL: info@dixiegunworks.com

Thailand, in one capacity or another, until the late 20th century.

Made In Japan

Lacking the necessary manufacturing facilities, Siam contracted out their production with the Japanese Koishikawa Arsenal located in Tokyo. Koishikawa served as Japan's primary military arsenal from 1870-1935. The mark of the Koishikawa Arsenal, found stamped on the Siamese Mausers and other period Japanese military firearms, depicts four, stacked cannon balls as viewed from above.

The resulting Siamese Mauser rifle is a blend of German 1898 Mauser design with a few Japanese touches and a twist of Siamese. Overall workmanship and finish evidenced in the Siamese Mausers is excellent—real, early 20th century quality. The bolt and the action are pure '98 Mauser, with a few significant exceptions.

Milled along both sides of the action, which features thick side walls, are raised rails upon which ride a sliding breech cover derived from the Japanese Special Naval Landing Forces Model 35 rifle, which was also built by the Koishikawa Arsenal. Unlike the later Arisaka breech cover that opens and closes with the operation of the bolt, the Model 35 breech cover must be manually



The Siamese Mauser incorporates a very functional, manual sliding breech cover over the action.

MODEL 1903, TYPE 45, SIAMESE MAUSER

KOISHIKAWA ARSENAL, TOKYO, JAPAN

ACTION TYPE: Mauser-type bolt action, **CALIBER:** 8x52mmR Siamese, **CAPACITY:** 5, **BARREL LENGTH:** 29", **OVERALL LENGTH:** 49", **WEIGHT:** 8-1/2 pounds, **FINISH:** Blue, **SIGHTS:** Tangent rear. Windage adjustable front post, **STOCK:** Hardwood, **PRICE:** \$250+ (based on Internet auctions)

unlatched and operated back-and-forth.

You guessed it. If the cover is not unlatched and slid forward before or just after firing a round and the bolt is withdrawn, the empty cartridge case can't be ejected nor can the rifle be reloaded. I'm assuming that the manual-of-arms for the Siamese Army and Japanese Navy called for keeping the breech cover fully open under normal conditions. It's a neat design. An excellent point about the design is that it does not make a telltale rattle like the later Arisaka model, which was usually discarded or "lost" by an experienced infantryman at his earliest convenience.

Similar to the Type 38 Arisaka action adopted by Japan in 1906, the Siamese Mauser sports both upper and lower, detachable, extended tangs which function to stoutly reinforce the wrist section of the stock. Also very Japanese like, the buttstock of the Siamese model is composed to two pieces of wood, dovetailed and glued together, to minimize waste by permitting the Arsenal to use smaller stock blanks.

The distinctive, slanted magazine box of the Siamese is designed so that as a full rimmed round is loaded it moves to the rear of the box, insuring the rim of the next cartridge is positioned in front of the rim of the preceding cartridge, thus eliminating jams. The system works.

The Siamese buttplate is interesting. It features a sliding trapdoor, exposing a well in the butt that housed a brass muzzle and sight cover when not being used.

One of the intriguing aspects of the Siamese is it started life as an 8x50R (Type 45) and ended its career as an 8x52R (Type 66). The original 8x50R cartridge featured a 237-grain roundnose FMJ bullet, .321" in diameter and had a muzzle velocity of 2,050 fps. In 1923, the Siamese adopted the improved 8x52R cartridge with a 181-grain spitzer boattail FMJ, .323" in diameter, having a muzzle velocity of 2,250 fps. The basic cases are very modern in appearance having a minimum body taper and a sharp, 23-degree shoulder angle (the .308 Win shoulder angle is

only 20 degrees).

There is some question as to whether the rifles were rebarreled or simply rechambered; however, one sure way of determining whether a Siamese Mauser was converted is to examine the rear tangent sight. On converted rifles (I haven't seen an unconverted one), the tangent cam is ground down and reshaped to track the improved ballistics of the 181-grain spitzer, boat-tail bullet. In doing so, the Siamese script characters, indicating elevation values, are clearly seen as being defaced.

Shooting the Siamese is somewhat of a challenge. The basic case for making the 8x52R Siamese cartridge is the .45-70. In making the 8x52R, the rim of the .45-70 is reduced in diameter to .556" and the annealed body is gradually reshaped with set of case forming dies. My advice: don't go to the trouble. Buffalo Arms has all the properly reformed cases you'll ever want for about \$75 per 50.

Loading dies are another issue. Real 8x52R dies are going to be expensive from outfits like RCBS unless you can find some on the web. To cobble up some ammo, I used Buffalo Arms brass, a set of 8x58R Danish Krag dies I had on hand and a Bonanza press with its adjustable shell holder. If you get serious with the Siamese, I would spring for the proper dies and shell holder.



Defaced Siamese script on the sight base (above) confirms this rifle has been converted to the flatter shooting 8x52R. Siamese numerals atop the rear sight (below) are as beautiful as they are exotic.



Loads? There's no need to load these old war horses up to military specs to see how they perform. My favorite load in the Siamese is 13.0 grains of Red Dot and any 150-grain 8mm bullet. This load averages 1,639 fps over my PACT Professional chronograph. At 50 yards, the load will group five shots in 1-1/4" to 1-3/8". What more could you ask? If you want more performance, I would consult the "QuickLoad" software program which lists the 8x52R Siamese to truly tailor a safe load equivalent to the military standard and not over 45,000 psi.

The Siamese Mauser is a unique milsurp. To my mind, it's a treasure since so few survived intact from the era of sporterizing. As you cruise the gun stores and shows, check out all those long barreled, Gew-looking 1898 Mausers. Another plus, Siamese Mausers are constantly appearing on the Internet auction sites. On your quest, may you grab the brass ring! **GUNS**



The rear bridge of the action (above) carries the rifle's serial number in Siamese script. The circular "Charka" mark atop the receiver ring (below) depicts an historical, Siamese throwing weapon.



FURTHER READING
BOLT ACTION RIFLES
BY FRANK DE HAAS, SOFTCOVER,
OUT-OF-PRINT. SHOP FOR
THE CHEAPEST COPY AT WWW.AMAZON.COM.

BRASS & HANDLOADING SUPPLIES
BUFFALO ARMS CO.
660 VERMEER CT.
PONDERAY, ID 83852
(208) 263-6953
WWW.GUNSMAGAZINE.COM/BUFFALO-ARMS

QUICKLOAD SOFTWARE
NECO

180 ARDMORE WAY
BENICIA, CA 94510
(800) 451-3550

WWW.GUNSMAGAZINE.COM/NECO

KWIK-SITE  co.



TOMORROW IS HERE NOW!

Check out the new
SUPER LONG BASE
from Kwik-Site.

Made from aircraft
aluminum, solid
& strong!

Good looks at a
fantastic price!

See it at
your favorite
dealer.

**NOW ON
SALE!**

Retail
Price
**\$17.94
or less.**

Available
in Matte,
Brite or
Stainless.



**SUPER
LONG
BASE**

KWIK-SITE  co.

Leading U.S. Manufacturer
of Scope Mounts

5555 Treadwell
Wayne, MI 48184

Phone: (734) 326-1500

Fax: (734) 326-4120

E-mail: kwiksiteco@aol.com

www.kwiksitecorp.com

OUTTM of the BOX

MARK HAMPTON

POWER UPGRADE Wilson Combat 7.62x40

It's a funny thing about our thought process as we meander through the aging process. A few years ago, I was more than happy with one AR chambered in .223 Remington. At the time, I really thought that rifle would be the only one of its type securing residence in my gun safe. I used it for varmint hunting—coyotes mainly—but it even accounted for a few prairie dogs on occasion. The rifle could also be employed as home defense if the situation warranted. Now I could move on and acquire other firearms and enjoy shooting different systems. A pure lack of futurity on my part!

Today, like many other shooters, I find myself wanting more variety in the AR platform and by golly we've got it. Just recently I had the pleasure of shooting Wilson Combat's new 7.62x40 project. Not that I needed an excuse to get another AR but I found myself wanting a .30 with less recoil than a standard .308 Winchester. Not only did I get the opportunity to shoot this unique offering but I also had the pleasure of visiting with Bill Wilson, who I hadn't seen in 30 years.

As you know, Bill was a highly

successful competitive shooter back in the 1970s. We both knew each other from our handgun hunting exploits and would exchange hunting stories from time to time. Wilson Combat started producing parts then went on to building custom firearms back in 1977. And the rest as they say is history. The company is well known for their high quality, custom 1911 firearms and accessories. Today Wilson Combat also provides the consumer with custom shotguns and rifles as well as top-shelf conceal and



Wilson Combat modified Lancer L5 AWM 5.56 magazines (above) come in 20- or 30-round capacity. The Accurizer scope mount (below) is a quick-detachable system allowing you to remove the optics if necessary. The scope remains zeroed when it is remounted.



carry autos. Their new 7.62x40 WT is a prime example of the company's innovation and premium quality production for demanding shooters.

Standard Components

The 7.62x40 WT is the brainchild of Kurt Buchert, an employee with many years of service to the company. His goal was to develop a low recoiling, accurate, .30-caliber cartridge utilizing standard AR platform .223 components. The array of .30-caliber bullets is one aspect that makes this cartridge versatile for a variety of applications. The cartridge itself is based on the inexpensive 5.56x45 NATO round. The 5.56 case is shortened to 1.560", then in a single operation, resized in a standard 7.62x40 sizing die. This process leaves an overall case length of 1.565".

The lighter .30-caliber bullets ranging from 110 to 150 grains loaded to supersonic velocities will obtain optimal performance for which the cartridge was designed. The barrel throat was engineered for an overall cartridge length of 2.250" with proper bullet seating. This fits perfectly and functions flawlessly in the new, slightly modified Lancer L5 AWM magazine. Magazines in 18/19 or 28/29 round capacity provide plenty of firepower when you encounter a field full of big, mean hogs.

This cartridge has a place in both tactical/defense and hunting medium-sized game categories. I consider this a neat little round ideal for coyote



In a relatively new venture, custom ammunition in a wide variety of calibers is now assembled at Wilson Combat including loaded 7.62x40 WT.

hunting but wouldn't hesitate for a moment to fill a deer tag. The 125-grain Speer TNT bullet leaves the muzzle around 2,400 feet per second generating almost 1,600 foot-pounds of energy from a 16" barrel. When fall hunting season rolls around I plan on having some Sierra Pro Hunter and Nosler BTs loaded for different hunting activities.

When I asked Bill if he had taken any game with this round he just laughed. Bill and his wife, Joyce, who is also a big hunter, reside on a Texas ranch infested with feral hogs. Believe me, this couple has done enough actual testing on hogs to make an honest, definite evaluation. Bill and Joyce have enjoyed success with the Barnes 110-grain TTSX, 125-grain Nosler Ballistic Hunter, and the 125-grain Sierra Pro Hunter. The cartridge is more than enough for a 200-pound hog. You can rest assured it will be effective on whitetail deer. One of the most accurate bullets tested was the Sierra 110-grain HP. This would make a great choice for predator hunters.

The Twist

After extensive testing, Wilson Combat has found optimum twist rates from 1:11" and 1:12" depending on rifling type. All barrels are made with premium stainless steel. Accuracy was one of my primary concerns. The apprehension quickly evaporated when I had the opportunity to shoot this rifle. Some 100-yard groups of



The new 7.62x40 WT (Wilson Tactical, above) is an accurate and effective .30-caliber offering designed to utilize many standard AR platform parts. The new 7.62x40 offers more power than the .223 provides and is ideal for ladies, beginning shooters, or anyone who may be recoil sensitive.

less than 2" were common. Banging away at steel targets was also a lot of fun and left me with the impression I would have no worries about connecting with a coyote out to 200 yards or so.

This is a gas-operated unit and I was pleasantly surprised with its mild-mannered recoil. This allows you to stay engaged on target for repeated hits if necessary. It also provides enjoyable shooting sessions for the young, female, or other shooters who are recoil sensitive. The ergonomic pistol grip fit my hand and was most comfortable. Their new suppressor was yet another feature I appreciated. That was until I accidentally touched the can with my forearm after running a couple of magazines through. They do have a tendency to get warm!

The particular rifle I was shooting was equipped with a Trijicon AccuPoint scope set on 4.5X mounted in a Wilson Accurizer scope mount. The same mount is suitable for Trijicon's ACOG and Night Optics D-740. This quick discharge mounting system makes dismantling the optics a breeze. Simply turn the thumb-knob to loosen the mount and remove. This process is quick and painless, giving you an opportunity to switch optics if necessary. Upon removal, I found it mounts back on the rifle just as easily and retains point of impact.

Wilson Combat is now manufacturing ammunition with five different loads for the 7.62x40 ready to be shipped. Reloading dies, accessories, and unprimed brass can be ordered from the company as well. Handloaders can fire-form brass and gain an additional one grain of powder capacity. This should give an additional 25 to 50 fps velocity. Loading data is available with 110- to 125-grain bullets.

This .30-caliber offering is going to give shooters looking for tactical/defensive options for their AR



One of the loads offered by Wilson Combat for the 7.62x40 WT is this 125-grain Nosler Ballistic Tip Boattail bullet traveling 2,350 fps from a 16" barrel.

platform a unique solution requiring only one part: a new barrel. The 7.62x40 WT will work with standard 5.56 AR components. Hunters will also find this new project both accurate and effective for certain hunting situations. If Bill Wilson hasn't killed all the hogs in Texas by this fall, I plan on trying to take a few myself with the 7.62x40 WT.

Having known Bill and his company for 30 years, I have learned his business concept. Make the best product you can, and try your best to improve. Wilson Combat is always striving to improve. You can see this successful business approach in the products they produce. **GUNS**

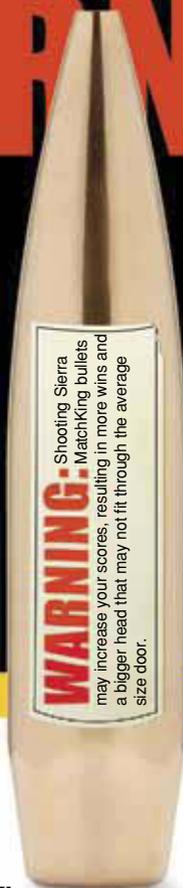
WILSON COMBAT
2234 CR 719, BERRYVILLE, AR 72616
(800) 955-4856
WWW.GUNSMAGAZINE.COM/WILSON-COMBAT

.....
TRIJICON
49385 SHAFER AVE., WIXOM, MI 48393
(800) 338-0563
WWW.GUNSMAGAZINE.COM/TRIJICON
.....



Tressa Logue, an employee of Wilson Combat enjoys shooting the 7.62x40 WT and shoots it well.

WARNING



MatchKing

Want to win?

Sierra MatchKing bullets are used by more shooting champions at more long-range matches than any other rifle bullet in the world.

In fact, 49 out of 60 NRA Hi-Power Rifle Champions used MatchKing bullets in 2010 to win at Camp Perry and 105 out of 151 champions used them at the 2010 NRA Silhouette Nationals.

MatchKing's hollow point Boat Tail design provides that extra margin of ballistic performance match shooters need at long range, under adverse conditions.

Put MatchKing to work for you, but be warned; winning has interesting side effects.

Contact your favorite dealer for the complete line of Sierra bullets or visit www.sierrabullets.com



SIERRA
The Bulletsmiths®

1400 West Henry Street
Sedalia, MO 65301
Tech support: 1-800-223-8799
Other calls: 1-888-223-3006

NEW! From Iver Johnson PAS 12 Shotgun



MSRP: \$270 - \$342

Available through Big Rock Sports, RSR, or dealer direct

- Pump Action Self Defense 12ga
- 18" smooth bore barrel
- Lightweight alloy receiver
- Cross trigger block safety
- Synthetic, grooved forend with belled back end for perfect grip
- Smooth, dual action bars for quick & easy pumping action
- Available models with front blade sight only, or adj. rear sight w/fiber optic frt sight & with or w/o extended, ventilated choke
- Standard model also available in all satin nickel or 2 tone
- Manufactured by Armed Guns in Turkey

Visit our website for more details and available options!

321-636-3377 • www.iverjohnsonarms.com

Q&A

QUESTIONS & ANSWERS

Got a burning question to ask the editor? Contact him at:
Email: ed@gunsmagazine.com
or postal at: GUNS Q&A,
12345 World Trade Dr., San Diego, CA 92128. Due to the volume of mail received, GUNS cannot offer a personal reply.

JEFF JOHN

Keep It Nice

Q: I've got three muzzleloading long arms with beautifully finished stocks, but I don't want to varnish them. What's a good stock protectant to help keep the stocks looking good? Linseed oil?

Wade McManus
via e-mail



Jeff keeps his oil-finished stocks nice by applying a generous coat of Birchwood Casey stock wax. If exposed to inclement weather, a rub down with Pilkington's Rubbing oil is applied first and allowed to dry before waxing.
Photo: Jeff Joú

A: You don't want to use linseed oil unless you are sure the finish on the gun is a linseed oil finish. One of the beauties of a linseed oil finish is you can touch it up and keep it nice by rubbing in a thin coat at the end of every season, then wax it after it dries.

But if you're unsure what method was used to finish the stocks, just use wax. I've used Birchwood Casey stock wax for years.

BIRCHWOOD CASEY
7900 FULLER RD.
EDEN PRAIRIE, MN 55344
(800) 328-6156

WWW.GUNSMAGAZINE.COM/
BIRCHWOOD-CASEY-LABORATORIES

BROWNELLS (PILKINGTON OIL FINISH)
200 S. FRONT ST.
MONTEZUMA, IA 50171
(800) 471-0015

WWW.GUNSMAGAZINE.COM/BROWNELLS

Breathing

Q: I am a relative newbie but did earn a CCW. One thing I did not ever hear in training and have not seen in writing is breathing techniques. In focusing on a target with a semi-auto, should I exhale before shooting, inhale first or normal breathing throughout? I seem to do better after exhaling before shooting.

Additionally, what does it mean when it says the magazine is "8+1"? Where does the "+1" go?

T. Powell
Phoenix, Ariz.



The S&W M39 has an 8-round magazine. Chambering a round then topping off the magazine with one round gives it a capacity of 8+1. Most auto-pistol magazines have holes in the bodies so you can quickly determine how many rounds are left. Photo: Jeff Joú

A: We often neglect the basics. The classical method, which goes back a long ways, is to take a deep breath, exhale about half, take your final sight picture and break the shot. You'll have enough air in your lungs to take careful aim and shoot. If you don't break the shot, rest and repeat. For shooting multiple targets with rapidity, you might try taking shallow breaths and holding your breath while you break each shot.

There isn't enough space to go into breathing techniques for active shooting games here, but look forward to a future column from Mas Ayoob, our handgun editor.

As to your second question, the first number is how many rounds fit in the magazine and the +1 includes the round in the chamber. It's just a shorthand way of letting you know the total capacity of the arm.

OOPSIE!

At Jim Hoag's shop the other day (Hoag Gun Works, 8523 Canoga Ave., Canoga Park, CA 91304), he was still chuckling over a recent encounter. A customer brought in granddad's 1955-vintage custom .270 sporter built on a Springfield 1903 because it wasn't grouping well. The customer had gotten it from his father, who had hunted deer with it successfully in the past. The old 4X Weaver scope and mounts were tight, so Jim's next check was the scope's adjustments. He put the .270 collimator stud in the barrel and it drooped. Yep, it was still a .30-06. There must have been some whopping miscommunication between granddad and the gunsmith. Granddad shot .270 through it, and for 56 years the family assumed that's what it was. Now they know.

GUNS

When you need
it most, will
you have
access?



LockSAF
safe guard your life. safe guard your rights.

The LockSAF PBS-001 Personal Biometric Safe is designed to protect and give quick access to your firearm and valuables. Easy to program and use, it takes one press of a button and a programmed fingerprint to open. The PBS-001 is made with 9 gauge steel that is twice the thickness of other similar products and four pilot holes in the bottom panel make it easy to mount in a drawer or any flat surface. Secure and reliable in every way, it is the fast access safe you can depend on.

- No more keys or combinations • Safe and secure
- Instant Access • Non-volatile 10 fingerprint memory
- CA DOJ Approved Firearm Safety Device

For more information, please visit your
local dealer or www.LockSAF.com
Toll Free: (877) 568-LOCK

Email: customerservice@LockSAF.com

Heritage
ROUGH RIDER REVOLVERS
YOU CAN PAY MORE ... BUT YOU WON'T GET MORE

Starting at
\$199.99
Adjustable sights available



4600 N.W. 135 Street • Opa Locka • Florida • 33054
Ph: 305.685.5966 • Fx: 305.687.6721

See our entire line of revolvers and accessories at
www.HERITAGEMFG.com





The Super Vinci

Benelli's self-loader delivers.

John Barsness

Some people think journalists should be totally objective, while others firmly believe that's impossible. The Benelli Super Vinci proved to be a test of both gun and journalist.

The Super Vinci is the latest in a long line of Benelli semi-automatic shotguns designed around a relatively simple, lightweight and supposedly foolproof "inertia-driven" action. In Benelli-speak this means recoil-operated.

Recoil-operated shotguns normally have two advantages over gas-operated shotguns: cleanliness and reliability. Powder fouling is limited to the inside of the barrel, rather than being spread throughout the gas system, allowing the gun to keep running longer. Plus, recoil-operated shotguns tend to be less picky about the ammo they shoot.

The reliability of Benellis is almost legendary in the hunting fields. A friend named Claude is a very avid waterfowler, hunting a lot every season in the fields and bayous along the lower Mississippi River. Once he and a friend dug a pit blind in a big field, and came back before dawn the next day to put out some decoys and shoot some ducks.

Rain had fallen all night and there were several inches of water in the bottom of the pit. Theoretically this didn't matter much, because Claude and his friend wore hip boots and their Labs sat between them on a crude bench, but while the humans were putting out the decoys the dogs

knocked Claude's Benelli into the bottom of the pit. After fishing it out of the mud, Claude opened the action and slobbered the shotgun around in the water for a minute or so, then held it up to let it drain. He shot ducks all morning with no malfunctions of any kind.

Gas Guns

On the other hand, gas-operated shotguns tend to have lighter felt recoil, thanks to the gas system spreading out the recoil impulse. This can be handy when shooting 3-1/2" magnums throughout a good morning of waterfowl shooting, or just shooting once at a turkey when sitting with your back against a big oak tree.

Over the past decade many manufacturers have tried to tame the kick of recoil-operated guns, mostly with high-tech stocks and recoil pads. These efforts have definitely been successful, though some hunters still prefer gas guns when shooting heavy waterfowl loads.

I've had my own adventures with various autoloading shotguns since the appearance of the 3-1/2" 12-gauge shell. Many 12-gauge owners like to use their shotgun for everything from doves to geese, but it's difficult for an autoloader to handle every 12-gauge shell from 1-ounce dove loads to 3-1/2" magnums. One gas-operated shotgun

supposedly took care of this with a self-adjusting system that changed the amount of gas “leaked” to the piston. It worked fine until I took it on a spring snow-goose hunt in South Dakota with some 3-1/2" Bismuth loads using 1-7/8 ounces of shot. The gun didn't like those much, failing to feed them about half the time. I had to buy some steel-shot ammo locally, and despite the improvements in steel it still doesn't work like heavier shot.

After the trip I sent the shotgun back to the manufacturer, asking that it be fixed. Instead they sent me another gun, saying it worked fine. It did great with heavy 3-1/2" loads—but didn't function reliably with standard 1-1/4-ounce field loads. So I sold the blasted thing and bought a Spanish 10-gauge side-by-side that went bang every time its triggers were pulled, even on sub-zero mornings in Montana.

Yeah, yeah, the 10-gauge is supposed to be dead, but in my experience it still makes high-flying ducks and geese suddenly dead—and a 10-1/2 pound shotgun reduces recoil the old-fashioned way. So there! I feel a lot better now, with some theoretical objectivity stripped away.

A Kit?

While talking with the boys from Benelli we'd mutually decided the test-gun would be a Realtree camo Super Vinci, but opening the rectangular plastic case was still a bit of a shock. Much of the gun was plastic, and the parts didn't fit together like a double-barreled shotgun.

The directions made it sound very easy, but the Quadrafit buttstock at first refused to twist onto the rear of the action. This problem was eventually solved by holding the buttstock between my knees while twisting the action with both hands. Another “bigger hammer” tecYique turned out to be necessary when fitting the fore-end to the barrel. This time bouncing the recoil pad firmly on the floor, while simultaneously twisting the plastic fore-end latch, eventually forced the Super Vinci together.

Once the collection of modular parts was transformed



The fine balance and relatively light weight of the Super Vinci made it relatively easy to bust a clay bird—then bust the biggest piece.



into a shotgun, everything went smoothly. Amazingly, the shotgun weighed exactly the 6.9 pounds listed in Benelli's specifications. This was the second test shotgun in a row that didn't weigh the typical 1/2-pound more than advertised, and both happened to be Italian. Perhaps other shotgun manufacturers should order their scales from Italy.

Broad Spectrum Reliability

Seven pounds may seem a little light for an all-around 12-gauge, but several boxes of ammo didn't hurt my shoulder at all. The loads included Kent Fasteel 3-1/2" ammo and hyper-velocity Federal BlackCloud 3" shells, along with a selection of 2-3/4" lead loads holding anywhere from 1, to 1-1/4 ounces of shot. All fed and ejected perfectly, even with the trigger pulled as fast as possible. The 3-1/2" Kent loads did force the non-objective tester to take a step backward when torching off three in under two seconds, but the ComfortTech Plus recoil pad prevented any bruising. (Even the conservative gun industry appears to have been overrun with NewSpeak compound words, no doubt due to required courses in 21st-century marketing schools.)

The biggest surprise turned out to be the gun's superb balance. The goal of sophisticated shotgun makers for well over a century has been “liveliness.” A really well-balanced double-gun comes to the shoulder and swings almost effortlessly. This is due to light barrels and a slim buttstock that place much of the gun's weight between the shooter's hands. At the same time, the light barrels are made long enough to swing smoothly, exactly how long depending on the shotgun's gauge and overall weight.

British and European gunmakers have known how to do this with double guns for a long time, and some American and Asian manufacturers are getting pretty good at it—but it was really weird to find this liveliness in a camouflage semi-auto with a stock made of wonder-polymers.

This liveliness isn't totally a matter of balance, because the slim grip and splinter fore-end of a double-barreled “game gun” also have much to do with the nifty feel. Another advantage of Benelli's inertia-action is that the fore-end can be made relatively slim, since it doesn't have



The chokes all patterned where the shotgun looked.

to hold any of the shotgun's machinery other than the tube magazine. Plastic also makes it possible for the pistol grip to be relatively thin, especially when compared to guns with mass-milled chunks of cheap walnut almost as thick as 2x4's. (Incidentally, I usually don't read the marketing spiels of test guns before the shooting, but did visit the Benelli website after the tests and found the fine balance mentioned. Reading this beforehand might have resulted in a hearty laugh—but they weren't lying.)

Versatile Fit

The gun fit me very well out of the box, but even if it hadn't, the buttstock dimensions could have been easily changed. These days many hunting shotguns have adjustable buttstocks, something once almost totally



One end of the choke wrench is a thread cleaner.



The stock comes with molded-in sling swivel studs on the fore-end (above) and buttstock (below).



The buttstock twists onto the rear of the action.

SUPER VINCI

MAKER: BENELLI ARMI SPA, ITALY

IMPORTER: BENELLI USA

901 EIGHTH ST., POCOMOKE, MD 21851

(800) 264-4962, WWW.GUNSMAGAZINE.COM/BENELLI-USA

ACTION TYPE: Inertia-driven autoloader, **GAUGE:** 12, **CHOKE TUBES:** C, IC, M, IM, F, **CAPACITY:** 3, **BARREL LENGTH:** 26", **OVERALL LENGTH:** 48-1/2", **WEIGHT:** 6.9 pounds, **FINISH:** Realtree camouflage, **SIGHT:** Red fiber-optic bead, **LENGTH OF PULL:** 14", **DROP AT COMB:** 1-1/2", **DROP AT HEEL:** 2-1/2", **RETAIL:** \$1,759

limited to target guns. The Super Vinci comes with four different metal washers made to fit between the buttstock and rear of the action, altering cast and drop. If necessary, you can also order different recoil pads and cheekpieces, or even change the entire buttstock.

I played around with the washers after the test-shooting was done. They worked—and the buttstock twisted back on more easily after each disassembly. The "standard" washer results in a drop at comb of 1-1/2" and drop at heel of 2-1/2", with a length of pull of 14".

The buttstock and fore-end also include molded-in holes for detachable sling swivels. Sling attachments are common on European shotguns, an addition the shotgun manufacturers in other parts of the world would do well to emulate. Americans seem allergic to slings on all but turkey guns, but a sling comes in very handy in other kinds of hunting. I've used one many times while climbing chukar cliffs, or when hiking back to the pickup with a limit of birds in my vest.

The trigger was also a pleasure, breaking pretty cleanly at an average of 3 pounds, 14 ounces. Many shooters consider the trigger pull on a shotgun unimportant, but good wingshooting requires a trigger that goes off when your subconscious says, "Go!" This is particularly important in a light shotgun, the reason the wingshooters of Victorian England worked out a basic formula: A shotgun's trigger pull should be about half the weight of the gun itself. The Super Vinci's trigger came very close to this ideal, and combined with the fine balance made shooting clay birds easy, even when I tried to dust the biggest piece after the initial break.

The rear of the triggerguard of the Super Vince has been reconfigured from the original Vinci's long slope, which tended to whack the shooter's middle finger. The guard on the Super Vinci is shortened and squared off, hence much less likely to cause pain.

Instead of the standard package of three choke-tubes provided by most manufacturers, the Super Vinci comes with five, marked Cylinder, Improved-Cylinder, Modified, Improved-Modified and Full.

The bore itself measured .726", tighter than most American 12-gauge bores but common in European guns, supposedly allowing the gun to handle traditional ammo with felt and cardboard wads. (Such ammo is still produced in other parts of the world, and is even starting to come back here, since the wads break down much more quickly than plastic wads.)

The chokes provided constrictions of .003", .010", .022", .028" and .040", and all shot to the same basic place, centered right around where the shotgun pointed. The chokes are longer and tapered more gently than many other screw-in chokes, helping any ammo pattern more evenly. Only the three most-open chokes are rated for steel shot, but extended, tighter-bored chokes are available as an additional option.

Eventually all the features of the Super Vinci overcame the non-objectivity of the tester. It's a very good gun, and would especially be a very good choice for any hunter desiring an all-around 12-gauge for everything from doves to geese.

GUNS

Santa's Last* MAUSERS

Ready for Christmas
At These Last Low Prices

Plus - **FREE** -
Original Accessories
Worth \$100's of Dollars
with each rifle.



Original

**Perfect Gifts
for the Man Who
Has Everything!**

1. The Original Mauser K98k from WWII Germany. Every Collector wants this Famous Mauser, because it was made in WWII Germany with the Original Nazi Markings. It oozes History! Factory overhauled and preserved in military storage. Copied by every major rifle maker since, but Never Beaten!

Souvenir Grade K98k Mauser \$399
Collector Grade K98k Mauser \$499

2. M48 Mauser Rifle. The most modern of all the military Mauser 98 Karbines, this FN pattern Mauser was built in Serbia in peace time using superior materials after the Germans

had been driven out. Very few remain.
M48 Collector Grade Mauser \$399

3. M2447 Mauser. This 1924 FN pattern Mauser 98 Karbine was made in Serbia before WWII in both infantry and cavalry versions, and then captured new by the Blitzkrieg in 1941. Never used. Standardized at the factory for infantry use in 1947. These rifles are still in Military New Condition. **Best Mauser Value** available today.

M2447 Collector Grade Mauser \$299

* **Last Mausers:** For over a year now, no more good Original German Mausers have been found in Europe. Only a few remain in our warehouse here. There are no more! **Prices Will Rise, again!**

The Average Price (of all grades) of German Mausers increases more and more every year.



At Christmas '09 we warned that prices would soon rise - **and They Did!** Thousands of Happy Customers beat that price increase.

Now we are warning again, Prices will take a **BIG Jump** - most likely **more than ever before!**

Don't Miss Out! Call Us Now!

Best Mausers! Best Selection! Best Support!

Our Mausers and our business have passed inspections by every major fire-arms publisher, like Rifleman, Guns & Ammo, Guns Magazine, etc; by the Better Business Bureau; by the ATF; and by the toughest judges of all . . . **Tens of Thousands of Happy Customers.**

Here's what *They* say:

I love it. It shoots like a dream and is highly accurate. I would recomend that everyone buy one.
- Dan in Pittsburg, PA

Just a short note to tell you how impressed I am with the quality of the rifle I received. It is one of the best C&R group rifles in my collection.
- Dwight in McKinney, TX

Received the Mauser today. It's beautiful. Thanks for all your help. Pleasure doing business with you . . .
- Warren in Metairie, LA

You can Purchase with Confidence!
Our products are what we say they are.

Your Satisfaction is Guaranteed!

All of our Mauser Rifles are:

- **Ideal** for Collecting, Shooting, and Preserving 20th Century History.
- **Purebred Original Mauser 98** system rifles with Mauser Accuracy, Reliability, Strength and Safety.
- **Thoroughly Inspected and Graded.** They are beautiful condition - cleaned and ready to enjoy, with bright bores, solid stocks and dark-blue metal.
- Packed in American Packaging with **American Manuals and Certification.**
- Backed by our comprehensive, **Money-back Satisfaction Guarantee.**

But . . . We Are Unable to Hold These Prices Much Longer!

Call Us at **800-274-4124**

Ask about the **Layaway Plan to Lock Your Price.** Some other grades and models also available, including Snipers, Lugers, Walthers, PPS50's, Black Lightnings, etc.

Mitchell's Mausers
P.O. Box 9295, Fountain Valley, CA 92728 714-596-1013
Fax 714-848-7208 www.Mauser.net

AR POWERHOUSE



The upper receiver (above) has a cartridge deflector, hinged ejection port cover, but no forward assist. The magazine release is protected by the magazine well. The Les Baer semi-auto .308 Match rifle (below) is a joy to shoot, although cold weather took away some of the fun. The weight and gas operation result in very light recoil. Trigger pull is excellent, reliability 100 percent.



HOUSE

LES BAER'S AR MATCH .308 DELIVERS POWER AND ACCURACY.

Dave Anderson
Photos: Robbie Barrkman

Generally the concept of a firearm review is to answer a few questions. Is it well designed? Does it do what it is intended to do? Is it reliable and accurate? Is it well made, using quality components?

The problem with reviewing firearms from Les Baer Custom (LBC) is you already know the answers. When Les Baer established his enterprise more than a quarter-century ago he established goals of high quality in every aspect of production, and those goals have never wavered.

So with the recent line of semi-auto rifles chambered in .308 Win, the question isn't so much whether it is a quality rifle. Knowledgeable shooters know the answer already. If it weren't, Les wouldn't put his name on it and offer it for sale. The question is, do you want an accurate semi-auto .308? If you do the Les Baer rifle is for you.

For many purposes, AR-style rifles in .223 are deservedly popular. For the casual plinker, ammunition can be fairly inexpensive, in either factory or reloaded form. As a rifle for police patrol vehicles or for home defense it has adequate range and power. It's a popular choice for 3-gun competition. Even for long-range shooting, current heavy/high ballistic coefficients from barrels of appropriate twist make it very effective.

So why a .308? For plinking and casual shooting, the fact you want it is reason enough. Some plink with air guns, some plink with .308s, and I knew a guy once who liked (or at least said he liked) to plink with a .460 Weatherby.

My police officer friends tell me they like the .223 round for most any situation involving armed suspects. However in our little Midwest city other circumstances can arise. One is the unpleasant task of putting down injured animals. A few years ago a moose was hit by a car, right inside the city. On another occasion a cattle trailer overturned and several (very large) bulls were badly injured.

In such situations officers want to be able to dispatch the injured animal quickly and painlessly, so they prefer .308 Win rifles. Officers receive instruction on where to place the shot to kill the animal instantly, and not endanger citizens with ricochets or pass-throughs. There is also the possibility of barricaded suspects, especially in the rural areas patrolled by the sheriff's department.

Although .223 rifles predominate in 3-gun competition, there is a lot of interest in the "Heavy Metal" division. It's a happy home for fans of the .45 ACP and .308 cartridges. For long-range target shooting an appropriate .223 bullet



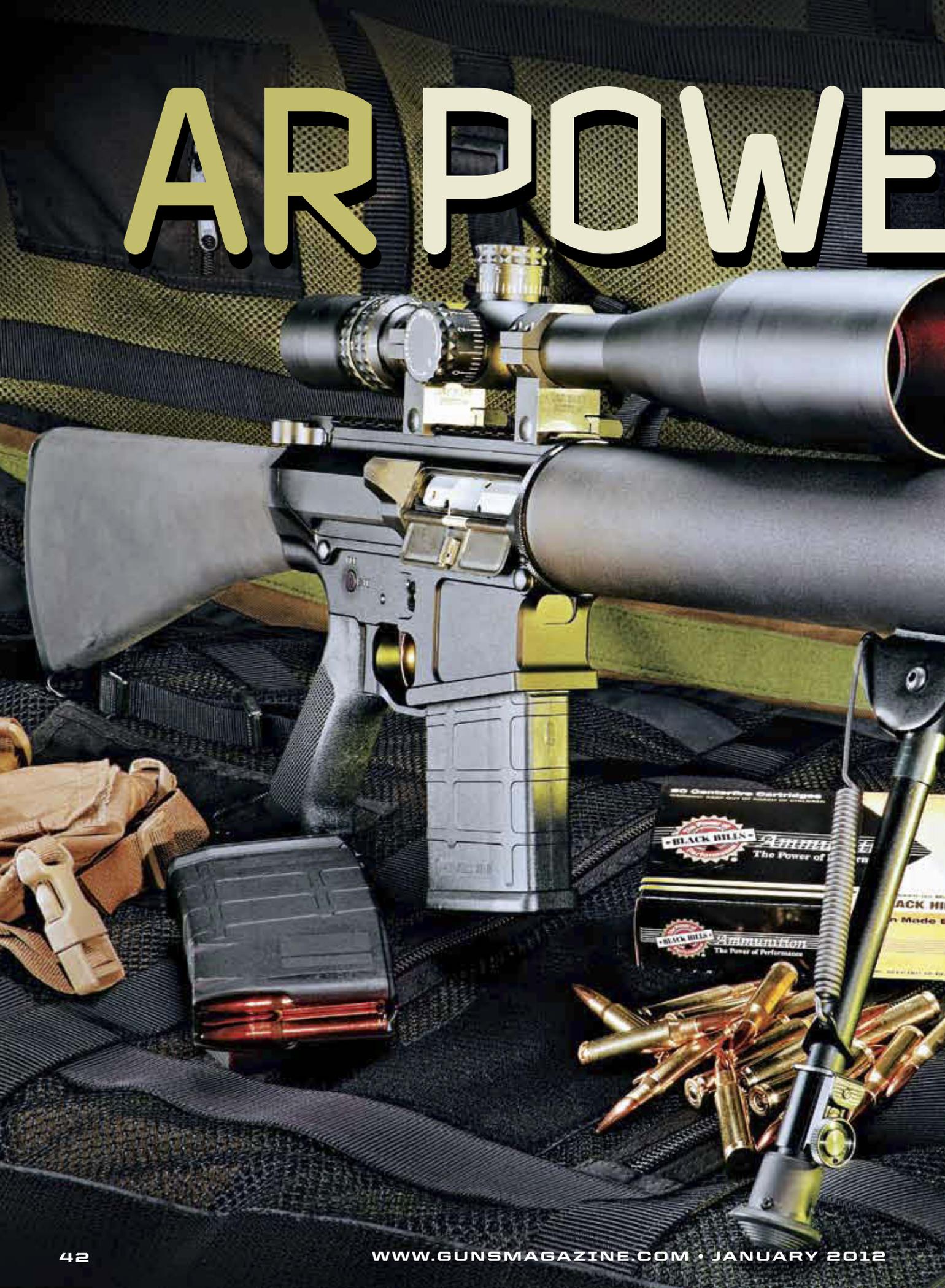
Operating controls magazine release, safety, bolt stop/release are the same as on AR-style rifles. The pistol grip is nicely shaped and fits the hand well. Note the shape of triggerguard, bowed on bottom to make room for gloved hands.



If iron back-up sights are on your list, you can add the front to the Picatinny rail extension (above) just beyond the handguard. Here Les Baer 30mm rings (below) are used to attach a Nightforce 5.4-22x56 scope. Note the heavy-duty LBC rings with four screws per ring. No way the scope is going to move.

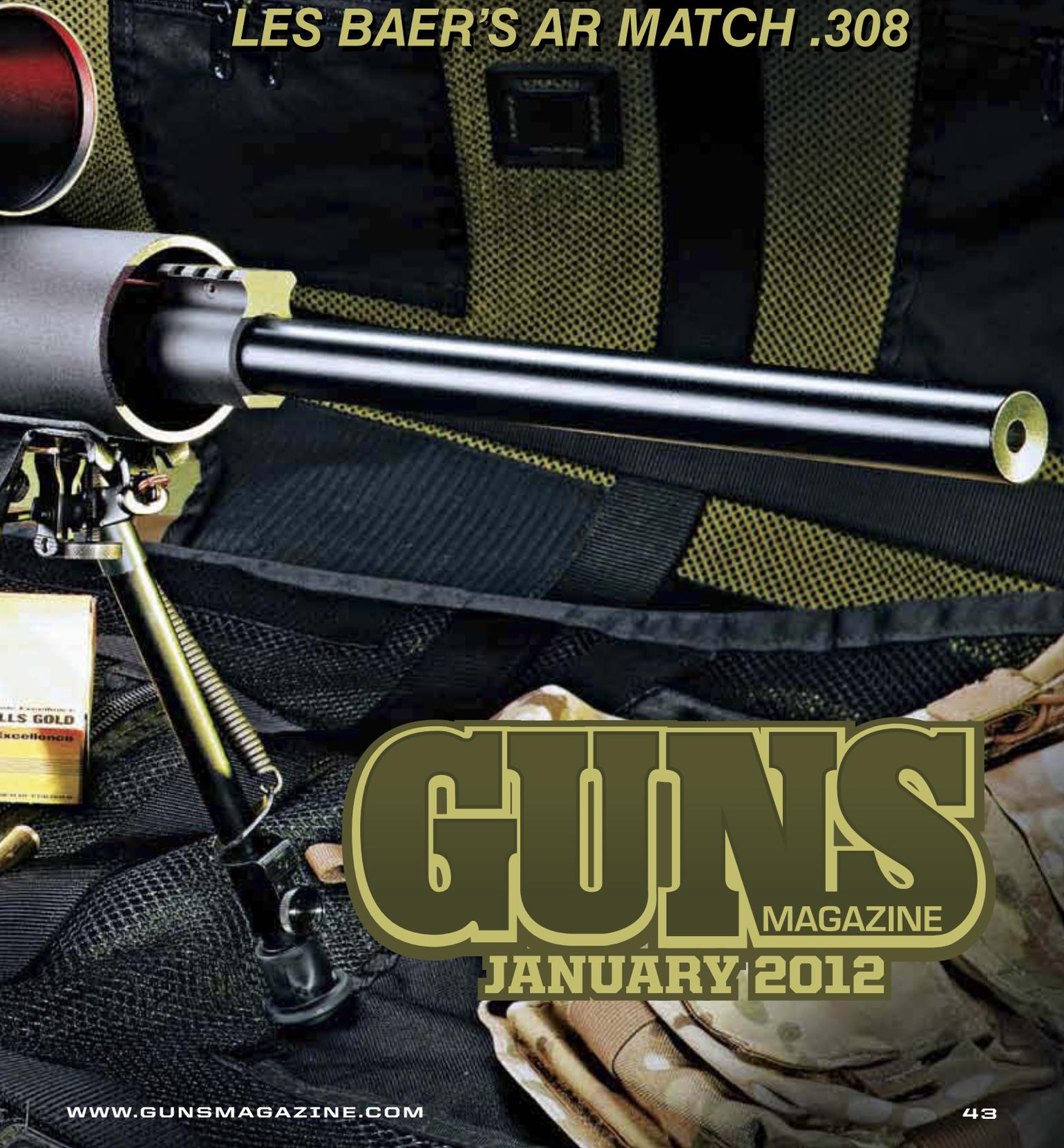


AR POWER



ARHOUSE

LES BAER'S AR MATCH .308



GUNS
MAGAZINE
JANUARY 2012

will get there just as quick, and make a hole in paper or ding a steel target just as well. On the other hand if you want to actually shoot something, obviously more than twice the bullet weight at similar velocity is going to hit harder.

With so many great bolt-action .308s around (including the one made by Les Baer) why a semi-auto? Well, for the same overall weight, a gas-operated autoloader has less recoil. Since it reloads itself, there's no need to alter head or body position (or the grip on the rifle) between shots, promoting consistency. If the first shot misses, or if there are multiple targets, follow-up shots can be delivered without delay.

The Les Baer rifle operates on a direct gas impingement system. The system allows for a free-floating barrel with no operating components to impart inconsistent movement to the barrel. Barrels are made by LBC of 416R stainless steel, precision cut rifled with a twist of 1:10". Barrel length of the test rifle is 24", with options of 18" and 20" available.

Upper and lower receivers are made of 7075-T6-51 alloy, precision machined and fitted. There's no forward assist in the upper receiver. Personally I have ARs with and without the forward assist, but even when one is present I never use it. When a dirty, oversize

SEMI-AUTO MATCH RIFLE

MAKER: LES BAER CUSTOM, INC.
1804 IOWA DR., LECLAIRE, IA 52753
(563) 289-2126
WWW.GUNSMAGAZINE.COM/LES-BAER

ACTION TYPE: Gas-operated, semi-auto,
CALIBER: .308 Win, **CAPACITY:** 20, **BARREL LENGTH:** 24" (tested, 18" or 20" available),
BARREL TWIST: 1:10", **OVERALL LENGTH:** 43.75", **WEIGHT:** 11-1/8 pounds, **SIGHTS:** None, Picatinny rail, **TRIGGER:** Geissele 2-stage,
RETAIL: \$2,980

or too long cartridge won't chamber, the last thing I want to do is push the forward release and get it stuck even tighter. Better to grab the loading handle and eject the cartridge.

Other than lacking the forward assist the .308 receiver and operating controls are classic AR style. There is a case deflector behind the ejection port, and a spring-loaded ejection port cover. Safety, bolt stop, magazine release button and loading handle are located and operate just as on an AR. A small but useful feature is the triggerguard shape, bowed at the bottom to allow more room for use when wearing gloves.

The bolt, extractor and bolt carrier are also precision machined, matched and hard chromed. No sights are provided but the upper receiver has a

Picatinny-style rail allowing virtually unlimited choice of optical or iron sights. For those who do choose iron sights there is a short Picatinny-style rail on the gas block, to accept a front sight.

The 2-stage trigger by Geissele is a joy to shoot. The first centerfire rifle I shot extensively was a surplus Lee-Enfield with 2-stage pull which I bought when I was 14 (dang, nearly a 1/2-century ago). The point is I'm comfortable with such pulls, and this is a good one. It takes 2 pounds of smooth pull to reach the second stage. Then there is a positive and consistent stop; apply an additional 1-1/4-pound pull and the trigger breaks cleanly and with very little movement.

The rifle on consignment is fitted with a 5.5-22x56 Nightforce NXS scope, using LBC's heavy-duty machined rings. I got the impression (could be wrong) this may be a rifle Les wants for his own use. At least when we were arranging the loan by telephone I mentioned I had several very good long-range scopes on hand. Les replied he had a new Nightforce he'd like to see on the rifle, and he would rather ship it with the Nightforce already installed.

Hey, no problem. It's no hardship to use a Nightforce scope. The company has earned a sterling reputation

NIGHTFORCE 5.5-22X56 SCOPE

Nightforce scopes came along at the right time, just as interest in long-range rifles, cartridges and shooting was growing rapidly. They quickly earned a reputation for toughness, durability, reliability, precise and repeatable adjustments and long eye relief. They are assembled in the USA, using the highest quality components available from top Japanese optics makers.

For example, consider the flat

springs which tension the reticle cell. If the springs fatigue from use or take a set, or have rough spots or burrs, the reticle may not move precisely.

The springs on Nightforce scopes are made of pure titanium. Nightforce claims it is the only known metal which can be repeatedly compressed without fatigue, or stay in one position literally for years without taking a set. The springs spend two weeks in a polishing tumbler to ensure they are absolutely smooth, with no bumps or burrs.

Precision-ground optical elements are matched so aberrations in elements compensate for one another. Scope tubes are machined in one piece from the toughest alloys available, with tubes two or three times thicker than other makes. Lenses are secured with both bonding agents and machined locking rings. Turret adjustments are made of hardened silicon bronze.

The adjustment turrets are a joy to use, operating with bank-vault door smoothness and precision. Turrets can be ordered with 1/8-MOA clicks (10 MOA per rotation) for target shooters, 1/4-MOA clicks (20 MOA per rotation) for general shooting, or in 1/10 milliradian clicks (one mil per rotation)

NIGHTFORCE 5.5-22X56 NXS

MAKER: NIGHTFORCE OPTICS, INC.
336 HAZEN LN., OROFINO, ID 83544
(208) 476-9814
WWW.GUNSMAGAZINE.COM/
NIGHTFORCE-OPTICS

MAGNIFICATION: 5.5X-22X, **OBJECTIVE DIAMETER:** 56mm, **FIELD OF VIEW:** 17.5' to 4.7' at 100 yards, **EYE RELIEF:** 3.9", **ADJUSTMENT RANGE:** 100-MOA elevation, 60-MOA windage, **ADJUSTMENTS:** 1/4-MOA clicks, **MAIN TUBE DIAMETER:** 30mm, **MAIN TUBE LENGTH:** 6.6", **OVERALL LENGTH:** 15.2", **WEIGHT:** 32 ounces, **PRICE:** \$1,751



A precision rifle needs a scope of equal quality. This Nightforce 5.5-22x56 has precise adjustments, easily accessible and clearly marked controls, made of the best materials meticulously hand-assembled and tested.

for police/military use.

The optics are as crisp and sharp as any I've used (including top-line European models). The long eye relief doesn't matter a lot with a light-kicking .308 but is a blessing on heavy-kicking rifles (think .338 Lapua or .50 BMG).

Long range shooting is a tough and unforgiving affair, one in which shooters demand a lot and where reputations are quickly won or lost. In this hard school Nightforce scopes have earned and maintained an unsurpassed reputation.

GUNS

for optics of unsurpassed quality, reliability, and durability. The scope is optically brilliant with fast side focus and accurate, repeatable click adjustments.

The test scope has 100 minutes of angle (MOA) elevation adjustment. Even with a standard scope base there is enough adjustment range to get you out well past a 1,000 yards from a 100-yard zero with the .308 cartridge, and a lot further should you choose a base with upward elevation.

Two 20-round-capacity polymer mags by Magpul are provided with the rifle. They appear to be very well made, fit properly in the rifle, dropped free when the release button was depressed, and functioned perfectly. Also provided with the rifle are a Harris bipod and a very nicely made, padded soft rifle case with compartments for additional magazines and accessories.

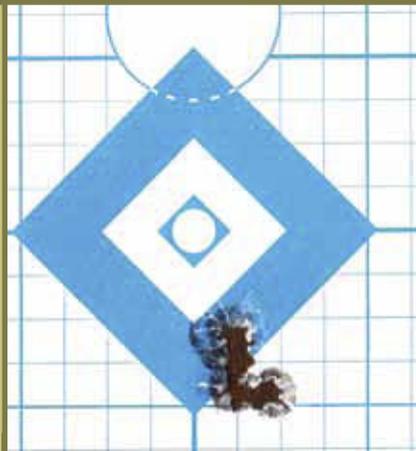
With an empty magazine and no sights, the Les Baer Match semi-auto weighs a couple of ounces over 11 pounds. Adding the 2-pound Nightforce scope, steel rings, bipod, and ammunition brings all-up weight to a bit over 14 pounds. With the weight plus the recoil-reducing effect of gas operation, recoil is very light.

I shot mostly match ammunition through the rifle, plus some plinking/fun shooting with hunting ammunition. Loads included Black Hills match with 168- and 175-grain bullets, Federal Gold Medal match with 168-grain bullets, and Hornady TAP with 155-grain bullets. Hunting loads included Black Hills 180-grain Nosler and Hornady 165-grain SST and Winchester 168-grain Ballistic Silvertip. Over several shooting sessions I fired a bit more than 200 rounds with no malfunctions.

The rifle came with a test target with two rather amazing 5-shot groups measuring well under 1/2 MOA. I'm embarrassed to say I couldn't match the groups, because I know it was my



A Picatinny-style rail on the upper receiver permits wide latitude in fitting sight options.



The factory test target was five shots in one ragged hole. Dave found the gun shot quite well, but was unable to duplicate the target in the long unrelenting North Dakota winter of 2010-2011.

shooting at fault and not the rifle. All I can plead is it was a long tough winter, I shot in very cold conditions (as in around 5 degrees F). The best 5-shot groups I could get were around .75". With the sharp Nightforce optics it was easy to spot the hits. As my trigger finger numbed from cold the fourth or fifth shot opened the group.

In any case, the Les Baer accuracy guarantee makes the point moot. LBC guarantees in writing 5-shot groups under 1/2 MOA with quality ammunition. A rifle which won't do it doesn't leave the factory. If for some reason the rifle you buy won't meet the accuracy standard, LBC fixes it so it does, or you get your money back.

I dialed in the appropriate elevation obtained from a ballistic calculator to engage the 600-yard steel target on the range. The target is about 8" to 10" wide (a bit more than 1 MOA) and isn't too hard to hit provided there's no swirling wind to contend with. The Les Baer rifle hit it repeatedly, and it was nice not to have to shift grip between shots to operate the action.

Overall quality of workmanship, parts fit and finish is outstanding. The only things I can criticize are personal preference. A shooter looking for a light rifle will find this one too heavy. That's just how it is. If you dislike a 2-stage pull, well, don't buy this one. If what you want is an accurate, reliable, dependable .308 semi-auto built to the highest standards without compromise, you'll like this Les Baer rifle.

GUNS



The bolt, extractor and bolt carrier are precision machined, matched and hard chromed. The action works on direct gas impingement.

ACADEMY OF EXCELLENCE WINNERS

20 Years Of High Standards!



Roy Huntington

Over 20 years ago, FMG decided to create an award program unlike anything our industry had ever seen before. Rather than having our editorial staff judge which new products were most innovative in each category, FMG reached out to the industry. We asked a broad cross-section of manufacturers, dealers, distributors, independent writers and other industry professionals to judge their peers on their own merits. It had nothing to do with how much advertising applicants had bought, or how much FMG staffers may have liked the products or people involved—it was, simply, all about just how good the top entry in a category actually was in the real world.

Over the following 20 years, the Academy has garnered a reputation for honest objectivity, and a spotless record for plainly being the vehicle that people involved in the outdoor and shooting industry use to make their votes known. We're proud to showcase the winners of the 2011 Shooting Industry Academy of Excellence awards, many of which you've either seen in our pages, or will appear down the road.



SHOTGUN
OF THE YEAR
AWARD

BENELLI USA
Super Vinci 12 Gauge

SHOTGUN OF THE YEAR AWARD

BENELLI USA SUPER VINCI 12 GAUGE

Able to handle 3-1/2" Magnum loads, the Benelli Super Vinci 12 Gauge offers a range of features sure to please any hunter. The In-Line Inertia-Driven action, superior balance, light weight, reduced recoil and minimal muzzle climb puts the Super Vinci at the top of the "must-have" list for hunters everywhere. It can also chamber light 2-3/4" rounds up to those big 3-1/2" ones! Call it a "Supersized" Vinci! (See the full review by JoU Barsness in this issue.)



HUNTING PRODUCT
OF THE YEAR
AWARD

LEUPOLD
RX-1000i TBR With DNA Rangefinder

HUNTING PRODUCT OF THE YEAR

LEUPOLD RX-1000i TBR WITH DNA RANGEFINDER

Light, loaded with features and accurate out to 1,000 yards, Leupold's RX-1000i is filled with the kind of engineering touches hunters and shooters want. The True Ballistic Ranging (TBR) tecUology accounts for incline, range to target and even your own ballistics information. Coupled with three reticle choices, machined aluminum body, weatherproof construction and a host of other features, it's obvious why Leupold won!



OPTIC
OF THE YEAR
AWARD

LEUPOLD
VX-R 3-9x40mm Rifle Scope

OPTIC OF THE YEAR

LEUPOLD VX-R 3-9X40MM RIFLESCOPE

A state of the art illumination system, exclusive "FireDot Reticle" and other features launched Leupold's VX-R to the top of the category. Leupold's "Motion Sensor TecUology" activates the FireDot reticle whenever the rifle is moved, the 30mm scope body offers more range of adjustment and the Extended Focus Range eyepiece makes keeping the field of view sharp fast and easy.

FOR MORE INFO:
WWW.GUNSMAGAZINE.COM/PRODUCT-INDEX
CLICK ON THE COMPANY NAME.

SAFETY PRODUCT OF THE YEAR

SUREFIRE EP3 SONIC DEFENDERS EARPLUG

Made of a soft, durable hypoallergenic polymer, SureFire's EP3 Sonic Defenders fit most ears comfortably, and offer the ability to hear ambient noise (non-electronically) yet shut off the sound of a gun report (up to 24 dB). Their construction allows for long-term wear, they come with a convenient carry case and the three sizes assure a fit for virtually anyone.



ACCESSORY OF THE YEAR

BUTLER CREEK BABY UPLULA LOADER

Offering the speed and convenience of the original LULA Speed Loader/Unloader for magazines, the new Baby brings the tecUology to handgunners. One size virtually fits all 9mm, 10mm, .357-, .40- and .45-caliber magazines, both single and double stack from all manufacturers.



HANDGUN OF THE YEAR

RUGER LC9 SEMI-AUTO

Riding crest of the hot wave of pocket-sized 9mm semi-autos is Ruger's LC9. At only 17 ounces and 6" overall length, it's slim, trim and fits neatly into a pocket. The full-caliber 9mm assures adequate stopping power for self-defense, and the 3-dot sights, 7+1 capacity and glass-filled nylon frame just adds to this award-winning package.



SELF-DEFENSE PRODUCT OF THE YEAR

CRIMSON TRACE LIGHTGUARD TACTICAL LIGHT

Made to fit S&W's popular M&P semi-auto pistols, the LightGuard offers a slim, trim fit and 100 lumens of white light, designed specifically to be compatible with Crimson Trace's LG-660 laser sight. The LightGuard removes the need for a flashlight and the shooter can operate the laser, the light or both with one hand.



RIFLE OF THE YEAR

RUGER GUNSITE SCOUT RIFLE

At only \$995, Ruger's hot new Gunsite Scout Rifle delivers .308 performance in a compact, heavy-duty rifle, loyal to Jeff Cooper's original thoughts on the Scout concept. The removable box magazine, 16.5" barrel, stout laminated stock, aperture sight, Picatinny rail and integral scope mounts help to round out this complete package. Great for the field, protection or police use.



AMMUNITION OF THE YEAR

HORNADY SUPERFORMANCE VARMINT AMMO

Using Hornady's polymer-tipped V-MAX bullet, their new line of high performance varmint ammo offers 100 to 200 fps increased velocity from any offered caliber, without increased pressure or wear. In .222, 223, .22-250 and .243, Superformance is safe in any properly chambered firearm.



KNIFE OF THE YEAR

BENCHMADE 915 TRIAGE FOLDER

The Benchmade Triage triple utility tool includes a knife, safety hook and glass breaker all in one tactical folder. The 3.5" blade is made out of highly corrosion resistant N680 stainless steel. The Triage features a hook made from 440C, G10 handles and a carbide glass breaker.



WITH THE NEW WINCHESTER 94

THE STORIED RIFLE RETURNS IN BOTH **.30-30** & **.38-55**.

Mike "Duke" Venturino
Photos: Yvonne Venturino

Production runs of military arms are commonly in the millions, but for sporting rifles getting even into the hundreds of thousands is an achievement. The Winchester Repeating Arms Company did phenomenally well with its Model 1892 by hitting the million mark in a run lasting until about 1940.

But consider this: the one millionth Winchester Model 1894 was presented to President Calvin Coolidge in 1927 and serial number 2 million was given to President Dwight D. Eisenhower in the 1950s. The last I heard before manufacture ceased in the United States about 2007 was that over 7 million Model '94s had been made. That has to make it the most proliferative non-military rifle ever produced.

The vast bulk of those first million Model 1894s were made either as saddle ring carbines or full-length rifles. The first had 20" lightweight round barrels and weighed about six pounds while the latter had 26" round or octagon barrels and weighed about 7-1/2 pounds. (There was also a military style "musket" made but they're so rare that I've never even seen one on display.)

Back in the late 19th and early 20th centuries Winchester welcomed custom orders. It's true that Model 1894s were generally considered a basic tool so custom versions are not nearly as commonly encountered at gun shows as some other Winchester lever guns. That said, it is also true that many left the factory with options such as 1/2-round, 1/2-octagon barrels, set triggers, 1/2 magazines, shotgun-



Duke found both of the new 94s perfectly reliable throughout the test with a variety of .30-30 and .38-55 factory ammunition.



style buttstocks and even fancy wood.

What is also true is this. The name .30-30 is almost synonymous with Model 1894 because the vast bulk of those 7 million or so made were so chambered. But there were other '94 calibers, especially in that first 1 million. In fact the very first cartridges for which the Model 1894 were cataloged were lead bullet, black-powder-powered .32-40 and .38-55, even though the model was designed from the ground up as a smokeless powder firearm.

It wasn't the powder that caused the slightly tardy introduction of the new rounds. It was the barrel steel. Because the envisioned new .25-35 Winchester and .30 Winchester Centerfire (WCF) used jacketed bullets, Winchester's engineers figured they would excessively wear the ordinary steel then used in building barrels. A nickel-steel alloy was required and some production problems



The new Browning/Winchester M94 is a beautiful deluxe version of the later angle-eject rifles, yet compares nicely with an original Model 1894 Winchester in the background.

were encountered in cutting it for barrels.

When those problems were solved, the .25-35 Winchester and .30 WCF appeared in 1895 and the .32 Winchester Special came along circa 1902. By 1930, the two old-time black-powder rounds were dropped. About then, so was the .25-35, but it was resurrected again between 1940 and 1950, by which time all Model '94s were carbines (sans saddle rings). The .32 Special stayed a Model '94 caliber all the way until 1973. In the time after that, many things began to happen with the '94. Handgun cartridges began to appear as chamberings and some new hotter rounds too. On the handgun side there were '94s made for .357 Magnum, .44 Magnum, and .45 Colt and at the other end there were calibers like .307, .356, and .375 Winchester. Of course the .30 WCF—now known as .30-30—stayed firmly at the top through all this.

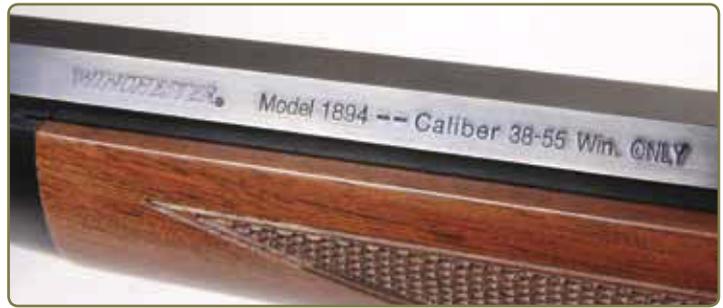
Then lawyers began their ascendancy and dictated a 1/2-cock notch in the lever gun's hammer was insufficient. So somebody came up with a cross-bolt, hammer block in the form of a large button on the rear left side of the frame. Also it was determined '94s should wear scopes, which wasn't a factor when originally designed. Scope mounting at first was a puzzler, because like all Winchester lever guns at that time, it flung its empty cases straight up. To cure that, an angle-eject version was built so a scope wouldn't be a roadblock to ejection. This happened in the early 1980s.

New Winchesters

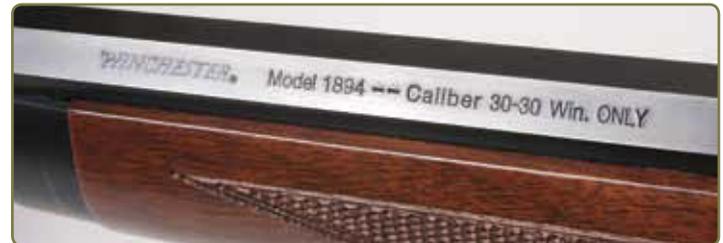
Now Browning has resurrected the Winchester Model 94. As with all lever guns now carrying the Winchester name, these new ones are being manufactured in Japan by the Miroku firm. Thus far only full-length rifles are being made but on the plus side they are not only being chambered for .30-30, but also for the venerable old .38-55. Samples of both arrived here in the summer of 2011 so I got to give both calibers a try in the new Model 94.

First, however, let's describe the new rifle. Browning has seen fit to fancy up this new version a bit. Barrels are 24" long but are 1/2-round, 1/2-octagon in configuration. Another nice touch is both buttstock and forearm are checkered and are cut from plain but eye-pleasing walnut. Finish is simply oil and not some shiny synthetic coating.

The buttstock has a crescent shaped steel buttplate, and as I still have my 1897 vintage Model 1894 .38-55, I can say the new rifle's blued buttplate duplicates the original perfectly. Likewise there is a blued steel forearm cap. The magazine tube is full length, again of blued steel, and has



The new Browning/Winchester Model 94 is being chambered as .38-55 (above) and .30-30. Both are nicely marked.



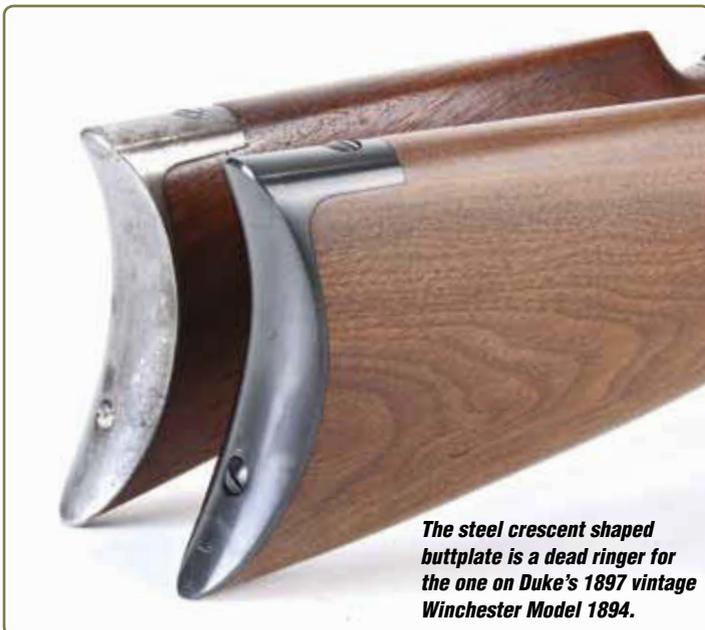
The new Browning/Winchester Model 94 uses the same angle eject receiver first introduced by U.S. Repeating Arms in the early 1980s. It is also drilled and tapped for scope mounts.

a capacity of 10 rounds. Sights are a traditional buckhorn rear with notched slider for elevation adjustment. Front is a fairly large brass bead: it subtends about 8" at 100 yards. Both front and rear sights are dovetailed to the barrel which makes it easy to drift them laterally to obtain a windage zero. With these sample rifles, the .30-30's point of impact was left of point of aim, and the .38-55s was right of point of aim. Since they were not my rifles I didn't bother to zero either.

Now we get to the necessary feature that leaves so many modern shooters cold. That's the safety. Face it: modern lever guns are going to have them. The best that the design engineers can do is make them less obtrusive. So instead of having that unsightly push button on the right side of the receiver, there is instead a sliding button installed on the tang. When pushed forward there is a red dot revealed meaning the rifle is ready to fire. Pulled back and the safety is engaged. Also it should be mentioned the hammer is a rebounding type. The trigger pulls of both samples were weighed and both averaged just slightly less than 5 pounds, which is pretty good for a modern factory rifle.

When these new Model 94s arrived, my ammo stocks showed I had three factory loads on hand for .30-30 and .38-55. Currently I don't load for .30-30 but I thought, "I'll flesh out the .38-55 shooting with a handload or two. After all, I've been handloading for the .38-55 for almost 30 years."

It was not to be. Here's why. Every vintage or "original" Winchester lever gun I've ever encountered chambered for .38-55, .38-56 or .38-72 had the same barrel groove



The steel crescent shaped buttplate is a dead ringer for the one on Duke's 1897 vintage Winchester Model 1894.

diameter. That was .379". However, many modern rifles chambered for .38-55 have .375" barrel groove diameters. This new Model 94 .38-55 has the latter size and so none of my handloads with .379" bullets would chamber—they were too “fat.” And I’m not set up to produce smaller bullets than .379" in .38-55, so the two factory loads had to suffice. Incidentally, the Black Hills .38-55 lead bullet factory load has a .377" bullet. It worked perfectly in the new rifle. However, another brand of .38-55 lead bullet factory ammo from a smaller manufacturer was tried. They used .379" cast bullets and none would fully enter the new Model 94's chamber.

Iron Accuracy

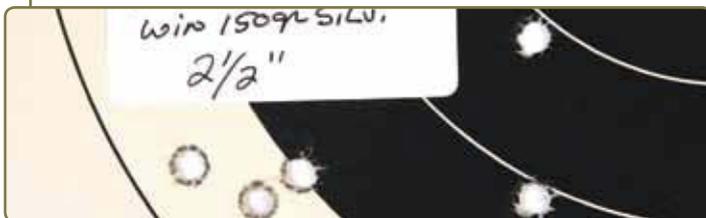
Both rifles shot nicely with the factory loads on hand considering that my eyes are now 60+ years old. That large brass-bead front sight was a definite help. I mated with it an 8" black bull's-eye, so when the bead covered all the black I knew to pull the trigger. Several groups were fired with



Duke slugged the barrel of the new Browning/Winchester Model 94 .38-55 and found it to measure .375" in the grooves.



Duke received groups like this (above) from the Browning/Winchester Model 94 .38-55. He attributes the common flyers to his eyesight. The Browning/Winchester Model 94 .30-30 consistently gave 5-shot groups like this (below) at 100 yards using only the barrel buckhorn rear sight and brass bead front sight.



MODEL 1894 RIFLE

MAKER: MIROKU, JAPAN
 IMPORTER: WINCHESTER REPEATING ARMS CO.
 275 WINCHESTER AVE., MORGAN, UT 84050
 (800) 945-5237
 WWW.GUNSMAGAZINE.COM/WINCHESTER-REPEATING-ARMS

ACTION TYPE: Lever action, **CALIBER:** .30-30, .38-55, **CAPACITY:** 10, **BARREL LENGTH:** 24", **OVERALL LENGTH:** 42-1/2", **WEIGHT:** 7 pounds, 8 ounces, **FINISH:** Blue, **SIGHTS:** Buckhorn rear, bead front, **STOCK:** Walnut, **PRICE:** \$1,379.99

.30-30 FACTORY AMMO PERFORMANCE

LOAD (BRAND, BULLET WEIGHT, TYPE)	VELOCITY (FPS)	STANDARD DEVIATION (FPS)
PMC 150 SOFTPOINT	2,402	46
WINCHESTER 150 SILVERTIP	2,528	52
WINCHESTER 150 HOLLOWPOINT	2,426	21

Notes: Chronograph figures are for 10 shots fired with chronograph screen at approximately 6'.

.38-55 FACTORY AMMO PERFORMANCE

LOAD (BRAND, BULLET WEIGHT, TYPE)	VELOCITY (FPS)	STANDARD DEVIATION (FPS)
BLACK HILLS 255 LEAD FN	1,434	9
WINCHESTER 255 JSP	1,248	65

Notes: Chronograph figures are for 10 shots fired with chronograph screen at approximately 6'.

each load in each rifle and the results were similar—most shots would go into about 2" to 2-1/2". Occasionally a flyer would increase that to 3" to 3-1/2". Remember, this shooting was done with open, barrel-mounted sights. These new “Winchesters” are angle eject so scope mounting would be easy and likely the precision delivered would be bettered too.

However, that brings us to the one thing I don't especially like about these new Model 94s. The wood is nice, the checkering is real, the metal polish and blue finish is good but I just can't get excited about that angle eject look. To me the words “Winchester lever gun” bring forth an image of an iron-sighted rifle or carbine, not a scoped one. I think Browning would have had a bigger hit with these new Model 94s if their receivers had been made the same as those before the early 1980s.

But that's my personal opinion in regards to esthetics. As far as functionality these new Model 94s did just fine. There were no feeding problems with any load tried and accuracy was at least as good as I normally get from such sighting arrangements. Now if Browning would just tell Miroku to make the actions as they were in about 1910 and craft a saddle ring carbine to boot, I think shooters would really take notice.

BLACK HILLS AMMUNITION
 P.O. BOX 3090, RAPID CITY, SD 57709
 (605) 348-5150
 WWW.GUNSMAGAZINE.COM/
 BLACK-HILLS-AMMUNITION

PMC AMMUNITION
 2257 N. LOOP 336W, STE. 140-428, CONROE, TX 77304
 (281) 703-8146
 WWW.GUNSMAGAZINE.COM/
 PMC-AMMUNITION

WINCHESTER AMMUNITION
 427 N. SHAMROCK ST., EAST ALTON, IL 62024
 (618) 258-2000
 WWW.GUNSMAGAZINE.COM/
 WINCHESTER-AMMUNITION



1-800-351-8900

JANTZ SUPPLY

DESERT IRONWOOD

Our Ironwood is unsurpassed in figure and contrasting color. Book matched 2 pc sets.



Scale Sets

5" x 1 1/2" x 3/8"

- EW170 High Contrast.....16.00
- EW171 Dark.....30.00
- EW172 Exhibition.....35.00
- EW173 Presentation.....40.00

MINI CORBY RIVETS

Designed for use in tang holes as small as 1/8". Use a 5/64" allen wrench (sold separately). Order a Jantz Rivet Drill to easily & precisely drill and countersink your handle material in one easy step.



- CP697 Brass, 5/32" head.....2.35
- CP627 Stainless, 5/32" head.....2.35
- RD8 Rivet Drill for 5/32".....19.95
- CP669 Brass, 3/16" head.....2.35
- CP629 Stainless, 3/16" head.....2.35
- RD1 Rivet Drill for 3/16".....19.95

PRE-SOLDERED GUARD KIT

440C Stainless Steel Blade with a pre-soldered nickel silver bolster. Kit includes blade, pins, dymondwood handle material and instructions.

Bearcat



- 8 3/8" overall, blade 3 3/4" x 7/8", 1/8" thick.
- SS874 Blade Only.....19.95
- SS874K Bearcat Kit.....25.95
- KT104 Leather Sheath.....14.50

Nevada Drop Point



- 8" overall, blade 3 3/8" x 1", .144" thick.
- SS650 Blade Only.....19.95
- SS650K Nevada Drop Point Kit.....25.95
- KT104 Leather Sheath.....14.50

WEEKEND PROJECTS

440C Stainless Steel Blade Kit includes blade, pins, dymondwood handle material and instructions.

Renaissance Dagger



- 6 1/4" overall, blade 3 3/4", 1/8" thick.
- SS167 Blade Only.....12.95
- SS167K Renaissance Kit.....14.95

Cobra



- 7 3/8" overall, blade 3 3/4", 1/8" thick.
- SS166 Blade Only.....14.95
- SS166K Cobra Kit.....16.95

Sportsman



- 7 3/8" overall, blade 3 1/2", 1/8" thick.
- SS164 Blade Only.....14.95
- SS164K Sportsman Kit.....16.95

Ringtail



- 7" overall, blade 2 5/8", 3/32" thick.
- SS873 Blade Only.....14.95
- SS873K Kit(w/brass bolster).....24.95

LOCKING LINER KITS

The 605 Kits



8A stainless sub zero quenched. Overall length 5 3/4", 3 3/8" closed, cutting edge 2 3/8", 3/32" thick.

- KV605MS 605 Mini Serrated.....34.95
- KV605M 605 Mini Standard.....39.95
- 605 Orig. overall 7-7/8", 4-1/2" closed, 3 1/4" blade.
- KV605 605 Original.....39.95

Black Widow



Black Anodized Stainless overall is 7 5/8", 4 1/2" closed, cutting edge 3 1/8". Is supplied with preshaped, drilled Quincewood handle material. Use a torx wrench T10 and a T6.

- SS652 Black Widow.....19.95

Hi Tech Folder



8A stainless steel blade with satin finish. It is supplied with preshaped, drilled Quincewood handle material. Length 7-3/4" opened, 4-5/8" closed, the cutting edge 3-1/8". Use torx wrench T10 and T6.

- SS3520 Hi Tech Fighter.....19.95

Fallow Kit



High Carbon Stainless blade, NS bolster, belt clip. Supplied with preshaped, drilled Quince wood handle material. Overall length 7 13/16" 4-1/2" closed. 3-1/4" cutting edge. Use Torx T10 & T6.

- SS656 Fallow Locking Liner.....19.95

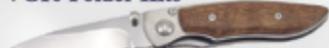
JEWELED OPENERS

For the 605 folder, Fallow, Black Widow and Hi-Tech Folder as well as other large folders using ambidextrous thumb openers with 1/8" or 5/32" holes, with supplied adapter. 7/32" dia. x.200" long each side.



- 01 02 03 04 05 06 07 08 09 10 11 12
- Choose appropriate color code and add it to the end of the part number below.
- TB81— Style 825 Opener.....19.95

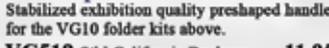
VG10 Folder Kits



Each kit includes all components except handle material. Easy instructions for the beginner. VG10 Super Sharp Mirror Polished Laminated Blade. Overall length opened is 6 5/8", 3 7/8" closed, cutting edge is 2 1/2".

- VG101 Blue Titanium Liner.....69.95
- VG102 Silver Titanium Liner.....64.95
- VG103 Stainless Liner.....59.95
- Pre-Shaped Handle for VG10
- Stabilized exhibition quality preshaped handle for the VG10 folder kits above.
- VG519 Stbl California Buckeye.....11.95
- VG570 Stbl Desert Ironwood.....11.95

VG10 LITTLE BIGHORN



VG-10 33 layer Damascus, super sharp high cobalt steel blade. Length 5 1/8", 3" closed, cutting edge is 2".

- SS723 VG10 Little Bighorn.....59.95

JANTZ USA BLADES

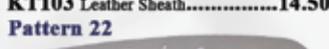
Made with pride in Jantz's Davis Oklahoma manufacturing facility, using Crucible steels. Each blade is double tempered & cryo treated for maximum wear resistance and edge holding capability. Brass bolsters available. Available in peened or satin finishes. Call if you do not see the part number for the finish you are wanting.

Pattern 21



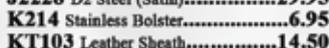
- 7 7/8" overall, 3 1/8" blade, 5/32" thickness
- J2108 440C Steel (Satin).....29.95
- J2127 D2 Steel (Peened).....29.95
- K214 Stainless Bolster.....6.95
- KT103 Leather Sheath.....14.50

Pattern 22



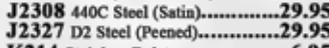
- 8 3/8" overall, 3 1/2" blade, 5/32" thickness
- J2207 440C Steel (Peened).....29.95
- J2228 D2 Steel (Satin).....29.95
- K214 Stainless Bolster.....6.95
- KT103 Leather Sheath.....14.50

Pattern 23



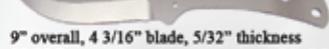
- 9 9/16" overall, 4 5/8" blade, 5/32" thickness
- J2308 440C Steel (Satin).....29.95
- J2327 D2 Steel (Peened).....29.95
- K214 Stainless Bolster.....6.95
- KT111 Leather Sheath.....14.50

Pattern 25



- 9" overall, 4 3/16" blade, 5/32" thickness
- J2507 440C Steel (Peened).....29.95
- J2528 D2 Steel (Satin).....29.95
- K214 Stainless Bolster.....6.95
- KT111 Leather Sheath.....14.50

Pattern 31



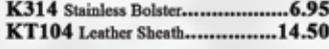
- 7 5/8" overall, 3" blade, 5/32" thickness
- J3127 D2 Steel (Peened).....29.95
- J3148 154CM (Satin).....34.95
- K314 Stainless Bolster.....6.95
- KT104 Leather Sheath.....14.50

Pattern 36 (SS573 Silver Moose)



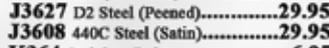
- 7 5/8" overall, 3" blade, 1/8" thickness
- J3627 D2 Steel (Peened).....29.95
- J3608 440C Steel (Satin).....29.95
- K364 Stainless Bolster.....6.95
- KT103 Leather Sheath.....14.50

Pattern 37 (SS473 Silver Fox)



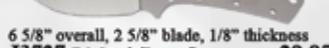
- 6 5/8" overall, 2 5/8" blade, 1/8" thickness
- J3727 D2 Steel (Peened).....29.95
- J3708 440C Steel (Satin).....29.95
- K374 Stainless Bolster.....6.95
- KT116 Leather Sheath.....14.50

Pattern 38



- 7" overall, 2 1/2" blade, 5/32" thickness
- J3828 D2 Steel (Satin).....29.95
- J3837 CPMS 30V (Peened).....39.95
- K384 Stainless Bolster.....6.95
- KT104 Leather Sheath.....14.50

Pattern 39



- 6 1/2" overall, 2 1/2" blade, 1/8" thickness
- J3907 440C Steel (Peened).....29.95
- J3928 D2 Steel (Satin).....29.95
- KT103 Leather Sheath.....14.50

Pattern 40



- 7 3/16" overall, 3 1/4" blade, 1/8" thickness
- J4008 440C Steel (Satin).....29.95
- J4027 D2 Steel (Peened).....29.95
- KT103 Leather Sheath.....14.50

LETTER OPENER

Available with or without a lightly etched Oak leaf design. 6" length, 4 1/2" blade, 7/16" wide, .046" thick.

The Frisco



- SS204 Frisco w/ Engraving.....7.95
- SS205 Frisco without Engraving.....7.95

The Burlington

This new opener is easy to customize. Nickel Silver bolsters are pre-pinned and ready to finish, the mirror finished stainless blade is 9-1/4" overall, 5-1/2" below the bolster. Kit includes blade, handle material, and pins.



- SS203 Letter Opener.....9.95
- SS203K Letter Opener Kit.....12.95

The Pacific

The mirror finished stainless blade has 3/32" holes and is 8-1/2" overall, 4-1/4" blade. Kit includes blade, handle material, and pins.



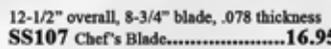
- SS201 Letter Opener.....8.95
- SS201K Letter Opener Kit.....10.95

KEEN EDGE BLADES

Light, flexible, well balanced. 8A blades, satin finished, flat ground to a super sharp edge that stays sharp. 4 styles to meet all your kitchen & camp needs.



- 12-1/2" overall, 8-3/4" blade, .078 thickness
- SS107 Chef's Blade.....16.95



- 10-1/2" overall, 6" blade, .078 thickness
- SS106 Cook's Blade.....14.95



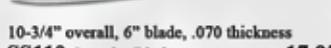
- 7-1/2" overall, 3-1/2" blade, .058 thickness
- SS108 Steak Blade.....9.95



- 10-3/4" overall, 6" blade, .070 thickness
- SS110 Santoku Blade.....17.95



- 7-1/2" overall, 3-1/2" blade, .058 thickness
- SS108 Steak Blade.....9.95



- 10-3/4" overall, 6" blade, .070 thickness
- SS110 Santoku Blade.....17.95

knifemaking.com

Download our on-line catalog free.

Jantz Print Catalog
Knifemaking supplies, tools, equipment, leathers, engraving and more.

JC47 Catalog \$5.00
Free with any order.

Send orders to:
309 W MAIN, DAVIS OK 73030
1-580-369-2316

ADD \$9.95 FOR SHIPPING



PRICES SUBJECT TO CHANGE

INCLINE SHOTS

Methods for solving angled shots using the Angle Indicators from Sniper Tools.

Jacob Gottfredson

Most hunters understand the bullet goes high when shooting at an angle either up or down. For most however, deciding how much remains problematic. One reason centers around what approach to take. You need to know the angle or angle cosine in any case. Once known, there are myriad methods to approach the problem. And an exact solution does exist.

There are various ways to learn the angle at which the shot will be taken. One tool, and the best for use with small arms in my opinion, was developed by Ward Brien of Sniper Tools Design Company. This simple, yet innovative device attaches in various ways to the action or scope. The angle degree or angle cosine, depending on the model chosen, is immediately available.

The indicator is in use on a wide range of military small arms, but it is also a great aid for hunters as well as Law Enforcement and can be attached to any rifle with a Picatinny rail or 30mm scope. No one wants to miss a trophy animal if it happens to be standing down in the canyon or up the ridge.



Incline shooting takes skill in order to make productive hits, whether on the battlefield or in big-game hunting. This High Angle Training class was given by Jacob Bynum of Rifles Only and Frank Galli of Sniper's Hide at Clint Smith's Thunder Ranch. Photo: Frank Galli of Sniper's Hide

ANGLE DROP TABLE

© Perry Systems (used with permission)

AMMO: .308 WIN BULLET: 175-grain Sierra MatchKing, 2,600 fps, ALTITUDE: Sea level, TEMPERATURE: 59° F, PRESSURE: 29.53 Hg, SCOPE: 1.5" above bore, ZERO: 100 yards

ANGLE:	0	10	20	30	40	50	60	70	
COSINE:	1.00	.98	.94	.87	.77	.64	.50	.34	
Range (yards)	All Comeups in MOA								
100	0.00	0.00	-.25	-.25	-.50	-1.00	-1.25	-1.75	
150	1.00	.75	.75	.50	0.00	-.50	-1.00	-1.75	
200	2.00	2.00	1.75	1.50	.75	.25	-.50	-1.50	
250	3.50	3.50	3.00	2.50	2.00	1.00	0.00	-1.00	
300	5.00	4.75	4.50	3.75	3.00	2.00	.75	-.50	
325	5.75	5.75	5.25	4.50	3.50	2.50	1.00	-.25	
350	6.50	6.50	6.00	5.25	4.25	3.00	1.50	0.00	
375	7.50	7.25	6.75	6.00	4.75	3.50	2.00	.25	
400	8.25	8.25	7.50	6.75	5.50	4.00	2.25	.50	
425	9.25	9.00	8.50	7.50	6.25	4.75	2.75	.75	
450	10.25	10.00	9.25	8.25	7.00	5.25	3.25	1.00	
475	11.00	11.00	10.25	9.25	7.75	5.75	3.75	1.50	
500	12.00	11.75	11.25	10.00	8.50	6.50	4.25	1.75	

Notes on using this information:

The table the shooter carries to the field should include data for wind and moving target lead. These are not affected by angle fire and were left off in this chart for clarity. It is easy enough to print an all-in-1 chart. When angled fire is required, the rifleman need only look at the Angle Drop Table (for your caliber and conditions). There is no need to do any math. However, the exact angle or cosine of the angle at which the shot is taken requires one of the Indicators from Sniper Tools.

The indicator uses high tech lubricants and operates from -30 to 300 degrees F. After it is leveled to the bore, the Indicator is flawless, operates without batteries and is impervious to water and other environmental conditions.

Ups & Downs Of Comeups

Many snipers and other shooters use "rules of thumb" methods to determine what adjustments to make when shooting up or down at an angle. These "rules of thumb" are approximations and work reasonably well in some circumstances, but perform very poorly in others.

Unless taken from a modern ballistic program using differential equations of time and motion, these "ballpark" indicators are often far enough out of the park to cause misses on medium- to long-range targets, or to miss short-range targets if they are small.

Rule Of Thumb: Method I

This rule tells us to use: Cosine of angle times distance to target to get an effective "gravity distance." It is seductively

"RATHER THAN USE RULES OF THUMB, WHY NOT LET THE COMPUTER DO ITS THING AND PRODUCE A CRISPLY FORMATTED TABLE WITH THE EXACT INFORMATION NEEDED. HENCE THE EXACT "ANGLE DROP TABLE" FEATURED IN EXBAL. NO MATH REQUIRED! NO PENCIL AND PIECE OF PAPER REQUIRED EITHER!"

COMPARISON OF METHODS I, II, & III SOLVING 40-DEGREE ANGLE SHOTS

AMMO USED IN EXAMPLE: .308 Win, 175-grain Sierra MatchKing, 2,600 fps, ALTITUDE: Sea Level, TEMPERATURE: 59 F, PRESSURE: 29.53 Hg, SCOPE: 1.5" above bore, COSINE: .766 (40-degree angle)

METHOD I: MULTIPLY ANGLE COSINE BY RANGE TO GET EQUIVALENT TARGET RANGE

METHOD II: SUBTRACT 1 MOA FOR EACH 20 DEGREES OF INCLINE

METHOD III: MULTIPLY ANGLE COSINE BY COMEUPS, THEN SUBTRACT BIAS VALUE** TO GET ADJUSTED COMEUPS

RANGE (YARDS)	HORIZONTAL COMEUPS* (FROM 100-YARD ZERO)	CORRECT COMEUPS TO SOLVE 40-DEGREE SHOT	COMEUPS (SOLUTION)	METHOD I (ERROR)	COMEUPS (SOLUTION)	METHOD II (ERROR)	COMEUPS (SOLUTION)	METHOD III (ERROR)
450	10.3	7.0	4.9	-2.1	8.2	1.2	7.0	0.0
500	12	8.5	5.9	-2.6	10.0	1.5	8.5	0.0

Notes: *All Comeups in MOA (minute of angle). **See Bias Value Chart, below.

simple to use but its accuracy may leave a lot to be desired. For example, shooting a 500-yard target on a 40-degree angle using this method we use this equation: $500 \times .766$ (the cosine of 40 degrees) = 383 yards, the effective distance to the target corrected for angle.

For the classic .308 Winchester target load using a 175-grain MatchKing bullet at 2,600 fps, at sea level, and 59 degrees F, with a 100-yard zero, the horizontal elevation adjustment needed at 500 yards is 63.3". At 383 yards, 31.1" are calculated by this method. The exact elevation adjustment needed for a 40-degree angle at 500 yards is 43.6". Thus the error is $31.1 - 43.6 = -12.5"$. Not too good if you're trying to make a hit on an 8" kill zone.

This method is correct in reducing the effective distance to the target. However, the bullet will spend just as much time getting to a 500-yard target at 40 degrees as it will getting to a target that is horizontal. This is because gravity pulls the bullet's trajectory over 500 yards, not 383 yards. Thus the vertical bullet drop from the line of bore will be the same in both cases. For horizontal shooting, the cosine of the angle (0 deg) is 1.0, and the drop and tra-



The Angle Cosine Indicator (left) is used by the US Military and shown with optional mounts for the Picatinny rail. The Angle Degree Indicator (right) is attached to the rifle's scope. Notice this configuration allows a right-handed shooter to see the indicator, and the angle at which the shot will be taken, with his left eye immediately. A left-hand mount is also available.



With the Flatline Ops level in place, move the rifle until the unit reads level. Use a screwdriver to loosen the screw on the side of the indicator as shown. Make sure you face the indicator perpendicular to the zero on the indicator. Move the body, upon which the numbers are engraved, until it reads zero and tighten the screw.

jectory axis are both vertical. Thus the projection of drop is not reduced by time in this case to get the actual trajectory. The key here is the drop value. It is based primarily on gravitational force over the time of flight. Using a distance less than the actual target distance does not account for all of the time the bullet spends in flight.

Rule Of Thumb: Method II

Another rule of thumb, which uses MOA instead of inches, is to subtract 1 MOA for every 20 degrees of angle from the horizontal comeups for the yardage. The range of

ANGLE DEGREE INDICATOR

MAKER: SNIPER TOOLS DESIGN CO.
P.O. BOX 1647, ESTES PARK, CO 80517
(800) 651-1050

WWW.GUNSMAGAZINE.COM/SNIPER-TOOLS

FEATURES: Water resistant, aircraft-grade aluminum, flat black anodized, numbers laser engraved, lenses shatterproof and shockproof, resistant to chemicals such as acetone and cleaning solvents, no batteries

PRICE: \$109.95

ANGLE COSINE INDICATOR

SAME AS ABOVE, PLUS MANUFACTURED PER US MILITARY SPECIFICATIONS AND DIRECTIVES
PRICE: \$141

NOTE: Sniper Tools also carries the Flatline Ops True Bore Leveler

TRUE BORE LEVELER: \$19.95

500 yards takes a dial comeup of 12 MOA from a 100-yard zero. When using this rule of thumb, the shooter looks at the chart and sees 12 MOA. He then takes the angle with the indicator and sees 40. For every 20 degrees, he subtracts 1 MOA. So from the standard comeups of 12 MOA, he subtracts 2 and uses a comeup of 10 MOA.

However, the true correction for 500 yards (see Method Comparison chart) is to come up 8.5 MOA. Method II results in an error of 1.5 MOA, which at 500 yards translates to an error of 7.0" ($10 - 8.5 = 1.5$ MOA). For this

BIAS VALUES FOR EXAMPLE CARTRIDGE

DEGREE OF ANGLE:	0	10	15	20	25	30	35	40	45	50	55	60	65	70
COSINE:	1	.98	.97	.94	.91	.87	.82	.77	.71	.64	.57	.50	.42	.34
BIAS:	0	.12	.22	.35	.50	.68	.88	1.1	1.34	1.60	1.87	2.17	2.46	2.76

NOTES: Bias Values were calculated by regression analysis to minimize the calculation errors for angle vs. distance.

particular set of variables, the result is slightly better than Method I. Once again it might produce a miss on an 8" kill zone. But the error becomes extreme at longer ranges and steeper angles.

Rule Of Thumb: Method III

A better approximation was developed at Perry-Systems and is obtained as follows: Multiply the horizontal comeups (for the actual target distance) by the cosine of the incline angle and subtract a bias value. This method takes the actual time of flight into account. This produces a significantly smaller error than either of the first two methods (see "Bias Values" chart above).

Comparison Of Methods

The .308 Win has been used in these examples because it is a cartridge often used by snipers, and it is also in a popular caliber for hunters. It is true, however, that errors can be lessened by the use of modern day thunderboomers such as the Ultra Mags. Mastering these concepts, particularly at medium to long ranges, takes a great deal of practice,



CHROME-LINED BARREL, LONGER LIFE, EASIER CLEANING

ALL BARRELS AND BOLTS ARE PROOF-TESTED AND MAGNETIC-PARTICLE-INSPECTED TO MIL-SPEC STANDARDS

MONOLITHIC RAIL DESIGN THAT ALLOWS THE ABILITY TO CHANGE BARREL LENGTH, OPERATING SYSTEMS AND CALIBERS WITH THE TURN OF TWO LOCKING BOLTS

STRAIGHT GAS TUBE RESISTS BENDING, BETTER ALIGNMENT

7 QD SLING SWIVEL ATTACHMENT POINTS

MIL STD 1913 STANAG 4694 COMPLIANT RAIL SPACE

CAPTIVE FIRING PIN WITH RETAINING PIN

AR10 MAGAZINE COMPATIBLE

AMBIDEXTROUS SAFETY SELECTOR AND MAGAZINE RELEASE

2 STAGE ELECTRONICALLY RECORDED TRIGGER

ADJUSTABLE SIGHTS TO FIT YOUR REQUIREMENTS

IMPROVED ERGO GRIP

SOPMOD COLLAPSING BUTTSTOCK, 6 POSITION

LM308MWS

YOU GET WHAT YOU PAY FOR!

That's why you'll never see us use statements like "Deal of the Week" or "Lowest Price Ever". That's why we prefer to use our ads to point out the features that make Lewis Machine & Tool weapons different from the rest and help you to retain a higher long-term value in your firearm investment.

We understand that deals seem appealing, but we also understand what it costs to build the weapon you want by your side for a lifetime. So when you find yourself with your finger on the trigger, you need to decide, do you want a weapon built the way a weapon should be built or do you want a "Deal of the Week"?



PHONE: 309-732-9527
SALES@LMTDEFENSE.COM
WWW.LMTDEFENSE.COM

and the big guns are both expensive and difficult to shoot.

The method comparison chart compares the errors from the foregoing methods of determining comeups for a 40-degree angle. I have used only 450 and 500 yards for brevity. Note the errors increase as distance and angle increase.

The Exact Solution

After dwelling on this problem at www.perry-systems.com, the author of Exbal finally concluded, "What is needed is not another rule of thumb but an effectively formatted exact solution. How is this accomplished?"

First are the underlying equations of motion used to solve ballistic problems. The differential equations of time and motion are solved for each yard along the way until the bullet path reaches the target.



Flatline Ops supplies a device (\$19.99) so you can ensure the barrel is level. It is a great help in calibrating the Angle Indicators. The rear is magnetized. Just attach it to the front of the barrel. Sniper Tools has 'em.

Rather than use rules of thumb, why not let the computer do its thing and produce a crisply formatted table with the exact information needed. Hence the exact "Angle Drop Table" featured in Exbal. No math required! No pencil and piece of paper required either!

The "Angle Drop Table" shows the comeups needed vs. distance and angle of incline/decline for ranges to 500 yards and angles from 10 to 70 degrees for the sample .308. Note that it includes the cosine of the angle. This is useful for those who are fortunate enough to have Sniper Tools' "Cosine Indicator" or "Angle Indicator" attached to their scope or mount. **GUNS**

RIFLES ONLY
188 SOUTH F.M. 772, KINGSVILLE, TX 78363
(361) 595-5472
WWW.GUNSMAGAZINE.COM/RIFLES-ONLY

PERRY-SYSTEMS
P.O. BOX 581, BISHOP, TX 78343
(361) 584-2555
WWW.GUNSMAGAZINE.COM/PERRY-SYSTEMS

SNIPER'S HIDE, LLC.
3205 FENTON ST., WHEAT RIDGE, CO 80212
WWW.GUNSMAGAZINE.COM/SNIPERS-HIDE

Recoil Can Get Nasty!

Reduce Recoil, Reduce Muzzle Jump. For accuracy, dependability, and quality.



41302 Executive Drive
Harrison Twp., MI 48045-1306

Phone: 586-469-6727
Fax: 586-469-0425

www.magnaport.com
email@magnaport.com



Cheaper Than Dirt!

858-501

America's Ultimate Shooting Sports Discounter



Lake City 5.56 NATO M855
SS109 Penetrator, 62 Grain,
3 Stripper Clips - 30 Rounds
AMM-249 ... \$14.79



Level III Pack
Heavy-duty Zippers, Quick
Release Buckles, MOLLE Style
Webbing, 18x10x10"
PACK-125 ... \$49.97



7.62x51 Battle Pack
FMJBT, NATO 147 Grain DM111, 200 Rounds
AMM-727 ... \$85.39



Finnish Gas Mask
New Filter. Used,
Grade I Condition
MIL-1200 ... \$11.97



Bulk Pack .45 ACP
FMJ, 230 Grain,
250 Rounds
AMM-513 ... \$104.79



Ceramic Filtration System
Removes Waterborne Bacteria,
Filters 1,000 Gallons of Water
CAMP-352 ... \$29.97

**Holds
100 Gallons!**



Water Bob
100 Gallon Capacity, Includes
Fill Socket, Bladder, Siphon
Pump and Instructions
CAMP-205 ... \$19.97



**Deluxe
MRE Meals**
Complete 12 Meal
Case, Military
Grade Components,
Selections Vary
Per Case
MRE-525 ... \$79.97



AR-15 M4 Carbine Quad Rail
UTG, Pro Mil-Spec Forearm,
Replaces Original Handguards
ARR-238 ... \$59.97



**Complete
Tactical
Assault Gear**
Nylon Vest,
Full ModGEAR
Webbing, One
Size, Fits up
to 51" Waist
MOLLE-060
\$99.97



Quick Link!
Use Your Smart
Phone to Visit
Our Website!



**Tactical Flashlight
and Laser**
150 Lumens, 3mW Red
Laser, 120 Minutes,
Picatinny Mount
LIGHT-153 ... \$79.97

**.50 Caliber Ammo
Can with FREE
Set of Three
Organizer Trays**
11 1/2 x 8 x 6"
ZAA-050 ... \$14.97



**FREE Set of
Organizer Trays!
\$9.97 Value!**



7.62x54R Russian Surplus
FMJBT, 149 Grain, Berdan Primed,
440 Round Spam Can
AMM-653 ... \$94.97



**Federal® .308
BTHP, 168 Grain,
20 Rounds
AMM-691 ... \$22.79**



American Eagle 9mm
FMJ, 124 Grain,
50 Rounds
AMM-436 ... \$12.19



Ulyanosk 7.62x39
FMJ, 122 Grain, 640 Round Spam Can
AMM-6408 ... \$127.89



Federal 5.56x45mm
FMJBT, 55 Grain,
30 Rounds, XM193
on Stripper Clips
AMM-269 ... \$11.19



Federal American Eagle .223
FMJBT, 55 Grain
1,000 Rounds Loose Pack
AMM-272 ... \$435.09



Federal Premium 9mm
JHP, 115 Grain,
Marked LE, 50 Rounds
AMM-4061 ... \$16.79



Remington® .223
FMJ, 55 Grain, 20 Rounds
AMM-206 ... \$10.49



Lake City 5.56 Penetrator M855
Military, 62 Grain,
1000 Rounds Loose Pack
AMM-223C ... \$479.79



Federal® .223 XM193
FMJBT, 55 Grain,
20 Rounds
AMM-207 ... \$8.19

We Sell Firearms!
The largest selection of firearms in the world.

www.CheaperThanDirt.com

For more information, visit our website or call 800-421-8047

THESE ARE THE NEW “NEW VARMINTERS”

John Taffin

When the .17 HMR arrived, Freedom Arms gave dedicated varmint hunters this cartridge chambered in the Model 97. Now very recently Freedom Arms has unveiled two more versions of the Model 97, both on the pleasant shooting, small game and varmint side. The introduction of the Model 97 in .32 Magnum, especially with a 7-1/2" barrel gave shooters the epitome of .32 Magnum sixguns and the addition of a .32-20 cylinder made it even more versatile.

When Federal introduced the .327 Magnum they succeeded in making the .32 H&R Magnum what it should have been in the first place. Originally, and still for most manufacturers of revolvers, the .327 is mainly looked upon as a self-defense cartridge chambered in the short-barreled

pocket pistols. However, the .327 which is simply a longer .32 Magnum, is worthy of other homes. Freedom Arms is the first to offer it in a long-barreled hunting version.

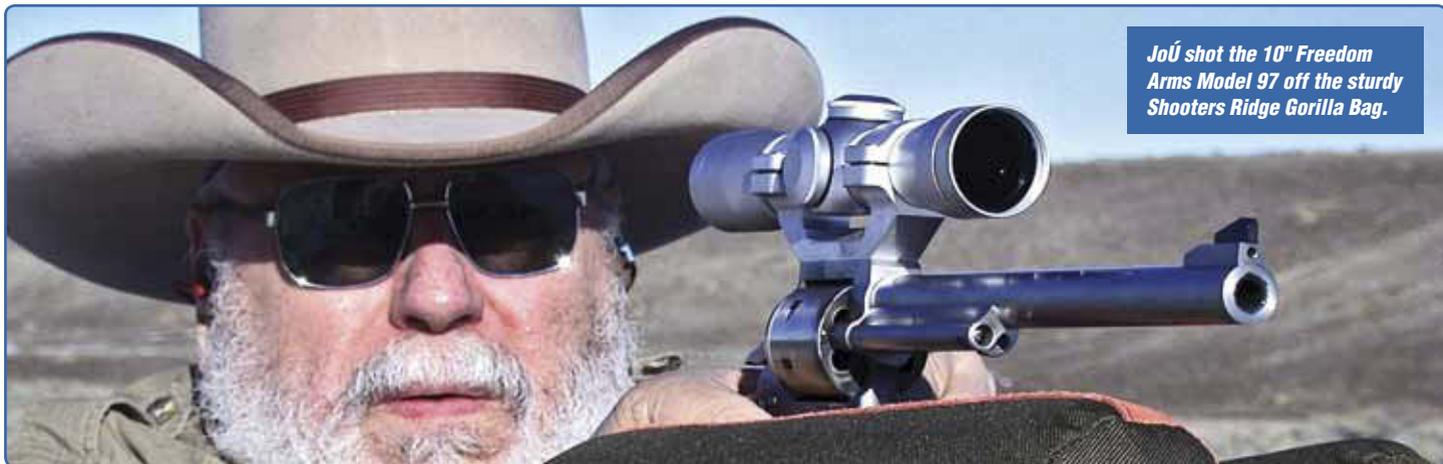
To arrive at the Freedom Arms .327, they simply added another cylinder to the .32 Magnum Model 97, and I am now shooting a 10" scope-sighted .327 Federal/.32 Magnum/.32-20. However, Bob Baker of Freedom Arms did not stop there. At the 2008 Shootists' Holiday we were able to shoot the third cartridge pioneered by Freedom Arms. First came the .454, then the .500 WE and now we have the .224-32 FA. To arrive at this fast-stepping .22, Baker necked down the .327 Federal Magnum.

Freedom Arms offers a full kit consisting of Model 97, RCBS dies, and if desired, a scope mounted in place. Sixgunners can now order the "New Varminters" Trio in identical barrel lengths chambered for the .17 HMR, .327 Federal Magnum and .224-32 FA. The spectrum of varmint hunting is virtually completely covered by these three smallbore sixguns. My original 10" Model 97 chambered in .17 HMR has now been sided by both the

THE SMALLBORE FREEDOM ARMS MODEL 97 REVOLVERS.

Varmints beware! Freedom Arms 10" Model 97s chambered in .224-32 FA, .327 Federal and .17 HMR.





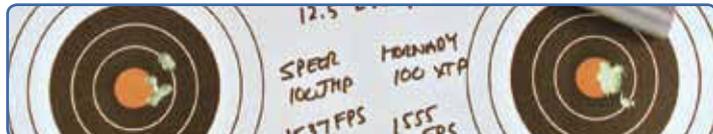
JoÚ shot the 10" Freedom Arms Model 97 off the sturdy Shooters Ridge Gorilla Bag.

.327 Federal and .224-32 in the same barrel lengths, the only difference in addition to the chambering is my choice of scopes for each one. The .17 wears an old Redfield 2-6X LER scope I acquired nearly 30 years ago, the .327 has been fitted with a new silver Leupold 4X LER scope and I ordered the .224 fitted with BusYell Variable LER scope by Freedom Arms.

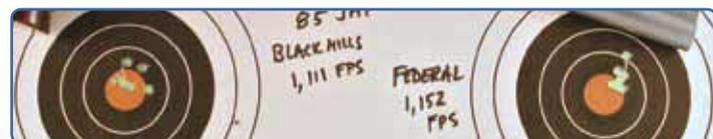
Ammunition for the three New Varminters is quite varied. Being a rimfire cartridge, actually a necked down .22 WMR, the .17 HMR is only available as a factory offering, and factory loads are offered for the .32 Magnum, .32-20, and .327 Federal. Handloaders can improve the first two .32s significantly, as the Freedom Arms Model 97 is able to handle much stouter loads than those offered by the factories.

That brings us to the .224-32 FA which at this point is strictly a do-it-yourself project. Beginning with the .327 Federal case, RCBS dies are used to form the .224-32, which must be trimmed to the proper length, and then fire formed. If you start with once-fired .327 Federal brass, case forming is much easier if it is first re-sized in a carbide sizing die. In fact, if this is not done the cases may collapse when run through the .224-32 sizing die.

Here then are the steps I go through to make a .224-32 FA: 1) Once-fired .327 brass is tumbled clean. 2) It is then sized in a .32 Magnum carbide sizing die. 3) Cases are then hand-lubed with a lanolin-based lube and run through the RCBS .224/32 FA sizing die. 4) Next comes trimming to length using the RCBS Trim Pro power trimmer. 5) Case necks are de-burred inside and out and the cartridge is now



The Freedom Arms Model 97 performs well with .327 Federal Magnum factory loads (above) and .32 Magnum factory loads (below).



JoÚ's 50-yard groups (above) with the Freedom Arms .327 Federal Model 97 were outstanding. Accuracy was spectacular (below) with the Freedom Arms Model 97 with all three cylinders in .32 Magnum, .32-20 and .327 Federal Magnum. Notice the first two cylinders are fluted.



“BY THE TIME YOU COME UP WITH SUCCESSFUL LOADS FOR THE .224, YOU WILL HAVE EXPERIENCED A GRADUATE COURSE IN CASE FORMING, AND IF I CAN DO IT, ANYONE CAN.”

HANDGUN VARMINTING

Long, long ago, in fact three decades before I became a staff writer for this publication, I was a devoted reader going all the way back to the discovery of that first January 1955 issue of *GUNS* while still in high school. As a young sixgunner I devoured everything I could find to read about guns. Early favorite writers when it came to sixguns were Elmer Keith and Kent Bellah, both of whom wrote for this magazine in the early days.

In the late 1950s, a new writer appeared, with his first articles being published right here. His name was Allen Skelton and one of his first articles was titled "These Are The New Varminters." I still have that article saved in plastic sheets, and I still enjoy looking at the

pictures of his Ruger and Smith & Wesson .357 and .44 Magnums. This young fellow, who so easily caught my imagination and fired my enthusiasm, wrote other articles for *GUNS* as Charles A. Skelton, and soon went on to greater fame using a nickname from his school days, Skeeter.

In the early 1960s, manufacturers began searching for better cartridges for varmint hunting than the big magnums. From Remington came the .22 Jet, chambered in the S&W Model 53, and the .221 Fireball in the single-shot XP-100. Winchester's offering was the .256 Winchester, which although chambered in proto-type Colt sixguns, was instead only offered in the single-shot Ruger Hawkeye and Marlin Levermatic. Even

before these cartridges arrived, sixgun genius Jim Harvey was using shortened and blown out .22 Hornet brass to form his .224 Harvey Kay-Chuk for use in converted S&W Model 17 revolvers.

The .22 Jet was advertised as obtaining 2,400 fps with a 40-grain bullet. Actual ballistics never even came close to this, more like 1,800 fps and serious problems developed. The .22 Jet was arrived at by necking down the .357 Magnum case to a .22 shaped like a milk bottle. The major problem with the .22 Jet was set-back. That is, due to its shape, upon firing, the head of the cartridge would jam against the recoil shield thus tying up the sixgun and the cylinder could not be rotated. All manner of things were tried to make the .22 Jet work. I tried them all to no avail, unless powder charges were cut drastically. Now nearly a half-century later what the .22 Jet could not do is possible with the .224-32 FA (Freedom Arms).

Freedom Arms started with the

ready to be loaded for fire-forming. I have found Step 3 works better if it is separated into two stages, first without the de-capping/expander in place, and then the operation repeated with this stem back in the die.

Cases are then checked to see if they will fit the chambers of the Model 97 properly and if so loaded with 40-grain bullets and fire-formed. I used 12.5 grains of AA1680 for this last step.

Freedom Arms has set the minimum and maximum case lengths at 1.115" and 1.120" respectively; mine are trimmed to 1.1185". The sizing die is set by using a feeler gauge between the bottom of the die and the top of the shell holder; I started at a setting of .005" and then decreased

MODEL 97

MAKER: FREEDOM ARMS INC.
314 HWY 239, FREEDOM, WY 83120
(307) 883-2468
WWW.GUNSMAGAZINE.COM/FREEDOM-ARMS

ACTION: Single-action revolver, **CALIBERS:** .17 HMR, .22 LR/.22 WMR, .224-32 FA, .32 Magnum/.327 Federal/.32-20, .357 Mag, .41 Mag, .44 Special, .45 Colt/.45 ACP., **CAPACITY:** 6 (5 in .41, .44 & .45), **BARREL LENGTH:** 4-1/4", 5-1/2", 7-1/2", 10", **OVERALL LENGTH:** 9.175" to 15.125", **WEIGHT:** 42 to 51 ounces, **FINISH:** Stainless steel, **SIGHTS:** Fixed, adjustable or scope (extra), **GRIPS:** Laminated rosewood, **PRICE:** \$1,891 (centerfire), \$1,907 (rimfire)

ELITE 3200 HANDGUN SCOPE

MAKER: BUSHNELL
9200 CODY AVE., OVERLAND PARK, KS 66214
(800) 423-3537
WWW.GUNSMAGAZINE.COM/BUSHNELL

MAGNIFICATION: 2X-6X, **OBJECTIVE DIAMETER:** 1.4", **EYE RELIEF:** 20", **INTERNAL ADJUSTMENTS:** 50" at 100 yards, **RETICLE:** Multi-X, **PRICE:** \$333.99

FX-II HANDGUN SCOPE

MAKER: LEUPOLD
1440 N.W. GREENBRIAR PKWY., BEAVERTON, OR 97006
(800) 538-7653
WWW.GUNSMAGAZINE.COM/LEUPOLD

MAGNIFICATION: 4X, **OBJECTIVE DIAMETER:** 1.4", **EYE RELIEF:** 18", **INTERNAL ADJUSTMENTS:** 60" at 100 yards, **RETICLES:** Duplex, **PRICE:** \$349.99



this to .004". This allows the shoulder to be pushed back to properly fit the cylinder and also head space correctly for easy cylinder rotation.

Both brass and cylinder chambers must be clean to prevent set-back as was a problem with the .22 Jet (see sidebar). If the lube is not removed from the brass, cases will set back and tie up the cylinder. I use a towel to wipe loaded cartridges clean and also use a spray degreaser on the cylinder chambers followed by cleaning with Q-Tips. I did neither in my first fire-forming loads and I had to remove the cylinder which locked up tightly to extract the cases. When both brass and cylinder are kept clean and dry there is no problem with setback, even with loads faster than 2,200 fps.

Proper bullets for the .224-32 FA are .224" in diameter and reloaders have a large selection available from such manufacturers as Barnes, Hornady, Nosler, Sierra and Speer. Two of the Hornady V-Max bullets as well as the Nosler Ballistic-Tip are of the boat-tail design which makes loading miniscule bullets in tiny little cases much easier. I have found flat-based bullets can only be used if the necks are given extra expansion with something like a Nexpander tool. If this is not done they will crush the case instead of seating properly. By the time you come up with successful loads for the .224, you will have experienced a graduate course in case forming, and if I can do it, anyone can.

Freedom Arms recommends standard pistol primers and



chambered in .357 Magnum. This grand cartridge straddles the fence between the truly big bores and the more pleasant-to-shoot smallbores. It is actually a jack-of-all-trades; bigger than necessary for small game and varmints, while in very careful hands with proper loads and bullets can be used for big game.

Freedom Arms then went two directions with the Model 97 after the first one was introduced (and are we thankful for that!). On one hand we have the big-bore .45 Colt, .41 Magnum and .44 Special.

On the other hand we have the very pleasant shooting .22 Long Rifle available with an extra .22 Magnum cylinder and the .32 Magnum with an extra .32-20 cylinder.

I ordered both the .22 Long Rifle and .32 Magnum with 7-1/2" barrels and their companion auxiliary cylinders when they were first announced. They have proven to be exceptionally accurate sixguns with all four chamberings.

GUNS

.454 in 1983, "backed down" to the .44 Magnum, and then added such big bores as the .475 Linebaugh and .500 Wyoming Express. These are great cartridges and all and anything that

walks can be taken with one or more of them. While producing these magnificent sixguns, Freedom Arms has not forgotten the gentler, kinder crowd. It began with the introduction of the smaller Model 97



Varmint cartridges go back a long ways and include the old 1892 Winchester's .25-20 (left) and the more modern .256 Winchester next to it. On the .22 front, we have the old timer .22 Hornet (fourth from right), .22 K-Hornet, .22 Jet and now the ultra modern .224-32 FA (right).

AA1680 and Hodgdon's 4227 for loading the .224-32. The latter is one of my favorite powders for big-bore sixguns, and AA1680 meters so well through the RCBS powder measure it is pure pleasure. As a test, I set the powder measure for 12.7 grains of 1680 and then threw 10 charges measuring each one. Eight of them came out 12.7, one was 12.6, and

.17 HMR FACTORY AMMO PERFORMANCE

LOAD (BRAND, BULLET WEIGHT, TYPE)	VELOCITY (FPS)	GROUP SIZE (INCHES)
CCI TNT HP	2,164	.974
CCI V-MAX	2,355	.917
CCI GAME POINT HP	2,147	.912
FEDERAL TNT HP	2,304	.735
HORNADY V-MAX	2,275	.714
REMINGTON V-MAX	2,276	1.022

Notes: Groups the product of 5 shots at 50 yards.
Chronograph screens set at 10' from muzzle.

.327 FEDERAL MAGNUM FACTORY AMMO PERFORMANCE

LOAD (BRAND, BULLET WEIGHT, TYPE)	VELOCITY (FPS)	GROUP SIZE (INCHES)
FEDERAL GOLD DOT 115 JHP	1,595	1
FEDERAL AMERICAN EAGLE 100	1,741	1-1/2



Forming the .224-32 starts with a .327 Federal case which is then sized, trimmed to length, and loaded for fire-forming.



Boattail bullets such as Hornady's 40- and 50-grain V-Max (second and third from left) and the Nosler 40-grain Ballistic Tip (right) are the easiest to load in the .224-32 FA. The Hornady 35-grain V-Max (left), is harder to load because of its smaller size and flat base.

BURGER KNIVES
distinguished craftsmanship
Est. 1987



Renowned world wide for our quality range of sword canes, custom canes and knives.

Tel. 301-3935423

www.swordcane.com

REST ASSURED



Call Us Today For Your Free Brochure

1-800-821-5216

993 North Industrial Park Road
Orem, Utah 84057

FORT KNOX
SECURITY PRODUCTS

"THE MOST TRUSTED NAME IN SECURITY"

www.FtKnox.com

**.327 FEDERAL MAGNUM
HANDLOADED AMMO PERFORMANCE**

BULLET (BRAND, BULLET WEIGHT, TYPE)	POWDER (BRAND)	CHARGE (GRAINS WEIGHT)	VELOCITY (FPS)	GROUP SIZE (INCHES)
HORNADY 100 XTP-JHP	AA9	12.5	1,668	2
HORNADY 100 XTP-JHP	AA1680	13.6	1,166	3/4
HORNADY 100 XTP-JHP	Alliant 2400	11.0	1,409	2
SPEER 100 JHP	AA9	12.5	1,670	1-3/4
SPEER 100 JHP	AA1680	13.6	1,089	1-3/8
SPEER 100 JHP	Alliant Power Pistol	8.0	1,513	1-3/4
SPEER 100 JHP	Alliant 2400	11.0	1,301	1-3/4

Notes: Groups the product of 5 shots at 50 yards. Chronograph screens set at 10' from muzzle. CCI 500 primers used in Federal brass.

.224-32 FA HANDLOADED AMMO PERFORMANCE

BULLET (BRAND, BULLET WEIGHT, TYPE)	POWDER (BRAND)	CHARGE (GRAINS WEIGHT)	VELOCITY (FPS)	GROUP SIZE (INCHES)
BARNES TRIPLE SHOCK 45 HP	AA1680	12.7	2,161	1-1/4
BARNES TRIPLE SHOCK 45 HP	IMR 4227	10.0	1,809	7/8*
BARNES 30 VARMINT GRENADE	IMR 4227	11.2	2,223	1-1/8
NOSLER 40 BT	AA1680	13.6	2,355	1-3/4
NOSLER 40 BT	IMR4227	11.2	2,151	1-1/4
HORNADY 35 V-MAX	AA1680	13.6	2,294	1-3/4
HORNADY 40 V-MAX	IMR4227	11.2	2,079	1-1/8
HORNADY 40 V-MAX	AA1680	12.7	2,169	1-1/2
HORNADY 40 V-MAX	AA1680	13.6	2,302	1-3/8
HORNADY 50 V-MAX	AA1680	12.7	2,257	2
SIERRA 40 BLITZKING	AA1680	12.7	2,128	1-1/2

Notes: Groups the product of 5 shots at 50 yards.

Chronograph screens set at 10' from muzzle. CCI 500 primers used in re-formed .327 Federal brass.

*Fire-forming load/4-shot group.

the other was 12.8; that is definitely close enough for me. If you start with new-primed .327 Federal brass, Freedom Arm recommends removing the factory Federal 205 primer used for .327 loadings and replacing it with a standard small pistol primer for best results. After my beginning loadings with AA1680 I then switched over to some test loads with 4227 and measuring several charges exhibited the same consistency as with 1680.

Bobby Burns was certainly correct when he talked of the best laid plans of mice and men. I had hoped to shoot the .17 HMR, .224-32 FA and the .327 Federal at 100 yards, or more. I have been waiting nearly 4 months now for the wind to stop blowing to no avail. The shooting range I use is a natural wind tunnel and plays havoc with lightweight bullets. Usually, good groups can be obtained at 50 yards but after that the wind takes over. Not only does it blow, it blows inconsistently and may come from many directions. It was not unusual in the long-range silhouette in days to see a 150-grain .30-30 bullet blown 3' sideways at 200 meters. I tried 100-yard groups, but the wind whipped the .17, .22 and .32 bullets all over the target, so for now at least my groups have been confined to 50 yards. I will do a Taffin Tests follow-up piece for our sister publication *American Handgunner* after the wind stops. Hopefully it will. Someday. **GUNS**

BARNES BULLETS
38 N. FRONTAGE RD., MONA, UT 84645
(800) 574-9200
WWW.GUNSMAGAZINE.COM/BARNES-BULLETS

FEDERAL AMMUNITION
900 EHLEN DR., ANOKA, MN 55303
(800) 322-2342
WWW.GUNSMAGAZINE.COM/FEDERAL-PREMIUM-AMMUNITION

HORNADY
3625 W. OLD POTASH HWY.
GRAND ISLAND, NE 68803
(800) 338-3220
WWW.GUNSMAGAZINE.COM/HORNADY

NOSLER
107 S.W. COLUMBIA ST., BEND, OR 97702
(800) 285-3701
WWW.GUNSMAGAZINE.COM/NOSLER

RCBS
605 ORO DAM BLVD., OROVILLE, CA 95965
(800) 553-5000
WWW.GUNSMAGAZINE.COM/RCBS

SIERRA BULLETS
1400 W. HENRY ST., SEDALIA, MO 65301
(888) 223-3006
WWW.GUNSMAGAZINE.COM/SIERRA-BULLETS

SPEER AMMO
229 SNAKE RIVER AVE., LEWISTON, ID 83501
(800) 627-3640
WWW.GUNSMAGAZINE.COM/SPEER-AMMO



The Team Match II™ is chambered in both .45 ACP & 9mm. Slide & frame are machined from stainless steel to exacting dimensions.



Team Match II pistols feature an adjustable sight with positive steel-on-steel clicks for match-winning accuracy, ambidextrous thumb safety & Premium Aluminum Trigger™ that breaks clean at 4-5 pounds.



USA Shooting Team logo grips, 30 lines-per-inch front strap checkering, beavertail grip safety & extended magazine well have a striking appearance and speed operation.

Heavy Medal

Kimber. The Choice of the USA Shooting Team.

The USA Shooting Pistol Team trains for Olympic and international competitions at action matches, going head-to-head against the world's fastest guns. They shoot a Kimber® Team Match II. A match grade barrel, chamber and trigger ensure accuracy, and dependability is guaranteed by machining the finest materials to unequalled tolerances. Equally important, all work is done in Kimber's American factory. The same Team Match II is available to the public, and \$100 from each sale goes to the Team. Get one, and shoot the gold standard.

Kimber®

THE CHOICE OF AMERICA'S BEST

kimberamerica.com



©2011 Kimber Mfg., Inc. All rights reserved. Kimber names, logos and other trademarks may not be used without permission. Names of other companies, products and services may be the property of their respective owners. Kimber firearms are shipped with an instruction manual and California-approved cable lock. Copy of instruction manual available by request.

Kimber, One Lawton Street, Yonkers, NY 10705 (800) 880-2418

KWIK-SITE
*has taken Weaver®
 style rings to new heights
 and new lengths*
**Our Caps Will NOT
 Scratch Your Scope Or Rust**

Special aircraft alloy metals won't scratch your scope, and they are *kwik-detachable* for easy remounting.

A satin smooth finish available in brite black, silver, and black matte. They set the standard for looks in the industry.

If you can't find our rings at your favorite dealer or distributor, contact KWIK-SITE and we'll make SURE you get them.

We can fit any scope in a 1" tube, long or short, low or high, with our new extension rings. Adjustable extension rings are the same quality as our top mount rings.



Up to 64 mm objective lens
 KS-305

4 HOLE CAP



Up to 52 mm objective lens
 KS-304

AIRCRAFT ALLOY



Up to 44 mm objective lens
 KS-303

GREAT PACKAGING



Up to 32 mm objective lens
 KS-302

AND THE BEST PRICE!



Up to 64 mm objective lens
 Extended offset base



Up to 64 mm objective lens
 2 position, extended offset adjustable base

Patent Pending

KWIK-SITE CO.

**Leading U.S. Manufacturer
 of Scope Mounts Since 1967**

5555 Treadwell, Wayne, MI 48184
 (734) 326-1500 Fax# (734) 326-4120
 www.kwiksitecorp.com

Weaver® is a trademark of the ATK Co.

KNIVES

STORY: Pat Covert

ALL ABOARD THE BULLET TRAIN! Spyderco teams up with Butch Vallotton for a real winner.

My eyes opened wide when I was handed the Spyderco Vallotton Sub-Hilt folder at the 2011 Blade Show. Then a smile came over my face. Really slick knives have a way of doing that. Spyderco Marketing Director Joyce Laituri informed me, "We'd been wanting to collaborate with Butch Vallotton for years and finally got the chance." It was well worth the wait.

Knifemaker Butch Vallotton is highly respected in custom circles and known for making some of the best automatics around. His Sub-Hilt handle design is an Italian-inspired bullet train in the hand. Stretching to 8.7" fully unwound, the folder sports a sleek 3.75" modified tanto cutting torch. For the blade, Spyderco chose top shelf CPM S30V stainless, a proprietary-powdered steel made by Crucible Industries especially for the cutlery market. The blade is hollow ground along the lead edge and switches to a convex grind at the tip. The humped Spydie-hole in the blade not only makes for easy opening, it ingeniously serves as the blade stop.

The handle, which incorporates a sturdy Michael Walker style liner lock, is substantial in weight with the entire package weighing in at 6.2 ounces. A versatile pocket clip allows



The Spyderco Vallotton Sub-Hilt, with its distinct styling and unquestionable pedigree, is one of those knives that comes along once in a blue moon.

positioning for tip-up or tip-down and right or left hand carry. The diagonally placed stainless steel "stripe" that crosses the handle terminating at the sub-hilt apex is a nice styling touch and the fit and finish of the entire handle is impeccable. Close your eyes, hold this knife in your hand, and you'd think you were holding a high dollar custom.

The price of admission for such finery isn't cheap. At \$299.95 suggested retail, the Vallotton Sub-Hilt tips the higher end of production knives but, as is common in purchasing a knife, a little bit of shopping around will put a smile on your face. The effort put forth will be worth it as this is one of those exceptional production knives that distances itself from the pack in spades.

GUNS

VALLOTTON SUB-HILT

MAKER: SPYDERCO, INC.
 820 SPYDERCO WAY, GOLDEN, CO 80403
 (800) 525-7770

WWW.GUNSMAGAZINE.COM/SPYDERCO

BLADE MATERIAL: CPM S30V, BLADE LENGTH:
 3.75", OVERALL LENGTH: 8.7", WEIGHT: 6.2 ounces,
 HANDLE: G10, stainless bolster, CARRY: Pocket clip,
 PRICE: \$299.95

ARE YOU READY?™

WHEN YOU'RE READY TO START COMPETING, THIS IS THE 1911 TO START WITH. DESIGNED TO BE AN AFFORDABLE 1911 FOR COMPETITION, THE NEW RO™ (RANGE OFFICER™) PISTOL IS BUILT WITH THE SAME QUALITY AS OUR TRP™ AND TROPHY MATCH™ MODELS.



THE NEW RANGE OFFICER™



1.800.680.6866 | WWW.SPRINGFIELDARMORY.COM

KIRKPATRICK
LEATHER COMPANY

Save \$20 on a TSS Combo

Sale Ends 01/01/2012



Retail \$170.00
Combo Price \$150.00
Plus S&H

Christmas Special

Order a TSS holster for a 1911, a matching belt and a matching double mag pouch and receive \$20.00 off of your order.

(956) 723-6893

www.kirkpatrickleather.com

1910 San Bernardo, Laredo, TX 78040

UNITED STATES POSTAL SERVICE (All Periodicals Publications Except Requester Publications)

Statement of Ownership, Management, and Circulation

1. Publication Title: GUNS MAGAZINE

2. Issue Frequency: MONTHLY

3. Issue Date for Circulation Data Below: NOV 2011

4. Annual Subscription Price: \$24.00

5. Number of Issues Published Annually: 12

6. Annual Circulation: 83636

7. Title and Address of Publisher: PUBLISHERS DEVELOPMENT CORP
12348 WORLD TRADE DR
SAN DIEGO CA 92128

8. Title and Address of General Business Office of Publisher: PUBLISHERS DEVELOPMENT CORP
12348 WORLD TRADE DR
SAN DIEGO CA 92128

9. Title and Address of Headquarters or General Business Office of Publisher (Not Printer): PUBLISHERS DEVELOPMENT CORP
12348 WORLD TRADE DR
SAN DIEGO CA 92128

10. Full Name and Complete Mailing Address of Publisher, Editor, and Business Manager: PUBLISHERS DEVELOPMENT CORP
12348 WORLD TRADE DR
SAN DIEGO CA 92128

11. Full Name and Complete Mailing Address of Publisher, Editor, and Business Manager: ROY HUNTINGTON
12348 WORLD TRADE DR
SAN DIEGO CA 92128

12. Full Name and Complete Mailing Address of Publisher, Editor, and Business Manager: JEFF JOHN
12348 WORLD TRADE DR
SAN DIEGO CA 92128

13. Full Name and Complete Mailing Address of Publisher, Editor, and Business Manager: JEFF JOHN
12348 WORLD TRADE DR
SAN DIEGO CA 92128

14. Issue Date for Circulation Data Below: NOV 2011

15. Extent and Nature of Circulation	Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date
a. Total Number of Copies (Net press run)	162259	175545
b. Paid and/or Requested Circulation		
1. Paid (Street Vendors, Carriers, etc.)	85855	84521
2. Paid Outside the US (Sales Agents, etc.)	N/A	N/A
3. Paid Through the US Mail (First-Class, etc.)	22460	22561
4. Paid Through the US Mail (Second-Class, etc.)	N/A	N/A
5. Paid Through the US Mail (Other than 3 & 4)	113121	113582
c. Free or Nominal Rate Distribution (Outside the US)		
1. Free or Nominal Rate (Outside the US)	2418	2384
2. Free or Nominal Rate (Inside the US)	N/A	N/A
3. Free or Nominal Rate (Outside the US)	N/A	N/A
4. Free or Nominal Rate (Inside the US)	433	300
d. Total Free or Nominal Rate Distribution (Outside the US)	2861	2684
e. Total Free or Nominal Rate Distribution (Inside the US)	113852	113582
f. Copies not Distributed (See Instructions to Publishers at page 412)	46277	85579
g. Total (Sum of 15b-f)	162259	175545
h. Paid (Sum of 15b-f)	162259	175545
i. Free or Nominal Rate (Sum of 15b-f)	97	98

16. Publication of Statement of Ownership: If the publication is a general publication, publication of this statement is required. Publication not required.

17. Signature and Title of Publisher: *[Signature]* Publisher

18. Date: 7/30/10

GUNS VNR

VIEWS • NEWS • REVIEWS

RIGHTS WATCH

DAVID CODREA

Why did cops seize guns from vet without legal cause?

“NOW COMES the Plaintiff, Francesca Rice, by and through undersigned counsel... and brings forth this Complaint in Replevin against the Defendants,” a filing in the Lakewood Municipal Court, Cuyahoga County, Ohio, begins.

“Complaint in Replevin”? Essentially a legal demand for return of property.

“Defendants”? Those would be the City of Lakewood, Division of Police, and Timothy J. Makkey, Chief of Police.

What property? What did the Lakewood Police do?

“[T]he Lakewood vet had stockpiled her... condo with a home arsenal including handguns, shotguns, a sniper rifle—plus a Thompson sub-machine gun,” *Cleveland Scene Magazine* reported. “Her cache somehow caught the attention of Lakewood Police... When they found Rice wasn’t home, they asked an obliging employee of the complex to open up the apartment without her consent. Once inside, they raided the gun rack, making off with 13 firearms worth around \$15,000.”

Except that they had no warrant and no probable cause. Everything was lawfully owned. Rice, a disabled military veteran, is not a prohibited person. So she asked them to return her property, by telephone and in writing. The result, per her complaint: “The Defendants... continue to fail and refuse to return said property.”

What’s clear from this is the police had no legal authority to do what they did, and yet continue to hold Rice’s property, which, as stated in the complaint, “has no evidentiary value and bears no relevance to police business.”

The court would appear to agree. The police department and its chief

received a notice of proceeding from the Court stating it “issued an order in... favor of the plaintiff... directing that [seized firearms]... be taken from you.”

This was followed with a summons commanding the bailiff to notify the police and the chief that unless they appear “to answer the action... and for wrongfully detaining... property, goods and chattel... the petition... will be taken as true and judgment rendered accordingly.” And the bailiff was “further commanded immediately to seize and take into custody... the said goods and chattels” unless Defendants posted a bond.

So what’s going on? Both the Plaintiff and the Defendants are being tight-lipped, and information outside of the above-cited article and online court documents is scarce. Still, an e-mail list I’m on that includes lawyers and academics resulted in opinions that compelling a property owner to initiate action is unconstitutional and violates due process, and that courts have consistently held that firearms seizures require proper notice and an opportunity for a hearing.

Still, it’s not the first time we’ve explored such outrages—in the December 2008 “Rights Watch” column we discussed a gun owner in New York whose firearms were confiscated even though there were “no criminal charges against him, no convictions, no mental health diagnoses, no adjudication of any kind.” He had committed the sin of trying to communicate with Rep. Carolyn McCarthy on an area of disagreement, and that kind of presumptuousness will simply not be tolerated.

Who among us has the resources to fight the government to reclaim what is rightfully ours? And for most of us who can’t afford it, how many would even try?

GUNS

Visit David Codrea’s online journal
“The War on Guns” at
waronguns.com,
visit DavidCodrea.com to read
his Examiner column.

Due to the importance of this column, GUNS will begin posting “Rights Watch” at www.gunsmagazine.com on the 1st of the month—long before it appears here.—Editor

New Self-Propelled Howitzer

The US Army is developing a next-generation, 40-ton, self-propelled 155mm Howitzer able to fire precision rounds, accommodate additional armor protections and power more on-board electrical systems.

The M109 Paladin Integrated Management, or PIM, is slated to begin low-rate initial production by 2013, and features a 600-volt on-board power system designed to accommodate emerging networking tecYologies as they become available.

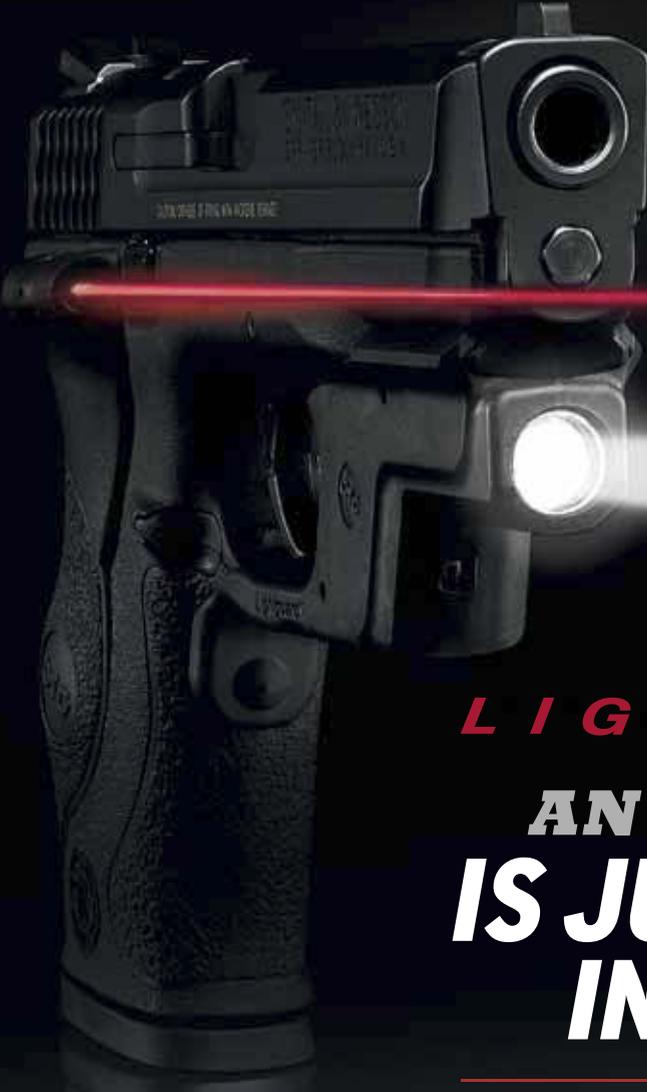
“The [space, weight and power] buy-back the PIM will provide is huge,” Furber said. “It allows us to add additional armor to the platform and it allows us to add additional capabilities such as automation or electronic packages,” said Lt. Col. Dan Furber, product manager, Self-Propelled Howitzer Systems.

The PIM’s on-board power system harnesses tecYologies developed for the Non-Line-of-Sight Cannon, or NLOS-C, a 155mm Howitzer formerly developed for the Future Combat Systems, Manned-Ground Vehicles program. That program was

canceled in 2009.

“We’ve also harnessed the electric drives from the NLOS-C, which are faster than the hydraulic drives used in the existing fleet,” Furber said. “With the electric drives and rammer, we are finding more consistent ramming of the round which allows for more consistent muzzle velocities and we are a little more accurate and responsive with the electric drives.”

Prototypes of the vehicle, built by BAE Systems, are now undergoing government testing in preparation for a low-rate initial production decision. The PIM vehicle’s cannon rests on a



LIGHTGUARD™
ANYTHING LESS
IS JUST A SHOT
IN THE DARK

Crimson  Trace

Visit www.ctclightguard.com
or scan here for a complete
overview of the Lightguard™
product platform.

WWW.CTCLIGHTGUARD.COM • 1-800-442-2406

PFI RAPID RETICLE

COMPETITIONS
 MIKE VOIGT:
 2009 & 2010 SUPERSTITION
 MOUNTAIN MYSTERY 3 GUN
 2009 USPSA MULTI-GUN NATIONALS
 2010 MDM IRON MAN 3 GUNS
 2010 SUREFIRE INTERNATIONAL
 TACTICAL RIFLE CHAMPIONSHIP
 MAGGIE REESE:
 2009 & 2010 USPSA MULTI-GUN
 NATIONAL CHAMPION
 JOHN PRIDE:
 4-TIME BIANCHI CUP CHAMPION

**SPOT. RANGE. FIRE.
 FASTER.**

SINCE 2004, THE PRIDE FOWLER PATENTED RAPID RETICLE SYSTEM HAS GIVEN RIFLEMEN THE ABILITY TO ENGAGE MULTIPLE TARGETS AT VARIABLE DISTANCES WITHOUT MANUAL ADJUSTMENTS. PFI OPTICS HAS BEEN COMBAT TESTED AND PROVEN BY MILITARY, LE, AND COMPETITION MARKSMEN WORLDWIDE. PRECISION SHOOTING IS NOW EASIER THAN EVER WITH THE NEW RAPID RANGING FEATURE THAT ALLOWS INSTANT TARGET RANGING. MANY IMITATORS TRY BUT NOTHING COMES CLOSE TO THE ORIGINAL RAPID RETICLE. PLEASE VISIT OUR WEBSITE FOR MORE DETAILS.

US MILITARY CONTRACTS:
 W91CRB-09-D-0074
 M20133-07-M-3125
 N00244-06-P-1971

NO ARTIFICIAL INGREDIENTS, ACTORS OR MODELS.
 100% ALL-NATURAL AMERICAN PATRIOTS.

SOPS-33MM SOPS-COMPACT RR-CQLR-1 RR-900-1 RR-900-4

877-817-6019 WWW.RAPIDRETICLE.COM SALES@RAPIDRETICLE.COM

chassis built with Bradley Fighting Vehicle common components including engine, transmission and tracks.



The M109 PIM 155mm Howitzer is slated to begin low-rate initial production by 2013. The cannon rests on a chassis built with Bradley Fighting Vehicle common components including engine, transmission and tracks. Photo: US Army

“Being common with Bradley decreases the logistics footprint that echelons above brigades will have to manage,” Furber said. “In the long term, it will decrease the amount of money needed to sustain the Bradley and Self-Propelled Howitzer fleets. We will only have to manage one engine, for example, in the supply chain, so there are economies of scale that are beneficial to the Army.”

Like other 155mm artillery systems, the Paladin will be configured to fire precision munitions such as the Excalibur and the Precision Guidance Kit. The PIM is being designed to provide key fire-support for a range of potential combat operations to include conventional, hybrid, irregular and counterinsurgency scenarios.



The 40-ton, next-generation M109 Paladin Integrated Management, or “M109 PIM,” 155mm Howitzer is able to fire precision rounds, accommodate additional armor protections and power more on-board electrical systems. Photo: US Army

“While PIM is associated with the heavy brigade combat team, it is a full-spectrum operational platform,” Furber said. “For instance, it would allow the artillery crew supporting light infantry on a forward operating base to be protected from indirect fires—something towed artillery pieces are not able to do.”

The PIM includes a sustained rate of fire of one round-per-minute and a

PROTECT YOUR NUTS

With America's Top Pre-Charged Airgun.

- Most Powerful!
- Most Flexible!
- Most Accurate!
- Most Fun!

Call us today at 877-247-4867 and start protecting your nuts right away.

Our powerful Condor model works for pest control, hunting or just plinking. Also available in colors. Please see our website for details.

See our holiday specials at www.airforceairguns.com and for more information or to find a dealer near you.

AIRFORCE
airguns

made in the usa

**GUNS MAGAZINE ONLINE!
www.gunsmagazine.com**

maximum rate of fire of 4 rpm, said Ed Murray, Department of the Army Systems Coordinator - Artillery.

The Army plans to build 580 new Paladin PIM sets. Each set includes a self-propelled howitzer and an ammunition resupply vehicle. The existing fleet of M109A6 Howitzers are nearing obsolescence. Those weapons were originally designed in the 1950's and produced in the 1960's.

As a result, the current fleet exceeds its weight and power capacity and does not provide for growth in mobility and force protection, thus emphasizing that the PIM program is necessary to address the existing capability gaps for self-propelled artillery. — *Kris Osborn, Assistant Secretary of the Army for Acquisition, Logistics and Tec Yology Public Affairs*

USS New York Comes to NYC to Commemorate 9/11

Secretary of the Navy Ray Mabus and New York City Mayor Michael R. Bloomberg announced amphibious transport dock ship USS New York would participate in numerous events throughout the city honoring the victims and responders from the Sept. 11, 2001 terrorist attacks.



Crew members aboard the amphibious transport dock ship USS New York (LPD 21) man the rails and present honors while passing The World Trade Center and the National September 11 Memorial and Museum as the ship arrived in Manhattan. Also aboard were family members of victims and first responders from 9/11, along with the crew and Marines assigned to the 3rd Battalion, 9th Marine Regiment. USMC photo: Sgt. Randall A. Clinton

Additionally, 170 members of the 9/11 Families Association, which includes families of victims and first responders, embarked USS New York for the transit from Norfolk, Virginia, to New York Harbor.

“With the steel from the World Trade Center in her bow, the USS New York represents a powerful symbol of the deeply personal connection that New Yorkers have with our military and is a symbol of the courage and

ELITE SPORTS EXPRESS

Visit one of our three traveling showrooms at a dealer near you and get your hands on the hottest new products from today's top manufacturers.



See our 2012 show dates online at www.elitesportsexpress.com

To book the ESE or get your products on board, call Don at 702-528-6771

**TOTAL ACCESS
TOTAL CONCEALMENT
TOTAL COMFORT!**

MSRP
\$64.95
Style 105

DeSantis Didn't Invent Concealment We Just Perfected It!

Intruder™

- Totally tuckable
- Detail-molded Kydex®
- Holster back made of premium steerhide for comfort
- Optional J-Clips available



**800-GUNHIDE
631-841-6300
Dept #GM12**

www.desantisholster.com

431 Bayview Avenue,
Amityville, NY 11701

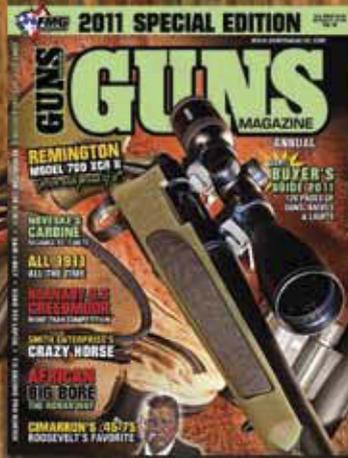


**De Santis
GUNHIDE**

GUNS

MAGAZINE

2011 SPECIAL EDITION ANNUAL



Order Your Copy While Supplies Last!

ONLY \$9.95 (outside U.S. \$17.95)
Mon-Fri 9 a.m. - 3 p.m. PST

A LOOK INSIDE: • African Big Bore Rifles • The DPMS RAPTR

- S&W I-Bolt • Lil' Lever Guns • Website Showcase
- 2010 Buyer's Guide & Much More!

Call Toll-Free

888.732.2299

Order at www.gunsmagazine.com

P.O. Box 502610 • San Diego, CA 92150-2610

Springfield® XDM Grip Extension

This Product Replaces
The Magazine Floor Plate
Providing Additional Grip
Length For Better Control
And Comfort

Suggested Retail \$9.95

See Your Local Dealer
Or Contact

PEARCE GRIP

Specializing in Replacement Grips for Firearms

P.O. Box 40367

Fort Worth, Texas 76140

(800) 390-9420 (817) 568-9707 fax

<http://www.pearcegrip.com>

Ask For Product #PG-XDM
Fits XDM Only



resilience of our nation," said Bloomberg. "She helps protect the freedoms that make this the world's most diverse and tolerant city and we are honored to welcome the men and women of the USS New York back to our city."

The ship was pierside in Manhattan last Sept. 8-9 and anchored in the Hudson River Sept. 10-12. On Sept. 11, USS New York moved from its anchorage in the Hudson River to a location within sight of the World Trade Center. Members of all branches of the military, including Navy and Marine Corps service members from USS New York, participated in the honor guard during the city's commemoration ceremony.

USS New York is the sixth US Navy ship to be named to honor the state of New York. Her bow stem includes 7-1/2 tons of steel recovered and re-forged from the World Trade Center's twin towers. The ship features many design elements and furnishings throughout her interior that serve as tributes to the events of 9/11. The ship's motto is "Strength forged through sacrifice. Never forget." — *Courtesy Department of Defense Public Affairs*

South Pole Airdrop

Airmen with the 304th Expeditionary Airlift Squadron Christchurch, New Zealand, airdropped urgently needed medical supplies last Sept. 1 at the Amundsen-Scott South Pole Station in Antarctica.

The supplies will augment a South Pole medical team's treatment of an ailing civilian wintering there with the US Antarctic Program.

Although accessible by ski-equipped aircraft during the summer season, extreme cold winter temperatures ranging between 70 and 80 degrees below zero F, plus continual darkness and strong winds, rule out traveling 800 miles overland and prohibit landing any aircraft at the pole during the winter. South Pole physicians and staff must therefore handle all medical emergencies themselves.

Upon learning that one the staff members at South Pole required additional medical supplies, the National Science Foundation, which is the lead agency for the US Antarctic Program, formally requested help from its inter-agency partner, Joint Task Force - Support Forces Antarctica. Lt. Gen. Stanley T. Kresge, the commander of both 13th Air Force and JTF-SFA, based at Joint Base Pearl Harbor-Hickam, Hawaii, called upon his attached C-17 Globemaster III forces, deployed from Joint Base

Lewis-McChord, Washington, to provide a solution.

The solution: a parachute-enabled C-17 airdrop of medical supplies in bitter cold and complete darkness using night-vision devices. Although JTF-SFA plans for such missions and trains for this requirement during the summer season, this is the first time a C-17 has attempted a mid-winter, nighttime airdrop at the South Pole.



A C-17 Globemaster III Loadmaster, forward-based with the 304th Expeditionary Airlift Squadron at Christchurch, New Zealand, prepares to airdrop urgent medical supplies near the Amundsen-Scott South Pole Station in Antarctica. Photo: Chief Master Sgt. Jim Masura

The typical Operation Deep Freeze mission consists of a 4-1/2-hour flight from Christchurch to McMurdo, with only one hour on the ground before returning to New Zealand. By being able to combine missions, the C-17 crew simply added the 2-1/2-hour flight over the South Pole after the routine stop at McMurdo. Once over the South Pole, the crew released two parachute-supported 200-pound bundles of supplies before heading back to Christchurch.



VA C-17 Globemaster III flies over Amundsen-Scott South Pole Station in Antarctica last Sept. 1, 2011, after dropping medical supplies nearby. The supply drop is part of Operation Deep Freeze, which is an annual USAF-led mission to lend operational and logistical support to the National Science Foundation's research and exploration in Antarctica. Photo: Robert Schwarz

Since the South Pole has 24 hours of darkness during the polar winter, the use of night-vision goggles was essential for the mission, officials said. Scheduling the delivery around daylight was not a factor.

According to Kevin Schriener, an NSF contractor and network administrator at the South Pole, the airdrop was a complete success. Both packages were dropped and recovered without damage.

"Coming on the heels of the late-June, mid-winter medical evacuation mission from McMurdo (Station, Antarctica), we welcomed another opportunity to provide assistance to the NSF," said Lt. Col. Robert Wellington, the commander of the 304th EAS. "Plus, we were fortunate to have the right crew with right qualifications in place when the call came in."—*Courtesy Joint Task Force - Support Forces Antarctica Public Affairs*

No Duty To Recall

Last week a federal appeals court affirmed the dismissal of a products liability lawsuit brought against Smith & Wesson in Alaska by the parents of a child accidentally shot and injured by a revolver manufactured by the company in 1972. Among the claims against Smith & Wesson were negligence for failing to include a safety lock at the time the revolver was made, failure to warn and failure to retrofit the gun with a safety lock years later. Under applicable Alaska law, Smith & Wesson had no duty to include a safety lock on the gun when it was produced in 1972, and nothing in the record supported imposing a duty on the company to retrofit or recall the gun after it was sold. Furthermore, the appeals court found that the firearm functioned as intended, so it was neither necessary for Smith & Wesson to include a warning with the gun nor would a reasonable firearm consumer expect to see such a warning in 1972.—*Courtesy NSSF*

August NICS BG Checks Up

The August 2011 NSSF-adjusted National Instant Criminal Background Check System (NICS) figure of 815,858 is an increase of 13.5 percent over the NSSF-adjusted NICS figure of 718,971 in August 2010. For comparison, the unadjusted August 2011 NICS figure of 1,300,433 is an increase of 20.2 percent over the unadjusted NICS figure of 1,082,360 in August 2010. This marks the 15th straight month-over-month increase in NSSF-adjusted NICS figures. —*Courtesy NSSF*

GUNS

ROY ALERT!

BEWARE SUBSCRIPTION SCAM

DEAR READERS: Nefarious scoundrels have been trying to scam *Handgunner* readers by offering unauthorized subscriptions for a ridiculously high price. Don't be a victim of this dastardly behavior! It's easy to protect yourself; simply remember: NEVER pay more than \$37 for a 2-year subscription to *Handgunner*! If it asks for \$71, toss it! I've received a bunch of calls from you guys, reporting suspicious offers to renew subs to *Handgunner*. You have detailed receiving offers on mailing pieces, looking suspiciously similar to ours. They direct you to write a check or submit a credit card number for the outrageous price of \$71 (almost twice the published price!!!). They appear to be from us — but they are most certainly not! While it is still rare, it has occurred, so keep a sharp eye and don't be shy about questioning something like this.

It's easy to verify that it's legit. Confirm the *Handgunner* ID Number on the top line of the renewal label matches your ID on the magazine you get. The price is NEVER higher than \$19.75 for one year, or \$36.75 for two. Our offers say, "Make check payable to American *Handgunner*" (NOT some sleazy third party!). The return address will either be 12345 World Trade Drive, San Diego, CA or P.O. Box 509093 in San Diego. Anything else spells trouble!

Keep in mind, we're always just a phone call away. Pick up the phone and dial (858) 605-0253 to chat with one of our ace subscription staffers or go to www.americanhandgunner.com and click on "Contacts" to reach us. We're actual human beings, and will be happy to help you out anytime. You can also always drop me a note at editor@americanhandgunner.com if you want to report a scam, have a question or think I can help out.

— Roy Huntington, Editor

DON'T BE A VICTIM!

- CONFIRM THE ID #
- NEVER PAY MORE THAN \$37 FOR A 2-YEAR SUBSCRIPTION
- WHEN IN DOUBT, CONTACT US



AMERICAN
HANDGUNNER

QUARTERMASTER

FEATURING: JOHN CONNOR

HOW HIGH'S YOUR TECH? ... and how bright are your lights?

JOHN CONNOR

What's new in high tech and lights? So much I had to take the pile of notes and toss 'em in the air and see which ones stuck to the ceiling! OK, I kinda sorted through 'em after that, based on my pseudo-scientific "What's Cool and Useful?" program. Whether you wander the High Lonely or navigate the concrete jungle, I hope you'll find something here that fits your needs—and your budget.

BUSHNELL OUTDOORS

BusYell just keeps rackin' up awards for its terrific BackTrack "GPS Made Easy" devices, and its latest, the BackTrack D-Tour received *Field & Stream's* "Best of the Best" honors. Features include digital compass, altimeter, time, longitude, latitude, temperature and more, also storing five selected locations with speed, distance and directional info, which you can later upload to a computer and overlay on Google maps. If you own just one navigational tool, the D-Tour is a great choice.

Just in case your D-Tour adventures take you out in the dark, check out BusYell's new Equinox night vision devices. Three models are offered, and I like the 4x40mm version,

using CCD recognition technology rather than image intensifier tubes. An on-board IR illuminator provides total-darkness capability, and you can switch the display from green to black and white. Depending on the background and your eyesight, that can really boost definition. It is handheld or tripod-mountable and boasts a 738' viewing range. If you're gonna wander in the dark, be its master!

BRUNTON RESTORE

You've got a smart phone, a GPS, an iPod, a mini weather-warning receiver and a half dozen other tech goodies—so what happens when the battery runs out and you're far from plug-in juice? Brunton's Restore is

a pocket-sized power pack; a "reservoir" battery which can recharge virtually any electronic device with a mini-USB adaptor. Fill 'er up from a computer, the included DC hookup, or flip open the twin polycrystalline solar panels and suck up some sunlight. Own your own power company!

CED7000 PRO SHOT TIMER

Time your draw-and-fire, go 1-on-1 with a pal, or run an entire weekend competition with the compact, powerful CED7000 PRO Shot Timer from Competitive Edge Dynamics. This unit can handle it all, with built-in Match and Steel Challenge scoring programs, training modules, Rate-of-Fire modes, multi-par options and so much more we can't list half of 'em here. Want to transmit results on the fly to a CED BigBoard display up to 50' away—especially if you're the winner? Yep; that's another option.

VIRIDIAN GEN -2 LIGHT & LASER

I don't know a better way to transition from high-tech to lights than to showcase Viridian Green Laser's superb Gen-2 X5L rail-mounted tactical light and green laser combination. The original X5L was impressive, but the Gen-2 version is now even more compact, powerful and user-friendly.

The Gen 1's light and laser were stacked. On Gen-2, they're side-by-side and slimmer. Gen-1 used a CR2 battery; Gen-2 uses a longer-lasting CR123A, which loads from the front, so you don't have to dismount the X5L to change batts. Controls on Gen-1 used four buttons, while six "standard" modes plus deep-programming is handled with only two buttons on the Gen-2. The 154-lumen light auto-boosts to 180 lumens on strobe, and



BUSHNELL OUTDOORS
The BackTrack D-Tour and Equinox find your way home even in the dark.

BRUNTON RESTORE
Brunton's Restore is a pocket-sized power pack.

VIRIDIAN GEN 2 LIGHT & LASER
The new Gen-2 X5L tactical light and laser by Viridian Green Laser.



CED7000 PRO SHOT TIMER
The CED7000 Pro can run your whole shootin' match.

BLUESTONE LIGHTING

The InCharge flashlight from Bluestone Lighting is always ready and flexible.



ENERGIZER

Intrinsically Safe Lights by Energizer are certified for hazardous environments.



STREAMLIGHT & FENIX

Streamlight's Super Tac X and the Fenix TK-35 offer high power and long reach.



you can set the daylight-visible green laser to a steady or pulsing beam. The X5L Gen-2 is some tough, top tech!

Lights—The Best & Brightest

BLUESTONE LIGHTING

Rechargeable flashlights are long-term economical, and variable-intensity lights are really handy. Adjustability from a spot-beam to floodlight is a great feature too. What could make this combo even better? How about induction charging? Just dropping your light into a charger cradle without fooling with dainty connections or fumbling to assure charging contacts are aligned properly? That's the AT-7 InCharge light from Bluestone Lighting. At the push of a button its Cree XP-E LED dims or brightens from 15 to 130 lumens, and it goes from an intense spot to broad floodlight with a twist. The AT-7 delivers 4 hours runtime on max power or 20 hours on low. The water, dust and shock-resistant body is only 5.6" long and weighs 8.5 ounces. You've got room for that, don't you?

ENERGIZER

Running to help at a traffic collision or checking out a strange odor in the basement or garage, would you rather have light from a flashlight, or from a blinding explosion and fire? I'm guessing you'd choose Option One. If so, Energizer has you covered with

their Intrinsically Safe Lights, which are certified spark-suppressed for use in hazardous conditions, bearing Class 1, Division 1 safety ratings. The 2-D-cell handheld light and the 3-AA-powered headlamp shown are home-and-vehicle necessities, well made and duty proven by emergency personnel working under the most dangerous conditions. Get 'em before you get *got!*

STREAMLIGHT & FENIX

Sometimes you just need usable light, and sometimes you need a light-cannon that will pinpoint—and pinwheel—a predator's pupils, or reach 'way out there past Fort Mudge. Both the Streamlight Super Tac X and the Fenix TK-35 handle those roles perfectly.

I didn't understand the hoopla when Streamlight introduced the Super Tac, and didn't pay much attention to the debut of C4 tecYology. Then I tried the latest iteration, the Super Tac X. OK, I get it! This is a powerful, lightweight, long-running light-cannon, weapon-mountable or handheld, that throws a center-loaded spot out to 400 meters while maintaining a good corona of peripheral light. You can step the 200-lumens down to 10, activate strobe, and control momentary and constant-on with a single switch, too.

If the TK-35 put out heat to match its ferocious 820-lumen maximum light level, you could probably fry fowl at 40 yards with it. But no, it's Cree XM-L T6 LED actually runs

fairly cool, and automatically adjusts in response to excess heat buildup. Or, you can select 12, 109, or 346 lumens easily, as well as two flashing functions and an SOS signaling mode. Impressed? Me too.

Just for grins, I simulated a "rescue me" situation, stretching a mylar-faced emergency blanket between tree limbs, angled it skyward, and then hit it with the SOS. If you couldn't see it from the stratosphere, I'd be amazed. All that power comes in a tough, weather-worthy package about 6.5" long weighing less than 1 pound.

There you have it—a little tech, a couple of lights. *Bon appétit!* Connor **OUT!**

GUNS

BLUESTONE LIGHTING
3000 WILSON AVE.
LEAVENWORTH, KS 66048
(913) 651-4420

WWW.GUNSMAGAZINE.COM/BLUESTONE

BRUNTON
2255 BRUNTON CT.
RIVERTON, WY 82501
(307) 857-4700
WWW.GUNSMAGAZINE.COM/
BRUNTON-HUNTING

BUSHNELL
9200 CODY AVE.
OVERLAND PARK, KS 66214
(800) 423-3537
WWW.GUNSMAGAZINE.COM/BUSHNELL

COMPETITIVE EDGE DYNAMICS
P.O. BOX 486
OREFIELD, PA 18069
(888) 628-3233
WWW.GUNSMAGAZINE.COM/
COMPETITIVE-EDGE-DYNAMICS

ENERGIZER HEADQUARTERS
533 MARYVILLE UNIVERSITY DR.
ST. LOUIS, MO 63141
(800) 383-7323
WWW.GUNSMAGAZINE.COM/ENERGIZER

FENIX OUTFITTERS
2103 W. GREELEY ST.
BROKEN ARROW, OK 74012
(918) 259-0099
WWW.GUNSMAGAZINE.COM/FENIX-OUTFITTERS

STREAMLIGHT
30 EAGLEVILLE RD.
EAGLEVILLE, PA 19403
(800) 523-7488
WWW.GUNSMAGAZINE.COM/STREAMLIGHT

VIRIDIAN GREEN LASER
LASER AIMING SYSTEMS CORPORATION
5929 BAKER RD., STE. 440
MINNETONKA, MN 55345
(800) 990-9390
WWW.GUNSMAGAZINE.COM/VIRIDIAN

EASYWAY KIT DURACOAT FIREARM FINISHES

Lauer Custom Weaponry and DuraCoat Firearm Finishes decided to put together an all-inclusive, can't be any easier than this, camo kit. There is no need for any additional spray equipment as everything you need to create a durable, protective and effective camo pattern is included in this kit. The kit includes four 2-ounce DuraCoat colors, a 6-ounce Aerosol can of TruStrip Cleaner/Degreaser, 4 ounce of DuraCoat Reducer, a Preval Aerosol Sprayer, a set of Cut-Rite Stencils, and an instructional DVD. Available in nine patterns including ACU, Desert MirageFlage, Urban MirageFlage, UnderBrush, Advanced Tiger Stripe, Air Force ABU, British DPM, Flame and Barbed Wire. Retail for \$69.95. DuraCoat Firearm Finishes, www.gunsmagazine.com/dura-coat



HIPERTOUCHE DROP-IN HIPERFIRE

HIPERTOUCHE is a proprietary fire control drop-in for mil-spec AR-15 lowers and multi-caliber variants that use .154" pins: exceptionally low dream 2- to 4-pound trigger pulls (in 1/2-pound increments), smooth-as-glass creep, very clean hammer release with no glass-rod break, faster hammer lock-up, and "Designated Marksman" setup capabilities significantly improves shot timing and placement. HIPERFIRE, (651) 426-3829, www.gunsmagazine.com/hiperfire



MOE+ GRIP AND MOE-K GRIP MAGPUL INDUSTRIES CORP.

The MOE+ is a drop-in replacement for the AR-15/M16 pistol grip featuring a wrap-around rubber overmold for added user comfort and maximum weapon control, interchangeable storage core options, and a hard polymer base to prevent snags and damage to the grip. Say goodbye to the days of DIY grip tape; this ergonomic design and rubberized texture are ready for adverse environments straight out of the box. Reinforced body construction and Magpul's proprietary polymer guarantee reliability, durability and functionality. The MOE-K is a slim profile, compact grip with a grip angle optimized for use on Personal Defense Weapon AR-16/M16 configurations. The more vertical grip angle improves comfort and control on rifles that bring the primary hand in closer to the shooter's body or body armor. The slim profile also makes it an excellent choice for shooters who prefer a smaller grip circumference. Magpul Industries Corp., (303) 828-3460, www.gunsmagazine.com/magpul-industries.com



BULL COLLECTOR FLEXTONE GAME CALLS

The Bone Collector Series—Bull Collector was designed to make all elk sounds. Its Mylar reed system allows you to bugle like big bad herd bulls or sound like smaller satellite bulls by simply adding or decreasing both air flow and pressure on the reed. The expandable tube also aids in creating the perfect tone by extending or shortening the tube. When it's time to cow call, simply pop off the mouthpiece and you are ready to mew like a cow, chirp like a calf or do aggressive estrus cries of a hot cow in heat begging for company from the herd bull. The Bull Collector from the Bone Collector Series does it all. Retail for \$19.99. Flexitone Game Calls, (866) 995-4263, www.gunsmagazine.com/flexitone-game-calls



DISGUISED MAG HOLDERS

SPIKES MAG Holders

"What you see is NOT what you see." Name brand knives, multi-tools, and sunglass cases now disguise your spare magazine. You can wear in plain view without a worry. It's quick and easy to get to, and comes in different sizes for all standard mags. With each purchase, receive a FREE Kleen-Bore silicon gun-cleaning cloth. Spikes Mag, (954) 288-6423, www.gunsmagazine.com/spikesmagholders



COLOR SHOT SPECTRA SHOT, LLC

Spectra Shot, LLC introduces Spectra Shot color shot for waterfowl and sporting clays. The ammunition is available in multiple colors (blue, yellow, green and orange) to assist waterfowlers with positive shot identification. Spectra Shot also creates a visible shot string, aiding sporting clays shooters in proper shot placement. The steel shot's patented color coating is non-toxic. It enhances the knockdown power of the ammunition, reducing the crippling of waterfowl. Waterfowl shot velocity is 1,400 fps; skeet shot velocity is 1,200 fps. Spectra Shot, LLC, info@spectrashot.com, www.gunsmagazine.com/spectra-shot



If you would like your product featured in GUNS Magazine's New Products, Contact: Jason Moreau (866) 903-1199.

For more New Products visit us online at www.gunsmagazine.com

XD1080 HD ACTION VIDEO CAMERA

REPLAY XD

The video experts at RePlay XD managed to combine stunning high definition video and a wide range of professional camera features into the smallest package on the market, period. Featuring a water-resistant, hard-anodized, rugged aluminum housing for extreme adventures, the RePlay XD1080 is the smallest and lightest full HD action camera on the market, and is packed with pro-level audio, live uncompressed HDMI video out in full HD, video playback, external audio line-in, time-lapse photography, and highly-configurable image and camera settings. All in a sleek, rugged, aluminum tube smaller than anything on the market. In addition to two mounts, the camera also comes with a kit that includes a soft silk protective pouch, a black ballistic carrying case, 4GB micro SDHC card which holds up to 2 hours of video, USB charge/data cable, micro USB card reader & micro SD to SD card adaptor for easy file transferring, HDMI view and playback cable, AC power adapter, car power adapter, safety leash. RePlay XD, (805) 480-9800, www.gunsmagazine.com/replay-xd



VACUUM PRESERVATION BAGS

ZCORR PRODUCTS

ZCORR Vacuum Preservation Bags offer 100-percent corrosion protection and last up to 20 years depending on use. They are made of a combined VpCl material and foil barrier layer, an airtight and waterproof zipper closure and a 1-way vacuum valve, which offers the industry's only reusable, fail-safe, anti-corrosion protection. ZCORR Products, (585) 742-3310, www.gunsmagazine.com/zcorr-products



SUPPRESSORS

OPS INC

OPS Inc., founded by Phil Seberger, has been making combat proven suppressors for elite Special Forces since 1988. Their muzzlebrakes and silencers are full-auto rated, self-cleaning and maintenance free, and can be emerged in salt water without damage. They guarantee their devices for 30,000 rounds or two years, whichever comes first. OPS Inc., j.dregne@gmail.com, www.gunsmagazine.com/ops-inc



FATBOY GTG

MAXPEDITION

The Maxpedition Fatboy GTG is a concealed carry shoulder bag with a main compartment of 3"x6.5"x8" and a rear CCW compartment of 7.5"x8". It has a water bottle holder and a quick detach belt loop. The Fatboy GTG has an integral 1.5" shoulder strap with adjustable non-slip pad, a D-ring for lashing and a maximum circumference of approximately 60". Maxpedition, (310) 768-0098, www.gunsmagazine.com/maxpedition



ULTRA SHOT QD DIGITAL SWITCH

SIGHTMARK

The Sightmark Ultra Shot QD Digital Switch reflex sight was created to satisfy the demand for a lightweight, accurate sight. This sight is perfect for close-range, fast-moving targets and is equipped with a digital switch button on the side to adjust variable brightness settings. The Sightmark Ultra Shot QD features a quick detach mount that is perfect for quick removal when iron sights or other accessories are used. Designed to return to the rail and still hold zero, the Sightmark Ultra Shot QD Digital Switch is equipped with a shield hood for added protection. The Ultra Shot QD Digital Switch features a matte black finish, eliminating glare during hunts and creating a military, tactical look. Sightmark, (817) 225-1713, www.gunsmagazine.com/sightmark



HUNTING KNIVES

SILVER STAG

What really separates Silver Stag knives is their "hands-on" approach to manufacturing. Every unit is hand profiled, hollow ground, assembled, polished and sharpened. The company uses D2 and 1095 High Carbon Tool steels to manufacture the majority of their blades. They also forge their own 200 layer high carbon Damascus steel. These skilled artisans are experts incorporating naturally shed North American antler into each one of their 50 designs. Since each knife is handmade using natural materials, no two Silver Stag knives will ever look exactly the same. Silver Stag, (888) 233-7824, www.gunsmagazine.com/silver-stag



GUNS CLASSIFIED

Classified ads \$2.00 per-word insertion. (\$1.50 per-word insertion for 3 or more) including name, address and phone number (20 word minimum). Minimum charge \$40.00. **BOLD WORDS add \$1.00 per word.** Copy and rerun orders must be accompanied by **PAYMENT IN ADVANCE. NO AGENCY OR CASH DISCOUNTS ON LISTING OR DISPLAY CLASSIFIED ADVERTISING.** All ads must be received with advance payment BY NO LATER THAN THE 1st OF each month. **EXAMPLE:** Closing for DEC. 2008 issue (on sale NOV. 5th) is SEPT 1st, 2008. Ads received after closing will appear in the following issue. Please type or print clearly. **NO PROOFS WILL BE FURNISHED.** Include name, address, post office, city, state and zip code as counted words. Abbreviations count as one word each. Mail to GUNS MAGAZINE CLASSIFIEDS, 12345 World Trade Drive, San Diego, California 92128. **NOTE: WE NOW HAVE DISPLAY CLASSIFIEDS IN BOTH GUNS MAGAZINE AND AMERICAN HANDGUNNER. ASK FOR OUR NEW RATE CARD. (858) 605-0235.**

ACCESSORIES

When conceal matters!

PS31 Speed Loader
PS30 6 round belt slide
PSG Series Systems include Belt, Mag Pouch, Holster
PSBSA Holster
PSBDA Holster
PSB System 1

Mernickle Custom Holsters
1875 View Court, Fenley, Nevada USA 89408 Phone: 775-575-3166
Fax: 775-575-3188 Email: sales@mernickleholsters.com
Internet: www.mernickleholsters.com Phone: 1800-497-3166

Getting a stomach-full of
Conetrol mount imitators?
How about the real thing!

Call: 800-CONETROL
for Free Brochure
www.conetrol.com

FREE CATALOG! Make your own kydex gun holster or knife sheath. Over 1200 items. Visit www.knifekits.com or call 1-877-255-6433 today.

American Made WRB

Premium Holsters and Range Bags
www.wrbsales.com

AMMUNITION

Quinetics Corporation! Reloading supplies for the reloader. *Made in USA.*
www.quineticscorp.com

APPAREL

THE BELTMAN makes sturdy, top quality, **DUAL LAYER** bull hide belts (not cow), for dress wear, concealed carry or competition from \$69.95. **HANDMADE** in the **USA** in three widths and five colors. Any length! Options include: Horse, Elephant, Velcro, tapering, stiffeners, etc. **919-387-1997**
www.thebeltman.net

AUCTIONS/SHOWS

BOOKS

New Book-The Reality of Armed Self Defense (Surviving The Attack And The Aftermath) Easy reading, 115 pages, \$20 Postpaid www.bobirwinbooks.com

BUSINESS OPPORTUNITIES

COLLECTORS

EMBLEMS & INSIGNIA

FIREWORKS

FOR SALE

GUN PARTS

GUNSMITHING

GUNSMITHING AT PIEDMONT COMMUNITY COLLEGE. Two-year, hands-on program; financial aid available; approved for GI Bill benefits; P.O. Box 1197, Roxboro, NC 27573; (336)599-1181; www.piedmontcc.edu

INSTRUCTION

KNIVES & SWORDS

FREE POCKET KNIVES. Collectibles, Bowies, Swords, Tacticals, And Much More. For More Information Visit Our Web Site And Click On The Featured Product For The Week. www.dovadistributors.com

GUNS CUSTOM CORNER

S&K SCOUT-MOUNT

No Drilling or Tapping!

The absolute best scope mount made for the Chilean 1895. Easy installation without modifications to your gun. Machined from solid bar stock & made in the USA. See www.scopemounts.com for a list of our other mounts & scopes.

Chilean 1895 Scope Mount

S&K Scope Mounts

70 Swede Hollow Rd
Sugar Grove, PA 16350
800-578-9862
www.scopemounts.com



FREE Membership!

FREE Advertising, Networking,
Education & More!



Register at www.FISST.org

GUNS MAGAZINE ONLINE! GUNSMAGAZINE.COM

"Clintism" No. 7:

"Carrying a gun is not supposed to be comfortable, it's supposed to be comforting."

CONCEALED CARRY OPTIONS



TRAINING SERIES



Logical Solutions for Concealed Carry

From Firearms Training Expert
Clint Smith

DVD Two-Disk Set Includes:

- Mental Preparation Lecture
- Gun Choice
- Carry and Clothing
- Drawing Technique



© 2009 Publishers' Development Corp.

You've decided to carry a concealed handgun.

Now what?

Clint Smith of Thunder Ranch can help you adjust to this change in your lifestyle through the Concealed Carry Options two-disc DVD set.

Clint will help you choose which gun to carry, how to carry it, what to look for in clothing and how to draw the gun correctly.

He also discusses the assets and liabilities of a concealed handgun and how they affect you.

Would you bet your life on your equipment and skills?

Clint Smith has taught thousands of students how to think defensively and refine their skills with all types of firearms.

The Thunder Ranch Concealed Carry Options DVD set will help you discover logical solutions that fit your lifestyle.

Order your copy today!

Two-disc set only
\$49.95



Includes over two hours of video!
(800) 628-9818 (M-F 8am-3pm PST)

www.americanhandgunner.com/TRvids

Allow 4-6 weeks for delivery

"Clintism" No. 3:

"The gun that's with you is better than the one that's home in the safe."

ENTER TO WIN!

GUNS MAGAZINE'S GUN OF THE MONTH GIVEAWAY

COLT NEW FRONTIER S&A

A fabulous package given away free this month also includes a great SilverStag Damascus Bowie knife and a nifty holster from Purdy Gear. Joÿ Taffin has always been a big fan of the New Frontier and a lot of shooters have desired one. Now Colt is reintroducing the New Frontier and it is a beauty, with its color case-hardened frame and rich Royal Blue barrel and cylinder. With fully adjustable sights, you can be sure you can dial in this revolver with your favorite load. Protect your hearing in

style with with Howard Leight ear muffs, which amplifies low-level sound, while reducing impulse noise above 82dB, and protect your eyes with Genesis XC glasses.

You can't win if you don't enter, so send those postcards in pronto or take the survey and enter online at www.gunsmagazine.com.

MODEL P4750 NEW FRONTIER

MAKER: COLT MFG. CO.
P.O. BOX 1868, HARTFORD, CT 06114
(860) 236-6311, WWW.GUNSMAGAZINE.COM/COLT

ACTION: Single-action revolver, **CALIBER:** .44 Special, **CAPACITY:** 6, **BARREL LENGTH:** 5-1/2", **OVERALL LENGTH:** 11", **SIGHTS:** Fully adjustable rear, ramp front, **GRIPS:** Walnut, **VALUE:** \$1,455, **VALUE OF PACKAGE:** \$2,095.95!

IMPACT SPORT ELECTRONIC EARMUFF BY HOWARD LEIGHT BY HONEYWELL

MAKER: HOWARD LEIGHT
7828 WATERVILLE RD., SAN DIEGO, CA 92173
(800) 327-1110, WWW.GUNSMAGAZINE.COM/HOWARD-LEIGHT

POWER: 2 AAA batteries (External), **HEADBAND:** Adjustable leatherette, **SHUT-OFF:** 4 hour automatic, **CONNECTIVITY:** iPod, MP3 players, other radio devices, **EFFICIENCY:** Approximately 350 hours, **VALUE:** \$79

GENESIS XC EYEWEAR

KIT: 3 interchangeable lenses; clear, amber, and gray, **FRAME:** Adjustable fit. Black storage case. Lens cleaning cloth. Lanyard, **EYEWEAR FEATURES:** Meets Military VO ballistic test for impact, exceeds ANSI Z87+ velocity standard by seven times, Anti-fog lens coating, lifetime frame guarantee, **VALUE:** \$22.95



FOR WEB LINKS, GO TO WWW.GUNSMAGAZINE.COM/PRODUCT-INDEX

PHOTOS: JOSEPH R. NOVELOZO

**PURDY GEAR
CUSTOM HOLSTER**

PURDY GEAR
KARLA VAN HORNE
204 RIDGEWOOD RD.,
JASPER, GA 30143
(706) 692-5536
[WWW.GUNSMAGAZINE.COM/
PURDY-GEAR](http://WWW.GUNSMAGAZINE.COM/PURDY-GEAR)

RETAIL: \$280

TO ENTER CONTEST

**TO ENTER CONTEST:
PLEASE USE YOUR OWN POSTCARD
(NO ENVELOPES, PLEASE)**

Follow sample card below. Mail postcard to:
GUNS Magazine, **GOM JANUARY**
P.O. BOX 502795, San Diego, CA 92150-2795.
Entries must be received before **FEBRUARY 1, 2012**.
Limit one entry per household.

QUESTION OF THE MONTH: Which products do you
most wish to see covered in GUNS Magazine?

- (A) Handguns
- (B) Rifles
- (C) Ammunition
- (D) Optics

Name _____
Address _____
City, State, Zip _____
Email Address _____
CIRCLE ANSWER(S) TO QUESTION OF THE MONTH JANUARY 2012:
(A) (B) (C) (D)
IF I WIN, SHIP MY PRIZE THROUGH:
FFL Dealer _____
Address _____
City, State, Zip _____
Phone # (____) _____
Store Hours: _____ a.m. thru _____ p.m.
Attention Deployed Military: USE STATESIDE ADDRESS!

SAMPLE ONLY

DAMASCUS BOWIE

MAKER: SILVERSTAG
328 MARTIN ST., BLAINE, WA 98230
(888) 233-7824, WWW.GUNSMAGAZINE.COM/SILVERSTAG

BLADE: High carbon Damascus steel, **HANDLE:** Antler, **BLADE LENGTH:** 6.5",
OVERALL LENGTH (APPROX.): 12", **SHEATH:** Handmade leather, **VALUE:** \$259

**INSTANT
ACCESS!**

**SCAN OUR
QUICK
RESPONSE CODE
TO YOUR
SMARTPHONE.**



ODD ANGRY SHOT

STORY: John Connor

2012 ON THE CHEAP Pinchin' Pennies in the New Year.

I'm not really a cheapskate—not in my heart, anyway. It's just that I decided to have kids rather than cash, y'know? But I admit, when I look at some price tags, I hear bagpipes wailin' and the Scottish blood runs in me like the Rogue River at spring thaw. The way the economy is going—or not goin'—2012 is lookin' like a great year for penny-pinching, ain't it?

Recently, I barely dodged the bullet on some serious flooding damage. I had to rescue and repack enough ammo to make Hillary faint dead away and Eric Holder issue a *fatwa* on me. They'd call it an "arsenal." I call it "a good start." Anyway, it was so wet you could wring out the air into a bucket. I bought new airtight containers, but if I packed that ammo without desiccant it would be destroyed anyway. I needed powerful desiccant and lots of it, preferably *cheap!* Have you ever tried to buy desiccant packs in bulk? And as a chemical-savvy friend cautioned, often they've lost considerable effectiveness by the time you get them.

"Follow me, pal," my buddy said, and led the way to a grocery store. There he grabbed an 8-pound bag of kitty litter, two boxes of store-brand teabags without strings and tags, and a cheap roll of 2-inch wide packing tape. The primary ingredient in *Fresh Step* kitty litter is silica gel—*desiccant!*—and no fillers which would break down and fail. Regular kitty litter won't cut it. The teabags were 200 for 2 bucks.

We slit the teabags, poured the tea into a canister, filled the bags with silica gel, then sealed the ends with

tape strips. *Voilà!* Cheap, highly effective desiccant. And yes, they can be refreshed on a baking sheet in the oven at 170 degrees F for an hour or so. If you don't mind the mess, you can pour it in loose, but since I was discarding damp paperboard boxes and packing loose rounds, the teabags were a great choice. Note: Do *not* let Fluffy use the litter before you bag it.

Penny Squeezin' 'Til Honest Abe Squeaks

A quick survey of some premium synthetic gun lubes show retails of \$2.50 to \$7 per ounce. At about \$8 per quart, *Mobil 1* synthetic motor oil runs 25¢ per ounce. I recently joined a 1/2-dozen shooters I know and more I'm acquainted with who service their lube-thirsty ARs with *Mobil 1*. Most also very selectively apply dabs of light synthetic grease on the hardest wear points.

Will it stand up to an AR's heat and friction? Oh, yeah. Those I've spoken with have had outstanding results. Now, whether you're using high-end gun-goop or *Mobil 1*, you want to avoid wastage by excessive lubing and greasing. A *Try Pak* of six syringes in 10, 30 and 50cc sizes costs \$14.99 from Brownells,

and they'll put just the right amount exactly where you need it. They're cleanable and reusable almost indefinitely, saving both time and money.

If you shoot a DGI—Direct Gas Impingement—AR, consider purchasing a *FailZero* or *NP3-Plus* treated bolt and carrier group. You'll virtually eliminate wear, and save countless hours of carbon-scraping and cleaning. Several shooters I know lube their receivers with *Mobil 1* and run *FailZero* or *NP3-Plus* BCG's lube-less for thousands of rounds between easy, wipe-off cleanings.

If you're devoting way too much time to soakin' and scrapin' carbon fouling and too much money on goop, try a home-brewed batch of "Ed's Red." It's sold commercially, but like its inventor, C.E. "Ed" Harris, you can mix some yourself. Ed's updated formula calls for equal amounts of Dexron automatic transmission fluid, K1 (deodorized) kerosene, aliphatic mineral spirits, and acetone, with an optional dollop of anhydrous lanolin. Ed wrote that the acetone was also optional, resulting in a less volatile though somewhat slower-working mixture.

It's not very effective on copper fouling, but kicks butt on lead fouling and caked carbon deposits—and the better you eliminate the latter two in rifle bores, the less copper fouling you'll get. A widely-used simpler variation of the mix calls for equal amounts of diesel fuel, ATF and mineral spirits, and it's said to work very well. Just be very careful to take proper ventilation, flammability and handling precautions with these potions.

Snakes, Swabs & Cents

I've kept a couple of *Boresnakes* in my range bags for years, erratically using them to make a quick solvent pass through still-warm barrels before heading home to bust out my expensive, eclectic collection of rods, brushes, patches and gizmos—to do a "real cleaning," y'know?

When Hoppe's introduced their *Viper* Boresnake, claiming 50-percent greater efficiency, I decided to do a semi-scientific test. I found first, it's



Kitty litter, teabags, motor oil and a Corning tempered glass Tactical Banana—a good start to a New Year!

“Gun Fit”



**If it fits,
she has a
better chance
for more hits.**

More hits = More fun. Choosing the right gun and making sure it fits a lady is important.

Shari can help.

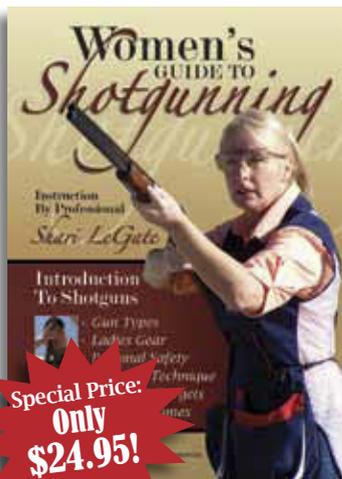
Shooting champion Shari LeGate provides all the information needed for any lady to get started in shotgun sports through her DVD, *Women's Guide To Shotgunning*.

Order Today!

(800) 628-9818

(M-F 8am-3pm PST)

www.gunsmagazine.com/fmgvideo



true!, and second, it took far less time to do an equal or better job of bore-cleaning with far fewer materials than the rods-widgits-an'-gizmos process.

They're not cheap. I figure it will take over a year to recoup my purchase costs, but I plan to be shooting much longer than that, and the time saved is significant too. You can use both solvent and lube in the same snake, but I use solvent in one and a twin for lube-and-dry runs, keeping them in separate plastic bags. When they're thoroughly dirtied, I wash mine with a little dish detergent, but they can be placed in a “lingerie bag” (not with your spouse's lingerie!) and machine-washed too. Air dry 'em, and you're good to go!

If you use cotton swabs, like Q-Tips, for cleaning and lubing, they're inexpensive, but you deal with shreds and lint, and they're only good for one session. Check industrial supply houses for foam-tipped swabs on polypropylene shafts, used for cleaning electrical contacts or spot applications of lacquer. No lint, more precision, and when dirty you can wash 'em in dish detergent and keep re-using them. Prices run \$4.50 to \$9 for 50, so shop around and save.

Well, dang... outta space and I haven't talked about super-saver lights, slings, puppy puddle-pads and—wait! The Tactical Banana? Oh, geez! It's deadlier than any gun, but I forgot—that's *classified!* Just forget you saw it, OK? And if you ever see anybody with one, don't ask him who he is or what he does. He'd prob'ly tell you, but then he'd have to kill ya. Connor *OUT*

GUNS

BROWNELLS

200 S. FRONT ST.

MONTEZUMA, IA 50171

(800) 741-0015

WWW.GUNSMAGAZINE.COM/BROWNELLS

FAILZERO

7825 S.W. ELLIPSE WAY

STUART, FL 34997

(866) 214-6926

WWW.GUNSMAGAZINE.COM/FAILZERO

THE ROBAR COMPANIES, INC.

21438 N. 7TH AVE., STE. B

PHOENIX, AZ 85027

(623) 581-2648

WWW.GUNSMAGAZINE.COM/ROBAR-COMPANIES-INC

HOPPE'S

BUSHNELL OUTDOOR PRODUCTS

9200 CODY AVE.

OVERLAND PARK, KS 66214

(800) 423-3537

WWW.GUNSMAGAZINE.COM/HOPPE

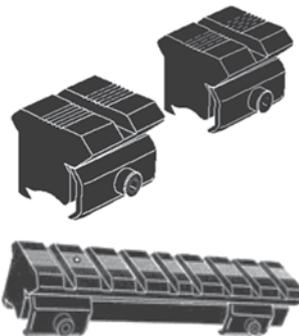
HOPPE'S

KWIK-SITE 

**DOES IT
AGAIN!**

With The *NEW* One And Only
Don't Be Fooled By Imitations

**KWIK-MOUNT®/
22 ADAPTER FOR RIFLES
with GROOVED RECEIVERS**



**New Long Adapter Works
For Air Rifles**

Universal mounts enabling scopes to be interchanged easily onto a variety of receivers.

Satin smooth finish available in brite black, silver, and black matte, all at the same price.

Sets the standard for looks in the industry.

If you can't find our bases at your favorite distributor or dealer, contact KWIK-SITE and we'll make SURE you get them.

KWIK-SITE 

**Leading U.S. Manufacturer
of Scope Mounts Since 1967**

**5555 Treadwell, Wayne, MI 48184
(734) 326-1500 Fax (734) 326-4120**

www.kwiksitecorp.com

GUNS

MAGAZINE

JANUARY 2012

ADVERTISER'S INDEX

The companies listed have featured advertisements in this issue. Look to them first when you are ready to make a purchase.

ADVERTISER	PAGE
AirForce Airguns	66
American Handgunner T-Shirts	80
American Tactical Imports	27
American Watch Co.	15
Bond Arms	19
Burger Knives	60
Cheaper Than Dirt	55
Colts Manufacturing Co. LLC	9
Crimson Trace Corp.	65
CrossBreed Holsters LLC	19
DeSantis Holster	67
Dillon Precision	23

ADVERTISER	PAGE	ADVERTISER	PAGE
Dixie Gun Works	30	Kirkpatrick	
Elite Sports Express	67	Leather Company	64
European American Armory	29	Kwik-Site Co.	31, 62, 79
FenixLight Limited	11	LaserLyte	21
FIIST	74	Lewis Machine & Tool	54
Fiocchi Ammunition	C3	LockSAF	35
Firearms Engravers & Gunmakers Assn.	30	Mag-na-port International Inc.	54
FMG Special Editions	68	Mitchell's Mausers	39
Fort Knox Security	60	Pearce Grip	68
Glock Inc.	7	Pride-Fowler Inc.	66
Helvetic Trading USA LLC	13	S & K ScopeMounts	74
Heritage Manufacturing	35	Savage Arms	17
Hogue Inc.	29	Sierra Bullets	34
ITT Corp.	14	SOG Specialty Knives	10
Iver JoUson	34	Springfield Inc.	3, 63
Jantz Supply	51	SureFire LLC	C2
Kahr Arms	25	Thunder Ranch Training DVDs	75
Kimber Manufacturing Inc.	C4	USA Shooting Team	61

New HANDGUNNER Gear!

GET SOME!

Only \$21.99 each!
with Free shipping
(within the continental U.S.)



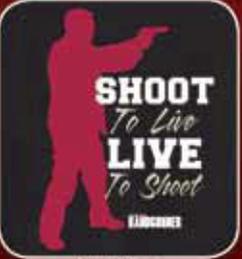
American Handgunner USA
Style #HGUS



Tactical Division
Style #HGTD



Keeping The Peace
Style #HGPC



Shoot To Live
Style #HGSH

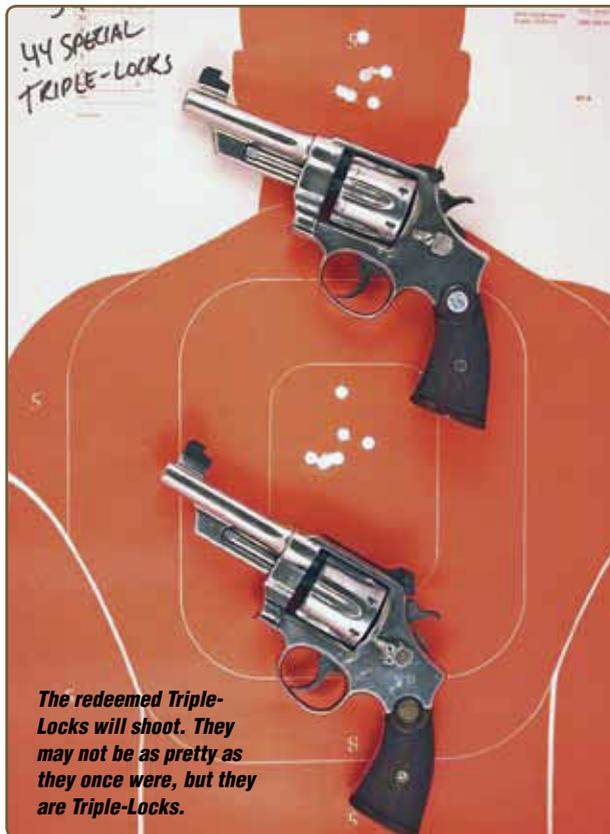
New American Handgunner T-shirts. Only \$21.99 with FREE shipping.
www.AMERICANHANDGUNNER.com or call (800) 628-9818

because there was very little thread left on the frame. Someone had really done something unbelievable. And that something was trying to remove the barrel without popping the barrel-retaining pin out first. What were they thinking? Somehow they managed to bend the retaining pin, twist the barrel, and wipe out most of the frame threads in the process. There certainly was not enough thread left to re-thread it in any way; so what to do? The best choice would be to find a stripped-down frame somewhere, however that was not likely to happen. Another choice was to simply part it out and help fill the parts box with a lot of S&W parts. Or, do what we did.

The barrel was epoxied back into place and a new pin installed. So far, it has held. I do not shoot full-house .357 Magnum loads in it, but rather standard .38 Specials and .38/44 loads. It is such a beautiful looking and handling sixgun it probably would not be too hard to pass it on to some poor unsuspecting soul, however I cannot function that way. The buck definitely stops here and if it comes a time when the barrel will not hold I will definitely part it out. However, one thing is sure and that is every time I shoot it I can't help thinking what in the world was someone thinking when they did this? You don't have to be a gunsmith to see the barrel retaining pin and understand its function.

In the February 2008 "Campfire Tales," I told the beginning of a sad story of a pair of Smith & Wesson Triple-Lock .44 Specials. Both of these sixguns were made before WWI and one was even the very rare Target Model. Both had felt the wrath of the gun butcher. Barrels were shortened to 4", front sights were poorly reset, they were both heavily buffed and then nickel-plated. One was still a Target Model with the original rear sight while the other one had a channel cut through the top strap for the installation of an adjustable Smith & Wesson sight, which never materialized. At the time of that previous Campfire Tales I had left one of these with a gunsmith to see if he could build a full length rib incorporating adjustable sights for one of these guns. He studied it for a while and then sent it back to me untouched. The amazing thing was both guns shot very well; after all they were Triple-Locks.

I turned them over to my gunsmiths, Mike Rainey and Tom Cripe at Buckhorn along with a modern Smith & Wesson rear sight assembly, and a D&L Heavy Duty Rear Sight Assembly from Dave Lauck. The latter sight is made to replace those found on any modern Smith & Wesson revolver which has the topstrap drilled and tapped with three factory screw holes under the rear sight. Once the rear sight is removed, the D&L sight replaces it and attaches with three



The redeemed Triple-Locks will shoot. They may not be as pretty as they once were, but they are Triple-Locks.

provided screws. The integral rear sight blade is dehorned, and provides high visibility with its large square notch. There are absolutely no sharp edges to cut hands or clothing.

The two sights were fitted to the botched Triple-Locks and the front sights were milled off down to the bases and both were slotted to receive black post front sights which were then pinned in place. The only thing left for me to do is to settle on one standard load and file down the front sights to the proper height. These are definitely not pristine collectors items or examples of great Triple-Locks, but at least they are now in shooting shape and presentable in mixed company.

I saved the best (actually the worst) for last. In 1950 S&W revamped their lineup of .44 Hand Ejectors and the result was the 1950 Target Model .44 Special complete with a new short action and excellent adjustable sights.

The companion piece was the fixed-sighted .44 Military Model. The latter is very rare and demands collector prices normally. A few months ago on one of the websites I frequent the question was asked about converting a .44 Special to .45 Colt. I let him know in no uncertain terms this was not an acceptable choice and especially so when I found out what it was. It was the rare .44 Military Model of 1950.

It was another example of, "What Were They Thinking?" In excellent original condition this 4" .44 Special would be worth \$2,000 or more; as it was I bought it for \$500. This one was definitely not original condition as someone had decided to make it into a would-be gunfighter's sixgun. The hammer spur was ground off, and both the original stocks and the square butt grip frame were roundbutted. Now all of these modifications are acceptable when well done, hopefully not on a rare sixgun, however it looked like somebody used a horseshoe file to perform the work. There were deep gouges in the grips and the modified grip frame had never been re-blued. I turned to my friend Butch Glenn who found a replacement hammer in his parts box, modified a pair of grips I happened to have, smoothed off the grip frame, and cold-blued it. It now looks presentable and also shoots quite well.

I have no problem with modifying sixguns to fit me personally. I have had many .357 Old Model Blackhawks converted to other calibers, and I even had a Colt New Service made into a Fitz Special. I would just ask that everyone think carefully about what they are doing. Is the sixgun so rare it should be kept original? If this is deemed not to be so, the work performed should at least be quality. Please don't wind up with another sixgun that makes a dedicated sixgunner ask, "What Were They Thinking!"

GUNS

D&L SPORTS
P.O. BOX 4843, CHINO VALLEY, AZ 86323
(928) 636-1726
WWW.GUNSMAGAZINE.COM/DLSPTS

.....
TEDD ADAMOVICH
BLU MAGNUM
2605 E. WILLAMETTE AVE.
COLORADO SPRINGS, CO 80909
(719) 632-2780
WWW.GUNSMAGAZINE.COM/BLUMAGNUM-
CUSTOM-PISTOL-GRIPS

CAMPFIRE TALES

BY JOHN TAFFIN

WHAT WERE THEY THINKING? Apparently, nothing at all.

Regular readers know of my affection for the old Smith & Wesson Classic N-Frames, the .44 Special Hand Ejectors, the .38/44 Heavy Duty and Outdoorsman, the .44 Magnum and, most assuredly, the .357 Magnum. The latter arrived out of experiments in the early 1930s by Phil Sharpe and Col. Doug Wesson with exceptionally heavy .38 Special loads in the .38/44 Outdoorsman and Heavy Duty. These guns were built on the large-frame .44 Special Model 1926 so they were very strong sixguns.

In 1935 when the new sixgun arrived from S&W, it was simply called the .357 Magnum. The earliest guns were virtually hand-built custom revolvers and were known as Registered Magnums with a special serial number stamped inside the ejector rod housing. A special registration certificate also came with these early .357 Magnums. Even in the midst of a depression the demand was so high S&W dropped the special registration and just offered a standard

model. It was however a superb standard model to be sure.

P And R

The Smith & Wesson .357 Magnum was finished in the old Bright Blue with nickel being offered as an option, the action was the smooth double-action S&W has always been known for, the topstrap and the full-length barrel rib were both finely checkered, and shooters had a choice of barrel lengths and sights. All of these sixguns

were also what has come to be known as "P and R," standing for Pinned and Recessed. These terms came from the fact the barrel was screwed in place and then fitted with a pin through the frame side-to-side and into a channel in the top of the barrel. The cartridge heads were enclosed, or recessed in the cylinder. Production was, of course, stopped during WWII and resumed very slowly in the late 1940s and early 1950s.

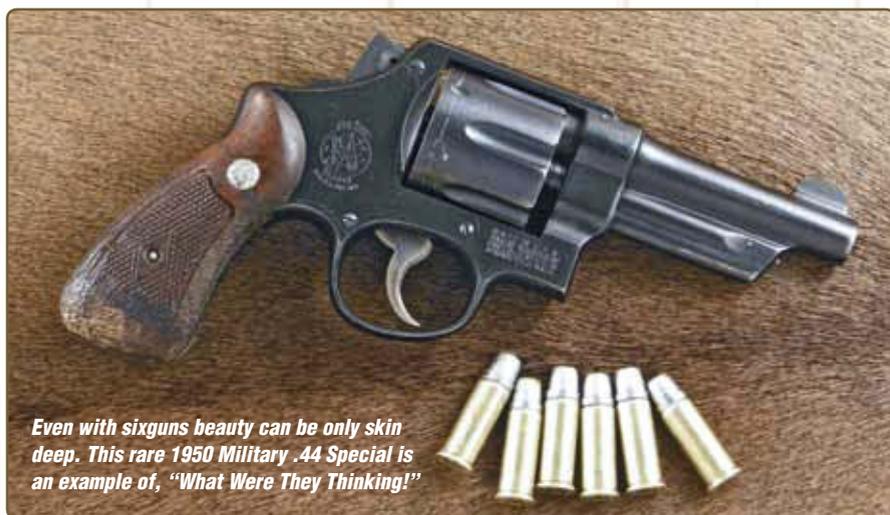
In 1957, the .357 Magnum became the Model 27, and then in succession Model 27-1, 27-2, etc. Along the way the pinned barrel and recessed cylinder were dropped to cut production costs. I have an 8-3/8" Model 27-3 and a pair of 5" Model 27-5s, and while both are excellent shooting sixguns, they are neither pinned, nor recessed. Now before me on the gun show table was a beautiful example of a Smith & Wesson .357 Magnum. I can rarely resist one of these classic sixguns especially when the price is right. This one was a nickel-plated Model 27-2 with a 5" barrel. I am especially drawn to nickel-plated examples of these old N-Frames.

I looked it over (well, at least I thought I did): rifling was sharp and clean, the cylinder locked up tight, the action was definitely S&W, so needless to say I bought it. When I got home I found a pair of BluMagnum Skeeter Skelton stocks crafted of curly maple and they not only fit perfectly, they really mated up well aesthetically with the nickel plating. It didn't take many shots for me to realize something was wrong. After two cylinders full the barrel had loosened and could be wiggled back and forth.

The Shocking News

Taking it to my gunsmiths at Buckhorn Gun I soon had the sad news. The pin was driven out, the barrel removed, and very easily so simply

continued on page 81



Even with sixguns beauty can be only skin deep. This rare 1950 Military .44 Special is an example of, "What Were They Thinking!"

CANNED HEAT



Introducing The New Line of Innovative Ammunition Packaging by FIOCCHI USA.

TRACER SHOTSHELLS, RIMFIRE, CENTERFIRE Pistol, Revolver and Rifle Ammunition
Packaged in StackAble, PackAble, StorAble CANS.

SINCE 1876



FIOCCHI

AMMUNITION

For the Fiocchi dealer near you, Call 417.449.1043 / visit www.fiocchiusa.com



THE KIMBER CDP. CARRY WITHOUT COMPROMISE.

The new Ultra+ CDP II™ (left) with full-length grip and Ultra CDP II™ with short grip are chambered in .45 ACP. Both have 3-inch barrels that make them easy to conceal.



CDP pistols feature night sights and a Carry Melt™ treatment for rounded and blended edges.



The Pro CDP II™ .45 ACP has a 4-inch barrel and full-length grip. It weighs just 28 ounces.



The Custom CDP II™ .45 ACP is a full-size 1911. Even with a 5-inch barrel, it weighs only 31 ounces.

Absolute dependability combined with power and accuracy is everything in a carry pistol. Kimber® CDP (Custom Defense Package) models take that to the extreme, blending all the important carry features into a light weight, high-performance package. Built in the Kimber Custom Shop,™ each has front strap checkering, match grade barrel, chamber and trigger, stainless steel slide and ambidextrous thumb safety. Seven models are offered, each an unequaled value. Chamberings include .45 ACP and 9mm. A carry pistol is the last place to compromise. Carry a Kimber CDP.



©2011 Kimber Mfg., Inc. All rights reserved. Kimber names, logos and other trademarks may not be used without permission. Names of other companies, products and services may be the property of their respective owners. Kimber firearms are shipped with an instruction manual and California-approved cable lock. Copy of instruction manual available by request.

Kimber, One Lawton Street, Yonkers, NY 10705 (800) 880-2418

THE CHOICE OF AMERICA'S BEST
kimberamerica.com