

GUN TECH: EOTECH
EFLX CE FOR PISTOLS

WALTHER PDP F-SERIES PRO-X
W/ TRIGGER & PMM COMP

PRECISION ARMAMENT
TITREX 300TI SUPPRESSOR

gunsandammo.com

GUNS & AMMO

SEPTEMBER 2026



FIRST LOOK

COMMAND & CONTROL

THE WATCHTOWER APACHE
COMMANDER 9MM IS AT
THE PINNACLE OF DOUBLE-STACK
9MM 1911s. **P. 34**

PROOFHOUSE

TriStar KR.22 .22 LR **P. 74**

SAKO 90 Finnlight 7mm PRC **P. 80**



P. 62

BECKSTRAND

More speed!
Federal 6.5 CM +Peak



P. 68

EMARY

Part 1: Civil War
Projectiles



P. 54

SWEENEY

Wilson Combat
Bulwark 9mm

DEFENSES UP COSTS DOWN

M3000

STR-9F

When you face a grave threat at home and everything is on the line, very few care about fancy etching or big-name logos on your go-to firearms. What matters most is fast deployment, relentless reliability, and proven performance. That's why more savvy home defenders are choosing Stoeger to build-out their defensive system for less than the cost of a single big-name firearm.

CHECK OUT STOEGER'S EXTENSIVE LINE OF DEFENSIVE FIREARMS.



SCAN TO ENGAGE
OR VISIT:
STOEGERINDUSTRIES.COM

SOLID. STEADY.
 **Stoeger®**

ENTER THE VOID



VOID-762



VOID-556



VOID-556K



INTRODUCING THE VOID-9

The CANiK VOID Suppressor Series – featuring the VOID-762, VOID-556, VOID-556K, and VOID-9 – delivers configurable, high-performance suppression without the premium price tag. **The VOID-9 is Canik's first suppressor precision-engineered from Grade 5 titanium using additive manufacturing.**

CANiK

SUPPRESSORS



@canikusa



@usacanik



@canikusa



POWERED BY OTTER CREEK LABS

CANIK.COM

CONTENTS

The subscriber cover features the Walther PDP F-Series Pro-X PMM. It's a medium-size striker-fire 9mm that hosts the features necessary for duty, EDC, home defense and competition — now proven in an IDPA match. [p. 44](#)



BY JAMES TARR

THE WATCHTOWER APACHE COMMANDER IS A TACK-DRIVING, COMPACT DOUBLE-STACK 1911 THAT HITS HARD IN ITS CLASS.

FOLLOW-UP SHOTS 34

COVER PHOTOS: MARK FINGAR; ABOVE PHOTO: MARK FINGAR

44

BEST OF BOTH

Walther combines its PRO-X and F-Series pistols into one do-all gun: Meet the PDP F-Series PRO-X PMM.

BY JACK OLLER

54

HELL FOR STOUT

Hammers are back, just hidden inside the Wilson Combat Bulwark.

BY PATRICK SWEENEY

62

SPEED THROUGH STRENGTH

Introducing Federal's 6.5 Creedmoor +Peak.

BY TOM BECKSTRAND

68

CIVIL WAR BALLISTICS

Part I: From buck and ball to the Minié.

BY DAVE EMARY

Reader Blowback	8
Editorial by Eric R. Poole	13
Gun Room by Garry James	15
Handgunning by James Tarr	21
Gun Tech by Jack Oller	25
Quiet Time Precision Armament TiTrex 300Ti	28

Range Bag	Pulsar Trail 3 LRF XR50	32
Proofhouse	TriStar KR.22 .22 LR	74
Proofhouse	SAKO 90 Finnlight 7mm PRC	80
Connect	by Antonio Acitelli	87
Spent Cases	by Keith Wood	88



ZERO HESITATION

Built for speed, control, and maximum reliability, the LCO® Pro F2 gives you the confidence and the capability to stay engaged and on target—day or night.

PROFESSIONAL-GRADE
OPTICAL SYSTEM
DISTORTION FREE CLARITY

WIDE FIELD-OF-VIEW
FAST TARGET
ACQUISITION

LCO PRO F2



4 SELECTABLE RETICLES
1 MOA DOT W/ 65 MOA CIRCLE

RAPID ILLUMINATION DIAL
30 BRIGHTNESS SETTINGS



BE RELENTLESS®

GUNS&AMMO

gunsandammo.com

An Outdoor Sportsman Group® publication

VP, SHOOTING GROUP PUBLISHER
Chris Agnes**EDITORIAL**

EDITOR-IN-CHIEF

Eric R. Poole

MANAGING EDITOR

Jack Oller

DIGITAL EDITOR

Antonio Acitelli

COPY EDITOR

Lisa Beuning

ART DIRECTOR

Michael Ulrich

STAFF PHOTOGRAPHER

Michael Anschuetz

SOCIAL MEDIA MANAGER

Keith Marlor

SENIOR EDITOR

Garry James

FIELD EDITOR

Keith Wood

HANDGUN EDITOR

James Tarr

RIFLES & OPTICS EDITOR

Tom Beckstrand

TECHNOLOGY EDITOR

Richard Nance

PRODUCTION MANAGER

Melissa Williams

CONTRIBUTORSCraig Boddington, Donna Boddington,
A. F. Branco, Dave Emary, D. Faubion, Mark Fingar,
Brad Fitzpatrick, Harry Fitzpatrick, Andy Grossman, Robert
W. Hunnicutt, Alfredo Rico, Yamil Sued, Patrick Sweeney**ADVERTISING SALES**

SENIOR VP ENDEMIC AD SALES

Michael Savino

mike.savino@outdoorsg.com

NATIONAL AD SALESSENIOR DIRECTOR,
NON-ENDEMIC SALES

Kevin Donley

kevin.donley@outdoorsg.com

DIRECT RESPONSE ADVERTISING,

NON-ENDEMIC

Anthony Smyth

anthony@smythps.com

914-409-4202

SUBSCRIPTIONS INQUIRIES: Should you wish to change your address, order new subscriptions, or report a problem with your current subscription, you can do so by writing Guns & Ammo, P.O. Box 37539, Boone, IA 50037-0539, or e-mail us at amocustserv@cdsfulfillment.com, or call TOLL FREE 1-800-800-2666, Outside U.S. call 515-237-3699.**SUBSCRIPTION RATE** for one year is \$24.94 (U.S., APO, FPO, and U.S. possessions). Canada add \$13 (U.S. funds) per year, includes sales tax and GST. Foreign add \$15 (U.S. funds) per year.By subscribing to Guns & Ammo, you agree to our Terms of Service (<https://www.outdoorsg.com/about/terms-of-service/>) and acknowledge our Privacy Policy (<https://www.outdoorsg.com/about/privacy/>).Occasionally, our subscriber list is made available to reputable firms offering goods and services that we believe would be of interest to our readers. If you prefer to be excluded, please send your current address label and a note requesting to be excluded from these promotions to: Outdoor Sportsman Group — P.O. Box 126640 Harrisburg PA 17112 - Attn: Privacy Coordinator or email your label information and note to privacy@outdoorsg.com.BE AWARE THAT GUNS & AMMO ONLY ACCEPTS SUBSCRIPTION REQUESTS FROM AUTHORIZED AGENTS! WE MAY NOT HONOR REQUESTS FROM UNAUTHORIZED AGENTS, AND YOU THEREFORE MAY LOSE YOUR MONEY IF YOU BUY FROM AN UNAUTHORIZED AGENT. If you are offered a subscription to Guns & Ammo, please call 1-800-800-2666 to determine if the agent is authorized. For more information on subscription scams, please visit www.ftc.gov.

"Owning a watch of this quality at this price makes me feel like I cracked a secret code."

— Robert M., Bethesda, MD

A Swiss Watch Is a Tool. Our Italian Watch Is a Romance.

More Precise Than a \$12,000 Rolex®? We'll Put Money On It.

We will be happy to test our stunning Italian timepiece against a \$12,000 Rolex®. If theirs is more precise, we will pay \$12,000 to the first challenger who can prove it! But our movement vibrates precisely at 32,768 times per second, so we are quite confident. And with **stunning Italian craftsmanship our classic design** is something to behold. Why pay \$12,000 when you can own our RossoBlu Classic Sports Watch and still have enough left over for a spectacular week in Florence, Venice, and Rome? Remember, Switzerland counts the seconds, but Italy makes them unforgettable. The Italians know life isn't measured in overpriced status symbols—it's measured in moments: a glass of Chianti at sunset, a gondola ride with your love, or standing in awe beneath Michelangelo's Sistine Chapel. And the Italian genius in timekeeping goes back 600 years with the mind-boggling invention of the astronomical clock in the 1360s.

Our RossoBlu timepiece **delivers better precision**, but with the soul, color, and elegance only Italy provides. Its lines echo the sculpted beauty of Italian sports cars, and it wraps your

wrist with the same passion that built Rome. **Buy the watch, take the trip, savor the food, the wine, the art, and the romance.** Ferraris, Maseratis, and Alfas may run fast, but our Raffinato runs right on time.

Watch Specifications:

- Precision quartz movement, date, rotating bezel
- 40mm stainless-steel case back and bracelet.
- Water-resistant to 10 ATM.
- Fits wrists up to 8.5"
- Made in Italy

RossoBlu Classic Sport Watch
~~\$499~~ \$99* + S & P **Save \$400**

**Special price only for customers using the offer code.*

1-888-444-5949

Your Insider Offer Code:
RSW154-01

Raffinato™

By Stauer

14091 Southcross Dr. W.,

Dept. RSW154-01

Burnsville, MN 55337

www.stauer.com

Rolex® is a registered trademark of Rolex SA.

PRIME RADIAN



PRIME GREY

SUPERIOR INNOVATION.



The CANIK PRIME **RADIAN**®, built on the award-winning CANIK METE MC9 PRIME platform by CANIK USA and enhanced with premium **RADIAN**® performance components.

PRIME **RADIAN**:
BLACK

NIGHT FISION® SIGHTS

OPTIC READY

RADIAN®
RAMJET™ BARREL

RADIAN®
ALUMINUM BACKSTRAP

17+1 CAPACITY

FLAT 90° BREAK
TRIGGER

RADIAN®
AFTERBURNER™ COMPENSATOR

RADIAN®
MAGWELL



CANIK
SUPERIOR FIREARMS



@canikusa



@usacanik



@canikusa

SACRED STONE OF THE SOUTHWEST IS ON THE BRINK OF EXTINCTION



Centuries ago, Persians, Tibetans and Mayans considered turquoise a gemstone of the heavens, believing the striking blue stones were sacred pieces of sky. Today, the rarest and most valuable turquoise is found in the American Southwest—but the future of the blue beauty is unclear.

On a recent trip to Tucson, we spoke with fourth generation turquoise traders who explained that less than five percent of turquoise mined worldwide can be set into jewelry and only about twenty mines in the Southwest supply gem-quality turquoise. Once a thriving industry, many Southwest mines have run dry and are now closed.



We found a limited supply of turquoise from Arizona and purchased it for our **Sedona Turquoise Collection**. Inspired by the work of those ancient craftsmen and designed to showcase the exceptional blue stone, each stabilized vibrant cabochon features a unique, one-of-a-kind matrix surrounded in Bali metalwork.

Your satisfaction is 100% guaranteed. If you aren't completely happy with your purchase, send it back within 30 days for a complete refund of the item price. Call today!

Jewelry Specifications:

• **Arizona turquoise** • **Silver-finished settings**

Sedona Turquoise Collection

A. Pendant (26 cts)	\$299*	\$99 +s&p Save \$200
B. 18" Bali Naga woven sterling silver chain		\$149 +s&p
C. 1 1/2" Earrings (10 ctw)	\$299*	\$99 +s&p Save \$200
Complete Set**	\$747*	\$249 +s&p Save \$498

**Complete set includes pendant, chain and earrings.

Call now and mention the offer code to receive your collection.

1-800-333-2045

Offer Code SDT205-01

You must use the offer code to get our special price.

*Special price only for customers using the offer code versus the price on Stauer.com without your offer code.



B.

26 carats
of genuine
Arizona turquoise
ONLY \$99

A.

Stauer...
Afford the Extraordinary.



Rating of A+

Stauer®

14091 Southcross Drive W.
Dept. SDT205-01, Burnsville
Minnesota 55337 www.stauer.com

**OUTDOOR
SPORTSMAN**
GROUP®
INTEGRATED MEDIA

CORPORATE

PRESIDENT & CHIEF EXECUTIVE OFFICER

Michael Carney

EVP, OPERATIONS

Derek Sevcik

SVP, REVENUE

Pat Hogan

VP, CONSUMER MARKETING

Peter Watt

SENIOR DIRECTOR,
MANUFACTURING & TECHNOLOGY

Kyle Morgan

DIRECTOR, DIGITAL EDITORIAL

Darren Choate

For questions regarding digital editions,
please contact digitalsupport@outdoorsg.com.

MEDIA

outdoorsg.com

TELEVISION

outdoorchannel.com
thesportsmanchannel.com
worldfishingnetwork.com

FISHING

bassfan.com
floridasportsman.com
flyfisherman.com
gameandfishmag.com
in-fisherman.com

HUNTING

bowhunter.com
gundogmag.com
petersenshunting.com
northamericanwhitetail.com
wildfowlmag.com

SHOOTING

gunsandammo.com
handguns.com
rifleshooter.com
shootingtimes.com
firearmsnews.com

CONTRIBUTIONS: Manuscripts, photographs and artwork must be submitted to the editorial department with a SASE. The Publisher assumes no responsibility for loss or damage to unsolicited material. Please send to: Guns & Ammo, 2 News Plaza, Peoria, IL 61614, Attn: Editor

FOR REPRINTS: For Reprints/Eprints or Licensing/Permissions, please contact: Wright's Media — TOLL FREE 1 (877) 652-5295.

The Publisher and authors make no representations or warranties regarding the accuracy, completeness, and timeliness of the information contained in this publication. Any reliance or use of the information is solely at your own risk, and the authors and Publisher disclaim any and all liability relating thereto. Any prices given in this issue were suggested prices at the press time and are subject to change.

Some advertisements in this magazine may concern products that are not legally for sale to California residents or residents in other jurisdictions.

GUNS&AMMO® is a registered trademark of Outdoor Sportsman Group® in the United States.

Copyright 2026 by Outdoor Sportsman Group®

All Rights Reserved. No part of this book may be reproduced without written permission.

Guns & Ammo (ISSN# 0017-5684) September 2026, Volume 70, Number 8. Published monthly by Outdoor Sportsman Group, 2 News Plaza, 3rd Floor, Peoria, IL 61614-8001. Periodical postage paid at Peoria, IL, and at additional mailing offices. Frequency is subject to change without notice.

POSTMASTER: Send address change (Form 3579) to Guns & Ammo, P.O. Box 37539, Boone, IA 50037-0539. Return undeliverable Canadian addresses to: 500 R. 46 East, Clifton, NJ 07011. Canada Post Publications Mail Agreement No. 41405030.



Printed in the U.S.A.



Marksmanship Made History

Whether you're a first-time shooter or a seasoned marksman, Project Appleseed's safety-focused clinics are designed for all ages and experience levels.

Under the guidance of experienced instructors, you'll master the fundamentals of rifle or pistol marksmanship — and discover the inspiring true stories of American heritage that will leave you forever changed.



**PROJECT
APPLESEED™**
LIBERTY • MARKSMANSHIP • HISTORY
appleseedinfo.org

READER
BLOWBACK

WRITE US! "Letters," Guns & Ammo, 2 News Plaza, 3rd Floor, Peoria, IL 61614, or email us at gaeditor@outdoorsg.com. Please include your city and state of residence. Letters may be edited for brevity and clarity.



SAME BUT DIFFERENT?

I'm trying to figure out the difference between "7x57" and "8mm." I bought rifles from the well-known company that advertised "The original German army rifle." Recently, I've seen stories by Dave Emary in Guns & Ammo featuring rifles in 7x57 and 8mm. What's the difference?

Hub Whitt
Email

The 7mm Mauser is also called the "7x57mm." It fires a .284-inch-diameter bullet. The 8mm Mauser is also called the "8x57mm." There are two versions of the 8x57mm, the "J" that fires a .318-inch bullet and the "JS," which fires a .323-inch bullet. The J is the original version of the cartridge and is older than the JS version. The JS was used by the Germans in World War I and World War II. The JS is more common than the J version. Do not ever try to shoot the JS cartridge in a rifle chambered for the J cartridge! The cartridge cases have the same head and length. The 7x57 has, of course, a

smaller neck and shorter headspace than the 8x57 cartridge. The German military never did much with the 7x57. It was primarily used by the Spanish and many South American countries.
— D. Emary

.357 MAG. LOAD

I have a question on shooting .357 Magnum loads in my Colt Viper. I recently purchased a 3-inch Viper, which is a nice compact revolver. I fired 50 rounds through it last week, a .357 Mag. load of 15 grains of IMR 4227 on top of a Berry 125-grain flat-nose bullet. The starting load in Lyman's 51st manual lists 15.5 grains of IMR 4227 with a Hornady 125-grain XTP bullet. The load was manageable to shoot in the Viper. My question is will a steady diet of this load loosen the revolver? I will probably shoot it about once a month with 50 rounds at a time.

Richard Radabaugh
Colorado Springs, Colorado

You might want to back off that a bit. The 15.0 grains are within load and pressure limits for the .357, but the

listed velocities I'm seeing are right at the limits for plated bullets. Me, I'd back off to 14.0 grains, get more loads per pound of powder, put less stress on the plated bullets, and enjoy additional practice. At 50 rounds a month, you've probably got well over a decade of steady practice before you have to worry about your Viper.

— P. Sweeney

KUDOS EDITORS

I am writing to compliment the March 2026 issue of Guns & Ammo. It is the first issue in 18 months that had four articles with interest to a hunter in Pennsylvania. I know your job is to sell magazines, and the current trend is to appeal to the "wanna-be Rambos" who think they must own high-capacity semiautomatic pistols and an AR-15, and who go to the gun ranges to blast away the backstops, leaving brass strewn over the ground for others to clean up. My subscription is good until '27.
Barry Horvat
Rillton, Pennsylvania

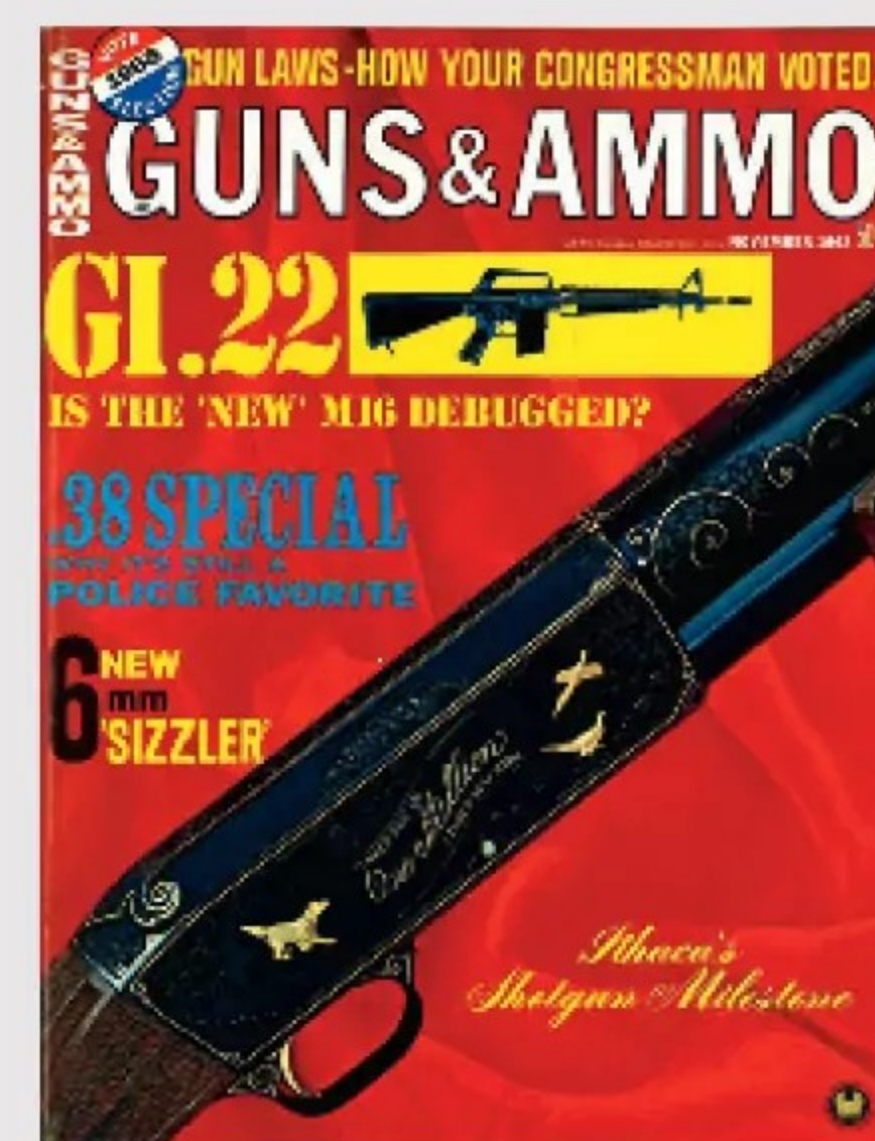
DEFINE "SD & ES"

In the performance charts for loads tested, what does "ES" and "SD" mean? I was thinking it is the type of powder used, the ballistic coefficient, the amount of powder or something else.
Fred Zervos
Orland Park, Illinois

"ES" stands for "extreme spread." This is the total velocity spread of ammunition fired during the

NOVEMBER '68

Serial number "1" and "1,000,000" were illustrated in a feature marking Ithaca's 1-millionth Model 37 pump-action shotgun. Number 1 was the actual prototype made in 1937. Appearing on the cover, number 1000000 was a presentation-grade featuring exquisite engraving surrounding the receiver and barrel, and ornamental gold inlay. Also in this issue, G&A examined updates to improve the M16's reliability in Vietnam and reported the congressional voting records and presidential candidate positions on gun control laws.



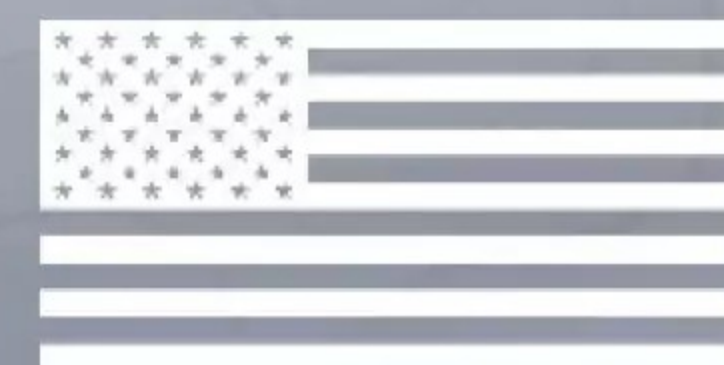
recorded test between minimum and maximum velocities in the test group. "SD" stands for "standard deviation." It is the measure of the average velocity difference of rounds in the test group from the average velocity of the group. Dividing the ES by 2.5 gives an approximate value of the SD.

— G&A Editors

DARNELL REMEMBERED

I was surprised and interested to see my ol' friend Don Darnell's picture and story in the April issue of Guns & Ammo. Don also shared with me that for a while he had a Mauser HSc

MODEL
2020
BOUNDARY



BOUNDARY



GEAR UP.

KNOW NO BOUNDS.

The Model 2020 Boundary family of bolt action rifles is expertly crafted for unrivaled precision and quality. With a refined carbon fiber stock and a robust hinged floor plate design, the Boundary offers the sleek lines of a classic hunting rifle with premium, modern features. Built on the custom-grade Model 2020 action, the Boundary is available in long and short action configurations and backed by our .75 MOA guarantee.



**.75 MOA
GUARANTEE**



SPRINGFIELD ARMORY.

[SPRINGFIELD-ARMORY.COM](https://springfield-armory.com)

that he saved as a souvenir but lost it when a half-track he was in was shot out from under him and burned up. This and other stories were shared with me when I was a young man and eager to listen while fishing with him. Thanks for recognizing an interesting story.

Max Reuscher
Vandalia, Illinois

FASTEST RELOADS RESPONSE

A friendly “Blowback” to “Mike” from Tomahawk. A couple things to consider when comparing revolvers to semiautos. If you make the first shot count, the amount of rounds becomes less important, especially if those rounds are more potent in every caliber as they are with revolvers. Too, with practice, a speed loader is almost as fast as a magazine. Finally, a revolver never jams. If you have a failed round, just keep squeezing the trigger.

Doug Felton
Lithia, Florida

BACK ISSUES

I just received my first issue of Guns & Ammo with my subscription. Thanks! Is there a way to get the issues from 2020 to 2025?

Ricardo Mora,
Email

Digitized back issues published since January 2013 are available with your paid print and digital subscription on the Guns & Ammo app in the Apple Store and Google Play for Android-supported devices. Unfortunately, print versions of Guns & Ammo's monthly back issues are no longer warehoused or offered. Many special inter-

est publications, including those on shooting, fishing and hunting genres, are offered at osgnewsstand.com.

— G&A Staff

OF WOOD & STEEL

I'm a long-time subscriber and my dreams were answered with Dave Emary's series “Of Wood & Steel.” It was my first stop in every issue since it first appeared in the January 2026 issue. My fingers couldn't turn the pages fast enough to read the text and examine Mark Fingar's beautiful photos of those great old guns! Mr. Emary did a superb job of mixing history and information with each installment, bringing back fond memories at the gun shop and my uncle's or grandpa's house. I wish younger generations could know the joy and excitement it brings to many of us “Old Gun Guys.” Keep up the great work.

John Berry
Marion, Indiana

SPEER & RCBS

CZ Group acquired most of Vista Outdoors regarding its ammunition manufacturing and formed The Kinetic Group (TKG). Other brands were sold to other companies. Is there any indication as to what will happen to the brands that offer reloading supplies? Speer bullets and RCBS, specifically?

Tom Murphys
Email

The Kinetic Group (TKG) was formed by Vista Outdoors in 2023 before it was sold to the industrial-technology company, Czechoslovak Group (CSG) in 2024. CSG's

Ammo+ Division includes ammunition companies Federal, Remington, CCI, Speer and Hevi-Shot, as well as Alliant Powder. CSG is also a majority owner of Fiocchi. In May 2024, family owned Hodgdon Powder Company acquired RCBS from Vista Outdoor.

— G&A Staff

ARMED CITIZENS

My attention was drawn to a recent letter from a reader in Wisconsin who observed, correctly, that it takes both hands to reload a revolver, notwithstanding the fact that it also takes both hands to reload a semiautomatic pistol. What interested me was that he went further to discount the effectiveness of the revolver as a defensive tool. A revolver will likely solve most problems, but any handgun can be a short-range proposition. Given that most lethal threats occur at arm's length and closer, sights are not usually needed. If you need a sight, you are likely shooting at someone who is too far to be an immediate threat. Besides, a sight will only help you see better. It will not help you shoot better. By adding accessories, including telescopic sights and silencers, you have transformed a personal defense firearm into an offensive weapon. The day an offensive weapon is needed, then a rifle or shotgun would be my first choice. Professor John Lott published a study of FBI case files and from other agencies. A million documented instances showed that the mere presentation of a deadly weapon was sufficient to bring many poten-

tially violent conflicts to an abrupt halt. Therefore, more important than even being loaded, the weapon must be visible to be a deterrent. Do not discount the effectiveness of open carry.

Patrick Smith,
Virginia

WHY NEW LOADS?

My dad inherited a large gun collection from his uncle, Lt. Col. Worrell Rolfe, who fought under Generals Eisenhower and Patton in World War II. The guns were German and Italian, both handguns and long guns. Most have been sold or traded by the inheriting family members. My nagging question has been, why do manufacturers bother to make ammo that varies so slightly from loads that are already available, proven and performing? The average hunter is not going to care about the miniscule differences between a 140-grain .270, a 170-grain .30-'06, or 150-grain 7mm, depending on the game. Yes, it must be powerful enough to bring down the animal. It seems that companies would want to duplicate ammo in cartridges that are already in circulation. Perhaps, some want to make their own ammo for their own guns, but I think they could sell more product and realize more profit! Is it simply the fickleness of humans wanting an option? Or is there a real value in the difference these cartridges offer? Or is it the entrepreneurial spirit of building something new and different?

Jerry Van Dyke
Sun City, Arizona 

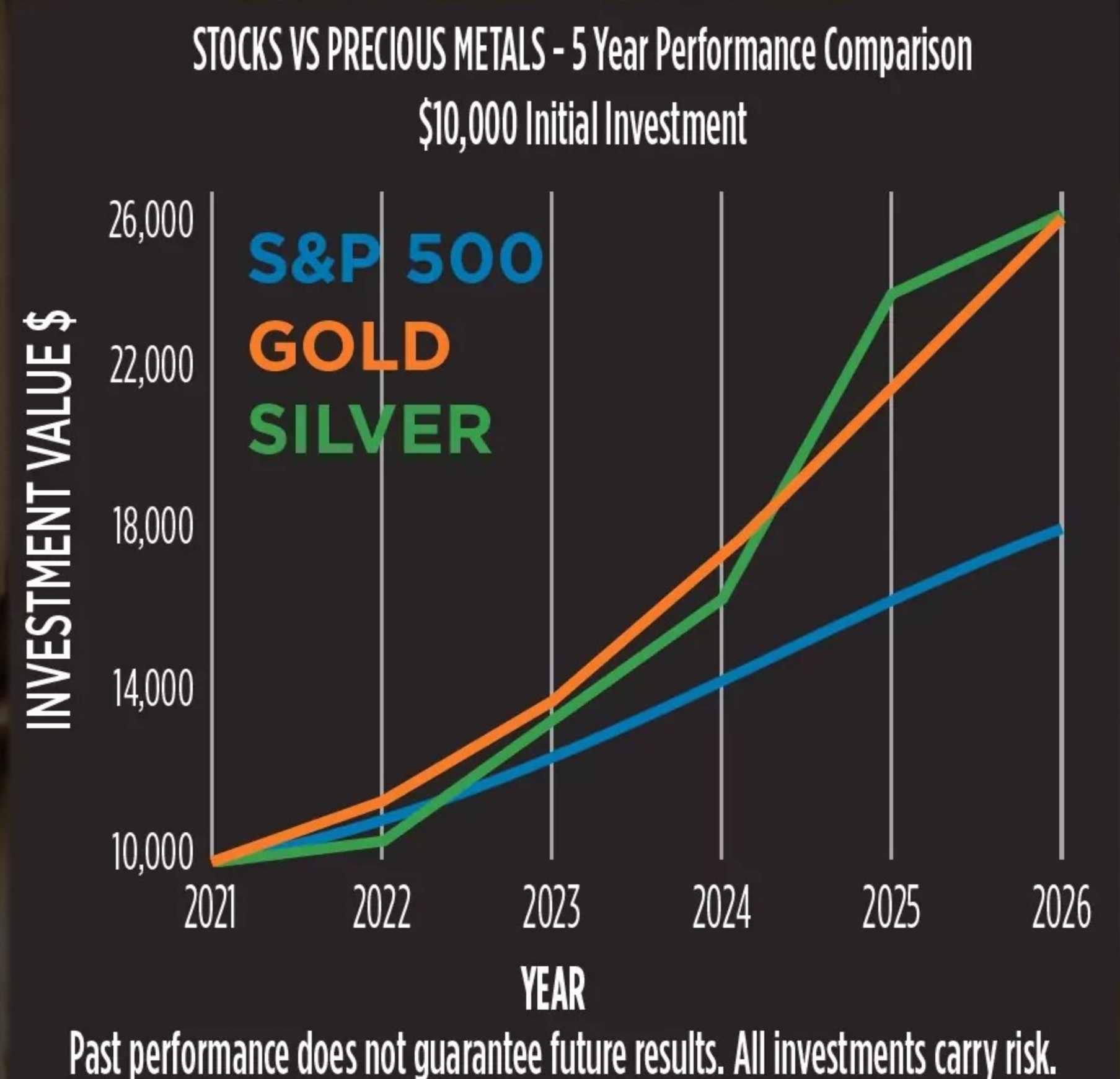
BUY GOLD AT SPOT

Brilliant Uncirculated Gold & Silver American Eagles

OPEN A GOLD IRA TODAY

- ✓ Easy Set Up
- ✓ Expert Guidance
- ✓ Tax-Advantaged
- ✓ Secure Process

In uncertain markets, many investors turn to gold for stability. A Gold IRA can help protect your retirement savings when traditional investments fluctuate.



Over the past two years, a \$10,000 investment could have grown to **\$45,000–\$50,000 in silver** or **\$17,000–\$20,000 in gold.**

Silver As Low As
\$65.00

Per 1 oz Silver Eagle Coin
Maximum of 20 Silver Coins at Spot



Gold As Low As
\$429

Per \$5 US Minted Gold Eagle Coin

Special discount packages are available for orders of **\$50,000** or more. Call to speak with a representative today!



ACH/ECheck and Wire Transfers also accepted as payment.

Gold and Silver at-cost-offer expires 09-15-2026 or while supplies last. Pricing is based on spot prices at the time of submission 06-25-2026. Price subject to change based on market conditions. Coin limits at our discretion - max of 20 silver coins at spot and max of 10 gold coins at spot.



FMR GOLD
FMRGOLD.COM

Call Today
1-800-895-8603

Discount Vault Code GA0926



BRING OUT THE
West IN YOU



HENRY[®]



**FREE CATALOG
AND DECALS**

Scan or Visit
www.HenryUSA.com

MADE IN AMERICA, OR NOT MADE AT ALL | LIFETIME WARRANTY | 100% SATISFACTION GUARANTEE

Officer Walter Weaver is not forgotten.



ERIC R. POOLE

@GUNSANDAMMOMAG

END OF TOUR

A HOMELESS PUPPY appeared at a New York Police Department's (NYPD) Emergency Services Unit (ESU) station. Loved by officers, it was named "Midnight." Officer Walter Weaver successfully lobbied to keep the dog as a mascot, and during the next few years Midnight became a member of the department but answered to Weaver.

ESU addresses high-risk incidents, technical rescues and performs counter-terrorism operations across New York City. Officer selection is

demanding and takes close to a year, then followed by continuous on-the-job training with a senior officer. ESU identifies candidates through a rigorous series of task selection processes before even sitting down for an interview. Whereas the military has occupational specialties, ESU officers specialize in multiple areas. Officers prepare to be

the first responder to any tactical situation requiring ESU. Each officer is an emergency medical technician (EMT) and certified rescue diver, and all are trained in hostage rescue, animal control, hazardous material (HazMat), presidential and dignitary protection, and crisis management.

Officers on patrol carry a duty pistol plus department-authorized back-ups. On September 11, 2001, duty pistols were either a Glock 19 (Gen 2) with a 12-pound "New York Trigger," a SIG Sauer P226 double-action-only (DAO), or a Smith & Wesson 5946 DAO. Though the G19 was standard with 15-round magazines, the NYPD specified officers carry the same maximum 10-round capacity for training and standardization so a block was inserted. ("Ridiculous.") A Smith & Wesson 640 revolver was also authorized as a backup. ESU spent 5 days at the range twice a year, at Camp Smith, Fort Dix, or in a shoothouse, breaching, room clearing, or working the shield, the MP5, Ithaca 37, or a rifle. Officer Weaver was a good shooter and was selected to become a counter-sniper, i.e., a member of the "observation team."

Officer Weaver was assigned to ESU Truck 3, which was adjacent to the 43rd Precinct, South Bronx, on September 11, 2001. Truck 3 covered six precincts near east Bronx,

north to south. I interviewed fellow ESU officers Peter Segreti and Raymond Flood on June 10 and 28, 2026. Pete knew "Wally," but was in a different squad at Truck 3. Ray was also a part of 3 Truck and worked with Wally as a partner in the 47th.

"They showed up," Segreti recalled. "They went in with the mission to get people out of there. They knew the tower's stability was failing. Officer Ken Winkler of 1 Truck

put the radio transmission to get out over the tactical channel, but many were so far in they couldn't get out in time. Officers Sergeant Mike Curtin and John D'Allara were killed while helping a lady on their way out. If a problem was big, Sergeant Curtin was the guy I wanted to work with. They were killed by the North Tower as the top fell on them and created a deep hole into the

parking garage. You never forget the sacrifice, but our guys would do it again. They knew they had to rescue people, and that day 25,000 got out. A lot of actions saved lives."

Officer Weaver, 30, was last seen on the 6th floor in the North Tower attempting to free passengers trapped in an elevator. His remains were never found, but his S&W 640 was recovered and given to his father who donated it to the NRA National Firearms Museum where it remains on display. "Wally was a passionate hunter, always in the woods," Segreti said, "and an NRA member."

"That day Truck 3 was heavy with ESU officers and Truck 2 was light," Flood recalled, "so Wally flew down with a couple of others from the Bronx's 3 Truck to Truck 2 based in Manhattan."

No one, including families, received confirmation that their officer had been killed for weeks. When members of Truck 3 returned to the command center without three of their own — Officers Weaver, Jermone Dominguez and Vincent Danz — Midnight was confused and worried. In the days that followed, she looked out the window lost and waiting for these officers to return. Truck 3 continued to look after Midnight as one of their own.





**PRECISION
BUILT.**

**MATCH
PROVEN.**

**ZERO
COMPROMISES.**

BERGER 223 REMINGTON AMMUNITION is made from premium components for match-grade performance and precision, straight from the yellow box. No handloading required. Available now in: **69 GRAIN OTM**, **73 GRAIN BT TARGET**, and **77 GRAIN OTM**.



*To Satisfy Your Precision Cravings,
Feed Your AR Berger. **Locate a Yellow
Box at BERGERBULLETS.COM***

BERGER®

SHOOT BETTER

“Three-inch versions such as yours bring a premium and can command the higher bucks.”

IDENTIFICATION & VALUES



GARRY JAMES
GARRY.JAMES@OUTDOORSG.COM



WWII WEBLEY REVOLVER

Q: I always look forward to checking my mail each day, hoping to find a new issue of Guns & Ammo so I can read your “Gun Room” column. It’s my favorite feature. I own a British Webley .38/200 World War II revolver that originally belonged to my great grandfather. It bears the so-called “WAR FINISH” stamp, British army acceptance markings, and has matching serial numbers on all major components. He served in the U.S. Army and brought this revolver home after the war. Given its history and condition, I was wondering if this might be of interest as a potential feature in the “Gun Room” column.

M. C.
Email

A: Thank you for your kind comments about my column and the excellent photos of your revolver. The primary issue British revolver a number of years before and

during World War II was the .38/200 Enfield No. 2, a double-action with many features borrowed from earlier Webleys. Demand was such that it was deemed prudent to augment the No. 2 with similar Mark IV .380 revolvers procured from Webley & Scott in 1940. As you note, they were marked “WAR FINISH” so that users would understand that it was not the normal appearance seen on guns produced by Webley & Scott. Unlike the Enfield No.2 Mark I* and Mark 1** revolvers, which were single-action only, the Mark IV could be fired single or double action. Some 126,000 were made between 1940 to 1945. Your example appears to be in

good shape. I’d value it in the \$550 to \$650 range.

RESTORING A MODEL 94 WINCHESTER

Q: I recently acquired a Winchester Model 94 in .30-30 that came to me as parts in a bucket. The original owner simply wanted a “working .30” for local deer hunting. Desiring a real Winchester for my own collection, the owner jumped at my suggestion to trade an extra Marlin I had for his Winchester. A local gunsmith confirmed all the parts were there and reassembled the Winchester for me, but he suggested I replace a few parts and restore the piece prior to

AUCTION BLOCK

.50 ALASKAN CO-PILOT TAKEDOWN RIFLE
A desirable Wild West Guns Co-Pilot takedown rifle in .50 Alaskan realized \$7,500 at a June 6, 2026, Sportsman’s Legacy sale. The chambering of the stainless-steel lever-action qualifies it as a rarity. It has an 18-inch ported barrel, hooded front sight with red fiber-optic bead, optic rail on the barrel, adjustable rear aperture sight, crossbolt safety, big-loop lever, synthetic stock and a silver-anodized Leupold FX-II 2.5×28mm Scout scope. A takedown case and a set of Hornady Custom Grade dies were included in the package. The rifle appears unfired since proof. The metal finish is at least 98 percent with only a slight trace of rubbing. Its stock finish is at least 99 percent, and the case remains in excellent condition. For more information about this and future sales, visit Sportsman’s Legacy at sportsmanslegacy.com.



any actual use of the rifle. A quick check of the serial number indicated to me that the rifle was manufactured sometime in the mid-1960s and could fall on either side of the pre- or post-1964 date that could possibly affect its value. I joined and wrote the Winchester Arms Collectors Association and submitted a request for information from the Buffalo Bill Center of the West; both organizations were unable to help as the records for my specific firearm no longer exist. I want this to be a safe working firearm, but I had planned to have it as part of a Western display paired with a saddle, lasso, SAA gun belt, and hat, and have no intentions of shooting it. In addition to making it safe, I intended to restore its appearance to the point where it looked old but well cared for, as it's a bit on the rough side in its present condition. The serial number is 2817XXX and the gun has the model stamped on the barrel just



SMITH & WESSON M547 3-IN. BBL., 9MM, 80%: \$1,100

below the rear sight. Based upon your experience, knowledge, and resources, would I hurt its value to restore this rifle to like-new condition? Or would it be best to simply make it safe and leave as-is?

S. D. Mandeville, Louisiana

A: *If it was my rifle, I would not re-blue it, but clean it up as best I could and keep it in its present condition. This will provide much more character for the Wild West assemblage you are planning than if it were completely re-blued. Plus, the polishing and re-bluing*

would be expensive and not add any value to the piece. In fact, re-bluing it may make it worth less. By the bye, this rifle was manufactured in 1965. Good luck with your project. It sounds like fun.

9MM SMITH & WESSON REVOLVER

Q: I was having a lazy Sunday here in Maine and decided I was going to clean some firearms that were overdue. One revolver that I bought used is a Smith & Wesson Model 547 in 9mm. The guy I bought it from said it was a prison guard's carry gun. I never knew if that was true or not. I'm hoping you can give me some insight on the year it was made and if law enforcement carried this gun.

B. M., Porter, Maine

A: *The K-frame Smith & Wesson 9mm Model 547 Military & Police revolver was manufactured from 1980 to 1985. During that period, some 10,270 were made. It was offered in 3-inch heavy barreled round butt versions (such as yours) or square-butt models with 4-inch barrels. Model 547s are bringing good money these days. Depending upon condition,*

sales in the \$1,200 to \$2,000 range are not uncommon. Three-inch versions such as yours bring a premium and can command the higher bucks. I must admit to not being able to find any large- (or even medium) scale law-enforcement usage of the 9mm 547. Perhaps some of G&A's readers have anecdotes to share on this subject.

SMITH & WESSON NO. 3 DA

Q: A couple years ago, I picked up a S&W revolver at a gun show. It is in like-new condition, and I was suspicious at first. It is somewhat unique in that it has a smooth bore. I am told that S&W made such guns for people who shoot aerial targets in shooting exhibitions, which may explain the lack of holster wear. I took a chance. The gun is fully functional and a .40-40 caliber. I use it to shoot rats in my out buildings, which may be considered questionable given the guns antiquity, but I love shooting rats in my out-buildings. I have no idea when it was made or what its value is. The serial number is shown on the pistol butt and on the cylinder where cartridges are loaded. Any information you can give me would be greatly appreciated.

J. D., Email

A: *I've always liked the Smith & Wesson Number 3 double-actions and have thought them somewhat underrated by shooters and collectors. The No. 3 top-break double-action revolver was manufactured from 1881 to 1913, and was not uncommonly seen in the Old West. In fact,*

HOLLYWOOD HARDWARE

"The Thin Man" (1934) Colt Police Positive

The nickel-plated Colt .32 caliber Police Positive from the first — and likely most highly-regarded of "The Thin Man" movies — was embellished with enigmatically inscribed pearl grips referring to the detective "Nick Charles," portrayed by actor William Powell. The six-film series, starring Powell and Myrna Loy and based on stories and characters from detective novels created by Dashiell Hammett, ran for an impressive 9 years spanning 1934 to 1947. (Courtesy of Hollywood Guns and Props, Santa Clarita, California, and The National Firearms Museum, Fairfax, Virginia.)





RPC



***SOME BUY A REPUTATION.
YOU BUILD ONE.***

The **all-new Taurus® RPC** delivers roller-delayed performance in a 9mm platform built for the shooter who trains with intention—putting serious capability within reach of everyone.

TaurusUSA.com

 **TAURUS®**



FN HI-POWER T-SERIES, 9MM, 95%: \$2,350

it was even a favorite handgun of gunman John Wesley Hardin. The No. 3 DA was offered in different variations, in calibers .44 Russian (“First Model” and “Favorite”) and .44-40 “Frontier.” Your Frontier (S.N. 4XX) was manufactured in 1886, the first year of production. Some 15,340 Frontiers were manufactured until 1913. Interestingly, all the frames of this model were manufactured before 1899, thus classifying even the later guns as antiques. The fact that your revolver is smoothbore is interesting, and indicates it could indeed have been used for some exhibition shooting. Accompanying photos show a nickel-plated revolver in at least 85 to 90 percent condition. A rifled gun’s value in such good shape would be in the \$1,500 to \$1,650 range. However, if it is indeed a factory-made smoothbore that figure could easily be doubled. An added note — most No. 3 DA smoothbores are in .44 Russian. Are you sure your piece is .44-40?

**FN BROWNING
“T” SERIES
HI-POWER**

Q: I love getting Guns &

Ammo and the first place I turn to is the “Identification & Values” section. I got this Browning about 7 years ago (serial number T247XXX) and shot it twice, cleaned it and put it into the safe. As you can see, it does have tangent sights and was made at FN. Can you please give me some information on it and a value?
R. F., Email

A: Tangent rear sight, slotted-for-shoulder-stock Hi-Power auto pistols were offered during several different periods by Fabrique Nationale and Browning Arms Company, pre- and post-World War II. The “T” serial number series, of which yours is a member, was imported between 1964 and circa 1970 by the Browning Arms Company. These are relatively scarce guns. Including the “TC” series, which was available from 1972 to 1976, some 7,000 were brought in. Value on your gun, which appears to be in stellar condition, is \$2,200 to \$2,500.

**HAMMERLI
VIRGINIAN**

Q: I purchased this revolver a while back and have been trying to find info about it.

Its serial number is C 38XX. I’ve emailed Hammerli and Interarms — the importer of this revolver — and can’t get a response. It’s new-in-box and is listed as having a silver grip frame and triggerguard. I’m sending a few pics and hope you will be able to help me find something about this pistol. It’s a beautiful piece and will be my safe queen.
R. T., Email

A: Your Hammerli Virginian was imported from Switzerland by Interarms between 1972 and ’75. There was also a Virginian Dragoon manufactured in the U.S. offered by Interarms. The Virginian was interesting in that its safety involved a longer cylinder pin with dual notches that, when pushed fully in, prevents the hammer from striking the firing pin. Virginians were available with 4¾-, 5½-, and 7½-inch barrels in .357 Magnum, and .45 Colt. Quality of these guns is quite good. Value on your piece, as new-in-the box, is in the \$850 to \$1,000 range.

**COLT LIGHTNING
REVOLVER**

Q: I have a Colt M1877 Light-

ning revolver, but it looks a little different from the norm. Can you tell me some more about it, please?
D. F., Email

A: The M1877 Colt DA was manufactured in .32, .38 and .41 calibers from 1877 until 1909. As a sales tool they were given the monikers “Rainmaker,” “Lightning” and “Thunderer” (in ascending chamberings) by retailer Benjamin Kittredge, and the names stuck. Despite their longevity and production numbers (some 111,500 were built), M1877s had a reputation for possessing a rather fragile action, and it is not uncommon to find many today with faulty mechanics. Special order versions were also available. These can bring substantial prices. Your 3-inch barreled Lightning is a variant of the 1877 and lacks an ejector rod. These “Storekeepers’ Specials” bring a bit of a premium on the collector market. Though devoid of finish, the gun seems to be in decent shape and assuming it works is worth in the \$1,400 to \$1,550 range. Based in its 122XXX serial number it was built in 1900. **G&A**



COLT MODEL 1877 “LIGHTNING,” .38 CAL., 50%: \$600



**ALPHA
FOXTROT**

ROMULUS



**TWO CALIBERS.
ONE STANDARD: YOURS**

BORN IN 9MM. NOW EXPANDED WITH NEW 10MM
AND .45 ACP OPTIONS.

10MM
MAXIMUM POWER

.45 ACP
PROVEN CONFIDENCE



BARREL OPTIONS:
BULL, COMPENSATED



PROVEN
RELIABILITY



AMERICAN
MADE



DESIGNED. ENGINEERED. MADE IN THE USA.
ALPHAFOXTROT.US



LEARN MORE
ABOUT ROMULUS

KUNA™



The all-new Kuna™ pistol from Springfield Armory® is a PDW built to deliver exceptional performance in a portable package. Featuring a roller-delayed operating system and precision manufactured for optimal fit and function, the Kuna is chambered in 9MM with 30-round magazines. The small profile, nimble handling, and prolific capacity make it a fierce personal defense platform. The Kuna from Springfield Armory – ready to roll.



SPRINGFIELD ARMORY.

SPRINGFIELD-ARMORY.COM

The Smith & Wesson Academy is open to the public.



JAMES TARR

BACK TO SCHOOL

THE SMITH & WESSON ACADEMY opened its doors in September 2025 next to the factory headquarters in Marysville, Tennessee, close to Knoxville's airport. It replaces the Academy once situated in Springfield, Massachusetts. Established in 1968, the former academy closed in 2017. To experience what the new location I attended a training event in June 2026.

For the rollout of the M&P Shield in 2012, Guns & Ammo sent me to the Massachusetts academy where we spent 2 days running those pistols through roughly 700 rounds. The Academy in Massachusetts was entirely indoors, which is what you need when you've got snow on the ground more than 4 months a year. There was a pro shop and several separate multi-lane ranges, though. The Tennessee academy is different in almost every way.

LAW ENFORCEMENT READY

First, it's much larger. The S&W Academy sprawls across 50 acres. At the front of the property is the Academy's main building which includes a classroom, secure storage, kitchen, restrooms, and so on. Except for the two-story indoor Simunition shoothouse, all the ranges are outdoors. The two-story 4,000-square-foot shoothouse is meant for use with Simunitions, as well. If you've never heard of "Sim," the projectile is akin to a tactical paint round fired out of specialized firearms at a speed fast enough that you'll need eye and face protection. Sims are non-lethal but produce a welt-producing pain response for realism. Sims are popular with law enforcement for force-on-force training.

The shoothouse has two entry doors, two staircases and movable walls for agencies to practice breaching and room clearing in a configurable environment. It also has cameras set up throughout so instructors can remotely monitor and record the action without worry of being swept by a muzzle.

At 50-yards wide and 65-yards long, the outdoor pistol range is huge. The walls to either side are Hesco barriers

stacked two high.

The S&W Academy broke ground in 2025, so additions are in the works. One is a large, covered area for the pistol range. As of this report, there's a small roof but the plan

is to install a large covered area at the 50-yard line so the range can be used year-round. In the summer, it will provide shade and protection from rain. In the winter, a few space heaters should keep shooters comfortable. (Tennessee gets winters, but they're usually mild.)

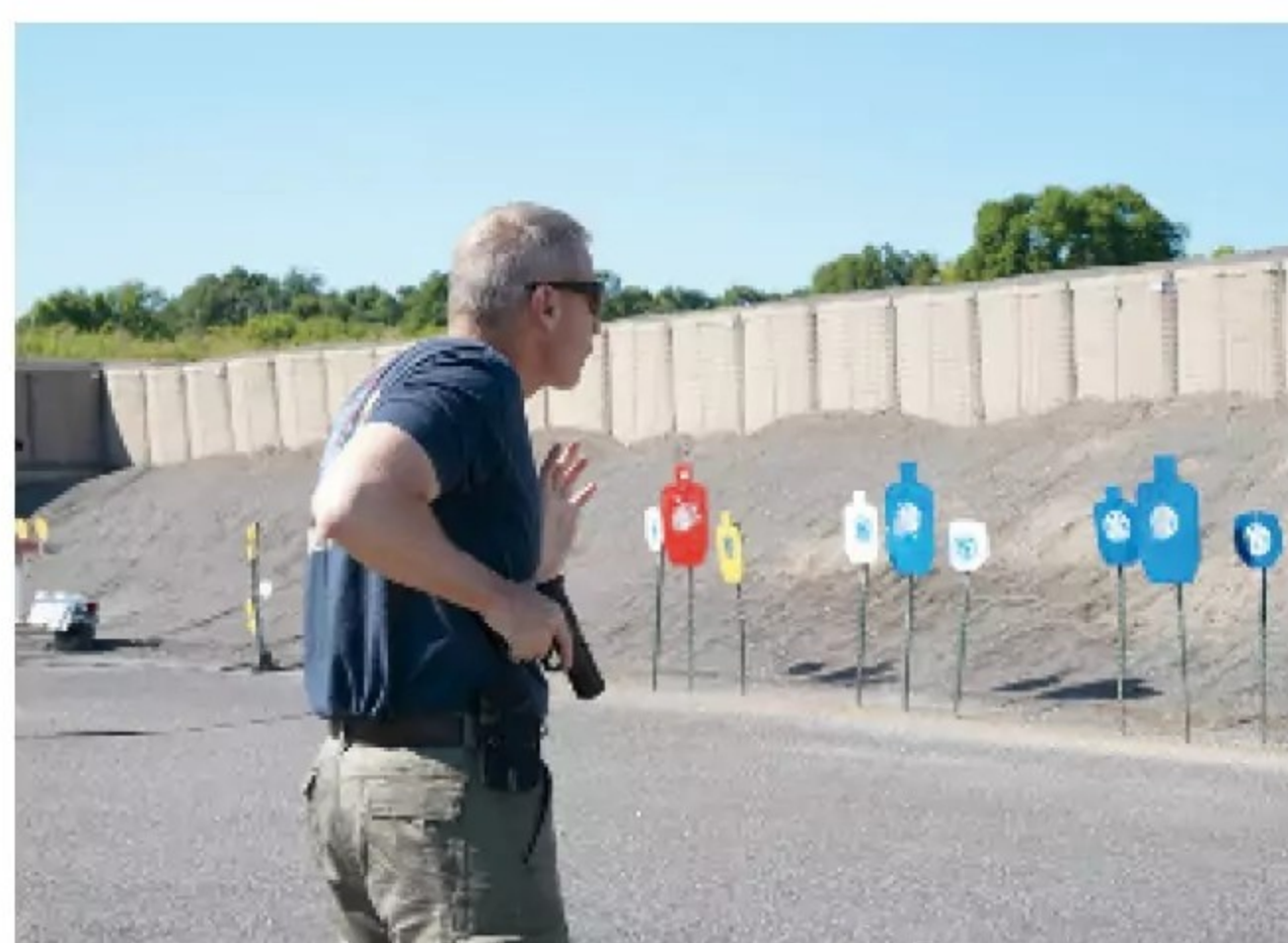
At the far end of the facility is a 300-yard rifle range. Between those two ranges is the Flex Range, a near-360-degree range that's 100 yards square. There is a back wall with gaps on either side that allow tactical instructors to pull vehicles inside if needed. While the FBI and police departments are already making use of the Academy, Smith & Wesson also offers a full lineup of courses, many of which are tailored for citizens.

CITIZEN CARRY

S&W's Intro to Pistol is a 4-hour course for qualifying adults with little to no experience handling or shooting fire-

arms. Fundamentals of Defensive Pistol is an 8-hour course that involves both classroom instruction and live fire. The Academy offers intermediate and advanced classes for both pistol and carbine, as well.

The director of training is former U.S. Navy Chief Warrant Officer (ret.) Mark Cochiolo. "Coch" spent time on SEAL Team Six, and later served as a firearm instructor for the U.S. Navy SEAL BUD/S course, designing much of the firearms training curriculum. He ran attendees through a condensed, combined 1-day pistol and carbine course to give us a taste of what the Academy will offer. Smith & Wesson offered M&P M2.0 pistols and M&P 15 rifles for use, and Safariland and provided holsters — 6000-series and Ballast Level III-retention models, as well as the Safariland Gravity OWB paddle holster.



Smith & Wesson handgun deployment training started with guns out and shooting and then reversed to the holster. Once mastered, training returned to single or multiple shots from the holster.



Fundamentals are the same regardless of distance, even at the 10-yard line. The S&W Academy ensures safe handling of firearms before more dynamic training begins.

When it comes to handgun shooting, everything was centered around fundamentals. So-called “advanced techniques” are simply fundamentals applied faster, some from unusual positions, under stress, or some combination thereof. With both his SEAL trainees and us, Coch started with the basics and built from there.

Coch’s base drill involved creating a foundation for shooting. We deconstructed the draw, beginning at the end, which was interesting. He started us with the gun out and in both hands, shooting. Then we began with our hands apart, as if we’d just drawn the gun, brought them together, acquired a two-handed grip and fired. Eventually, we were drawing, applying a two-hand grip, and shooting. First it was one shot, then multiples. It wasn’t about going fast but doing everything right instead. Speed came when students eliminated wasted motion. We started by shooting steel silhouettes for immediate feedback from hits.

The techniques he taught are deliberately simple. They were designed to ensure the lowest chance of failure and highest chance of success in drawing, gripping and shooting. That’s what you want whether you’re training to be a SEAL or a citizen learning to defend one’s self. Coch covered ready positions, trigger-finger placement — when it should be on the trigger and when it shouldn’t — sight alignment and sight picture, and reloading. After shooting one and two rounds per draw, we practiced some speed shooting (i.e., how fast can you shoot) and how to hit your target, along with failure drills. We practiced transitioning between targets in the most efficient way possible and then did some shooting on the move.



U.S. Navy SEAL veteran Mark Cochiolo brings experience training military and law enforcement to the S&W Academy.

TO THE VICTORS ...

Before lunch, we shot man-on-man competition against plate racks and dueling trees. The winner of each event walked away with a pair of shooting glasses. Some people can shoot fast; some can shoot accurately. Shooting fast and accurately under pressure — against someone else, with a bunch of spectators, for example — is something most shooters rarely do, and it’s great experience. I’m pretty sure I’ve shot more plate racks in practice and competition than everyone else in attendance combined (not counting Coch). Managing Editor Jack

Oller and I left with a pair of glasses each.

After lunch we swapped out pistols for a variety of M&P15 rifles topped with Vortex Spitfire 1X prism optics. In our compressed class, Coch only had us using the rifles to 10 yards, performing drills specifically designed to address home defense, which is why many purchase these rifles. He covered optical height over bore, reloading, sling use and how to lean into the recoil when firing multiple shots. One of the media attendees had a lot of experience hunting but zero experience using ARs, so this was new to her. As with the pistols, we finished by shooting on the move.

Some attendees, even some with a lot of experience, had never shot on the move. It’s tough. Like all shooting techniques, moving is a perishable skill — and that goes double for handguns! Unless you have access to a range, most gun owners never have access or opportunity to participate in training. That’s one of the advantages in favor of a facility such as the Smith & Wesson Academy. It’s not just learning the right way to do things, but S&W offers the opportunity to experience something you’ve never done before. **GA**

MOSSBERG | 990® SPX SERIES

THE 990...
NOW EVEN
SPX-IER.



#83014
990® SPX - Magpul®
NFA/Class 3
12GA, 14.75" Barrel

Magpul is a registered trademark of
Magpul Industries Corp.
Cerakote is a registered trademark of
NIC Industries, Inc.

NFA/Class 3: Requires compliance with
any additional requirements under
applicable law, including but not limited
to the National Firearms Act regarding
applicable forms for transfers.

Consult and comply with any and all applicable federal, state, and local: laws,
regulations, requirements, and/or restrictions, including but not limited
to those regarding the purchase, ownership, use, transport, and carrying
of a firearm. Not all products are available in all states and jurisdictions.

#83011
990® AfterShock SPX
FDE Cerakote®
12GA, 14.75" Barrel

SAFETY TIP 
Store firearms securely, inaccessible
to children and unauthorized users.

THE 990 SPX SERIES: NEXT GENERATION TACTICAL SEMI-AUTOS.

From its tactical forend/heatshield combination to stock choices and its internationally patented and patent-pending optic-ready receiver with removeable winged ghost ring sights, the 990 SPX Series has been designed and engineered with purpose. Customizing and accessorizing is a breeze, while a clean-running gas vent system and oversized loading port helps ensure smooth semi-auto operation. Available in multiple finishes and barrel lengths to suit any taste or tactical need.

Mossberg – Makers of dependable, hardworking firearms for more than a century.

LEARN MORE AT
MOSSBERG.COM

MOSSBERG®
SINCE 1919

SCAN CODE FOR
MORE INFO 





M5 CARBINE

AMERICA'S RIFLE

EOTech EFLX CE

JACK OLLER

The EOTech EFLX CE is an enclosed-emitter red-dot sight compatible with the RMSc or DeltaPoint Pro mounting footprint. It is controlled with two top-mounted buttons and features an adjustable 3-MOA center dot with 42-MOA circle reticle. Its medium size pairs well with medium-compact handguns. \$479



SPLIT THE DIFFERENCE

KNOWN FOR HOLOGRAPHIC WEAPON SIGHTS (HWS), EOTech identified a gap in the red-dot market for a mid-size pistol optic. Perhaps it was a natural evolution following the introduction of optic-ready compact and “micro” or sub-compact pistols nearly 10 years ago. Quickly, it was obvious that red-dot optics available at that time were too large for the narrow 1-inch footprints of the micro pistol slides. While more convenient to carry, micro 9s can be more difficult to shoot for people with large hands, so medium-size pistols emerged to split the difference in size, blending concealability and shootability traits. Micro optics are also challenging for some to use, so EOTech created the EFLX CE to address the needs for a larger window with the RMSc and DeltaPoint Pro footprints.

ANATOMY

EOTech refers to the EFLX CE as a “mini red-dot sight,” but its proportions is akin to what cheeky youth refer to as a “sh-medium.” Measuring 1.6-by-1.2-by-1.1 inches, it’s smaller

than a full-size red dot but larger than a true micro optic. What makes it impressive is that the dimensions describe a closed-emitter (CE) red dot for a pistol. However, the objective perspective is large and weight is minimal — 1.4 ounces — because it’s housed in 7075-series aluminum.

Its brightness adjustments are located on top of the housing, and there are only two buttons. The “+” on the left increases illumination, and the “-” on the right decreases intensity. The minus button can be pressed to cycle through the reticle options: 3



Known as a holographic sight brand, the EOTech EFLX CE is a red-dot sight with a red LED emitter enclosed within an aluminum housing. Almost no tinting or distortion was detected in the glass.

MOA center dot, circle only, and a circle-dot combination. The EFLX CE automatically turns on when motion is detected — a welcome feature — and a sleep feature can be programmed to turn off the reticle between 10 minutes and 12 hours of no motion. There is also a lockout mode to prevent any brightness setting changes, which also disables the motion activation.

The reticle is powered with a standard CR2032 battery, providing an estimated 25,000 hours at the medium setting. There are two night vision (NV), six daylight and one ultra-bright illumination settings for a total of nine options. Windage and elevation adjustments are at the rear right-side and top of the housing.

IT COMPETES

For evaluation, I shot an IDPA match at the Green Valley Rifle & Pistol Club, home of the CMP Bianchi Cup. There is



The battery can be accessed without removing the optic from your pistol slide. The objective lens is recessed and safe against impacts, even if you rack the slide with the serrated face.

a small three-stage match every Tuesday evening, perfect for trying new handguns and optics. I mounted the EFLX CE to the new Walther PDP F-Series Pro-X PMM, and it proved to be an ideal fit. A medium-size optic for a medium-size pistol makes sense, and the EFLX CE did not overwhelm the PDP. Large reflex sights on carry-size handguns can potentially snag easier on clothing from a concealed draw, but since the battery housing is on the right side the optic, it

has no snag points — for a right-side draw at least.

The timer and an audience was great to simulate stress. The large objective of EOTech's EFLX CE made it easy to see the reticle right away, and I was pleased with my draw-to-first-hit times. I also appreciated the EOTech's circle-dot reticle for target transitions. It should be familiar to those who may have served in uniform and carried a carbine with an HWS mounted to the rail. At close targets, the circle was all I needed to see to land consistent A-zone hits.

WILSON  COMBAT

**eXPERIOR
ELITE**

WELCOME TO THE
**EVOLUTION OF
THE 1911**

18+1 CAPACITY • 1.5" AT 25 YDS • OPTICS-READY

For more than a century, the 1911 has defined American handgunning. The eXterior ELITE Double Stack 9mm pistol carries that legacy forward, pairing the proven ergonomics of the X9 platform with modern high-capacity performance. From the TRAK-textured grip surfaces to the Bullet Proof® controls and Wilson Combat's Pin Mounting Platform for direct-mount optics, every detail is engineered for the way you carry today.

eXterior ELITE | ORDER DIRECT OR FIND A DEALER AT WILSONCOMBAT.COM

The center dot provided a precise aiming point for more distant targets. I only dropped a few shots outside the A-zone during the match due to my poor weak-hand shooting skills. I can't blame the optic or gun for that.

Having shot matches with open-emitter red dots in the past, I always find a way get some grime on the inside of the objective lens. A closed emitter is quicker and easier to wipe off and keep clear of occluding smudges. If you're determined to carry a reflex sight on your conceal-carry gun, a closed-emitter pistol optic is worth the extra money in my opinion.

One more feature of note regarding the EOTech EFLX CE is the integral rear backup sight behind the rear lens, just in front of the elevation adjustment. Purportedly, it serves to co-witness with the front sight should the dot ever go down, but I was not able to co-witness it to the PDP's front sight in a meaningful way. It might work on better handguns with a taller front sight. Invest in suppressor-



The EOTech EFLX CE includes typical accessories, including a cover, windage adjustment tool, installation wrench, thread-locker-dipped screws.

height sights if you want the ability to co-witness with the reticle.

As I was also evaluating Walther's latest PDP, the EFLX CE was subjected to 400 rounds during testing and competition. No issues. Considering the brand reputation of EOTech's holographic sights, and the 10-year warranty on the EFLX CE, I have no concerns about its durability.

With a suggested retail price of \$479, the EOTech EFLX CE is competitive in its

class. It's a fair price and will likely cross the counter for less. The appeal of the optic is its medium housing that offers a large view with a micro footprint. It may not be revolutionary, but it was well-designed and well-built with U.S. assembly and some foreign-made parts to keep it competitive. The EFLX CE is a worthy option for medium-size handguns, appropriate for duty, conceal carry and home defense configurations. I will undoubtedly be competing with it again, too. **G&A**





50° of cant

Buttonless stow and quick pull deployment of legs

Oversized aluminum tension knob

Stowable at 0° or 180° and deployed at 90° — making the bipod completely reversible

Height range from 7.1" to 10.5"

All aluminum construction with steel hardware



LEARN MORE



MADE IN USA

VAPOR BIPOD

READY FOR ANY SHOT, ANY POSITION, ANY BUDGET.

The Warne® **VAPOR® BIPOD** is built from all-aluminum construction and steel hardware to ensure performance—no matter your budget. The bipod features eight height positions with 3 inches of height adjustment and 180° reversible locking for ultimate versatility. Precision-engineered and American-made for rock-solid confidence in every shot.

MSRP \$99.99

warnescopemounts.com






Precision Armament TiTrex 300Ti



LIMITLESS SUPPRESSION

RATHER THAN START with the nerdy stuff, here’s what’s most unique about Precision Armament’s line of TiTrex suppressors. This is the only suppressor on the market that can be upgraded or exchanged unlimited times. That’s right, one transfer and unlimited upgrades.

It is made possible by the serialized Xband component, a one-way, snap-on ring that permanently attaches to the 3D-printed TiTrex Exchangeable Core (X-Core). Think of the Xband as the “forever part” and the X-Core as the “component with a fixed lifespan.” When the suppressor is eventually shot out, damaged, or you want to change bore diameter or upgrade suppression technology, send the unit to Precision Armament. Within 48 hours, they’ll attach your serialized Xband to a new TiTrex core and return it. You now have a new suppressor for roughly a third the cost.

The TiTrex suppressor line consists of four models, each priced at \$1,199.

Three use titanium cores for weight savings and one is built from Inconel for durability. For testing, Guns & Ammo received titanium samples of the 260TI, 300TI, and 360TI. Each performed well. The cans are lightweight, handsome, and have an external texture for grip. They use HUB mounts at the rear and replaceable front caps/suppressor brakes up front for increased versatility, as well.

According to Matthew Vossler, co-CEO of Precision Armament, the TiTrex design was thoroughly tested by their team of obsessive-compulsive engineers to offer best-in-class sound performance and durability.

“We’re mostly an innovation company,” said Vossler, “meaning we’re top heavy with degreed engineers who don’t know when to drop the pencil. To offer the best suppression technology, we built our own sound lab inside our facility using high-end instruments in an anechoic chamber.”

From a company like this, you’d

PRECISION ARMAMENT TITREX 300 TI	
CALIBER	.30
THREAD PITCH	5/8x24 and .578x28, HUB compatible
LENGTH	6.2 in. (w/ mount, endcap)
DIAMETER	1.65 in.
WEIGHT	9.2 oz. (w/ mount, endcap)
MATERIAL	Titanium, Grade 5 (body, mount, endcap), 17-4 stainless steel (band), 7075-T6 aluminum (brake)
FINISH	Cerakote, Dark-Ti (body), DLC, Black (mount, endcap), Type III, Class II anodized (brake)
MSRP	\$1,199
MANUFACTURER	Precision Armament, 585-593-4975, precisionarmament.com

PHOTOS: MARK FINGAR



THE PERFECT STORM HAS LANDED

STORM CAT4 RIFLE + EOS-556 SUPPRESSOR



STORM SERIES CAT4 RIFLE

EOS-30Ti EOS-AK EOS-30 EOS-556

WEATHER ANY STORM



LEARN MORE



FOLLOW US ON SOCIAL@USPALM



USPALM.COM



The TiTrex baffles feature a rough surface contour to optimize energy dissipation.



expect a lot of acronyms. One that leaps out is “NURBS,” or “Non-Uniform Reconvergent Baffle Stack” technology. Instead of complex internal plumbing, NURBS technology uses surface contouring and baffle topography to maximize energy dissipation.

According to Vossler, they evaluated many baffle designs before settling on one that offered high sound reduction while being unaffected by fouling.

“We built [more than] 100 prototypes in phases,” said Vossler. “We would evaluate a certain number of variables, print cores, test them, and then push new variables. At the end of our process, we had cores that were more complex, heavier, and offered marginally better sound performance. However, cans with complex internal plumbing got worse over time due to carbon fouling. The TiTrex, in contrast, was unaffected by round count. Whether it had 1,000 rounds through it or was fresh off the assembly line, sound performance was the same.”

Once the TiTrex design was finalized, they had to ensure it would last. Let the fatigue testing begin.

“We refuse to bring products to market before they’re perfect,” said Vossler. “Our motto is to not let customers be beta testers, so we routinely do high-cycle count fatigue testing using impulse pressure to simulate gun fire through our samples. By using water and a hydraulic piston, we can simulate tens of thousands of rounds of anything from a .223 to a .338 Lapua Magnum. Our product’s minimum life is 10,000 rounds, but we typically test

to 100,000 rounds to address any weaknesses.”

How exactly does the Xband and X-Core go together? According to Vossler, the Xband is a one-way spring that is not readily removable from the suppressor core.

“Our snap-on spring band is innovative and tamper-proof,” said Vossler. “It can only be removed intact by complete destruction of the core. When a TiTrex is sent in for a recore, we cut the suppressor away from the Xband. Because it’s a one-way spring lock, once it goes onto the new core, it can’t come off. From a regulatory standpoint, it’s permanent.”

Recoring costs \$399. Vossler indicated that two of the main reasons to recore is to stay current on suppressor innovations and eliminate future paperwork.

“One main advantage of our TiTrex suppressor is that it can be recored for updated technology, which is expanding at an incredible rate. This allows you have the best suppression possible. In addition to suppressor evolution,

think about future legislation. Now, the needle is in favor of the gun owner, but that may not always be the case. Owning a TiTrex gives you immunity to future tax stamp changes.”

In today’s market, there’s no shortage of excellent suppressors for every conceivable application. The TiTrex is a strong performer, but what makes it so intriguing is the unprecedented versatility. Precision Armament’s TiTrex is a suppressor for tomorrow that you can own today. 

— D. Faubion



The serialized portion of the TiTrex Xband can only be removed by cutting the suppressor away or destruction.



THE NEXT GENERATION OF AMERICA'S FAVORITE HUNTING RIFLE

The Ruger American® Rifle Generation II; an update to the American-made rifle that has been the benchmark for accuracy, durability, and performance in bolt-action rifles for over a decade. Designed with customer feedback in mind, the Ruger American Rifle Generation II is available in a variety of calibers and is sure to become the first choice for hunters and firearms enthusiasts.



**LEARN
MORE**



The acquisition, ownership, possession and use of firearms are heavily regulated. Some models may not be legally available in your state or locale. Whatever your purpose for lawfully acquiring a firearm – know the law, get trained and shoot safely.



Multi-use thermal with integral rangefinder.



The Pulsar Trail 3 LRF XR50 features a 640x480 thermal imaging sensor, has a magnification range from 3X to 24X, and a detection range of 2,515 yards. The quick-change rechargeable battery pack lasts up to 10 hours of constant use, and the advanced technology was built to endure recoil from magnum firearms. The integrated laser rangefinder (LRF) accurately measures a deer-size target to 1,312 yards and angle. **\$4,500**

PULSAR TRAIL 3 LRF XR50

SELLMARK INTRODUCED the Trail 3 for the rifles of serious hunters, but it can also serve in a handheld form as an excellent spotting and observation monocular.

The Trail 3 series was launched with two models, initially, the LRF XQ50 and LRF XR50. Both offer superior target detection and identification in any hunting environment, including fog, smog, rain, daylight, low light, no light, hot, cold, and through a lot of vegetation that typically obscures objects that may prefer to stay hidden and unseen. Don't confuse thermals with "night vision." Thermals contrast temperature differences between objects and surfaces in any condition, making them way more useful than conventional night vision products. The thermal sensitivity is described as the "Noise Equivalent Temperature Difference" or "NETD." The Trail 3 LRF XR50 has less than 18 millikelvins (mK) for the system, which means that clear, high-contrast images are enabled. The Trail 3 LRF XQ50 has a system NETD of less than 15 for exceptional image clarity. Less internal "noise" confuses the sensor with the heat signal, meaning target edges and animal outlines are sharp and detailed.

A sensor's capability is nullified if the display isn't capable of high-resolution. Pulsar incorporated a 1920x1080-pixel AMOLED screen to ensure excellent imagery and contrast. Multiple reticle options are offered for each magnification range. An adjustable picture-in-picture (PIP) mode is included that offers a magnified close-up of the aiming point on target for increased precision when zeroed. The larger field-of-view screen helps in locating the exact target. This

is useful when identifying a single animal within a group or a single target among a firing line of similar adjacent targets. For range work to 200 yards, we primarily toggled between 3X and 6X magnification for the PIP mode.

SENSIBLE CONTROLS

Whether you have perfect vision or are color blind to specific hues, simultaneously pinching the two flanking buttons below the menu wheel allows users to cycle through eight primary color palettes. Pressing the left button one at a time cycles through three graduated brightness levels for each primary color. Pressing the right button fires the rangefinder.

Menu buttons are situated within a knurled toggle wheel, which brilliantly helps users quickly cycle through various sub-menus. The three black-rubber primary buttons control the XR50s camera operation, a back-arrow button and a select/enter button. Attached to the laser-rangefinder housing is a blue power button and bilateral focus/gain adjustment wheels with levers. To adjust the sharpness of the display image, simply rotate the rubber eyecup.

Unlike a lot of Asian-made thermals, the Trail 3 has a footprint and profile like a low-power variable optic (LPVO). It's only, 10.7 inches long, 2.8 inches wide and 3.4 inches tall. A push-button objective flip-cap protects the lens like a riflescope, and the battery compartment is housed on the right side in the middle sharing the contours of the unit's aluminum-alloy maintube. Except for the focus adjustments, controls have pictograms for universal understanding.

The 10-hour battery pack is quickly interchangeable with the provided spare. If both are charged, the Trail 3 will supply up to 20 hours of continuous operation in a 72-degree environment. Battery performance is affected by extreme temperatures, but most hunting will be accomplished in the time span produced by a fully charged battery's output. In a tactical setting, extended mission requirements can be aided with a conveniently located USB-C external power port.

Reliable operation of the Trail 3 line ranges -13 to 122-degrees Fahrenheit ambient. The Trail 3 is also weatherproof according to its IP67 rating, and these were engineered to withstand 4,425 foot-pounds (ft.-lbs.) of recoil energy. For reference, the largest free recoil energy measured from an .50 BMG-chambered rifle was 97 ft.-lbs. Pulsar asserts the advanced electronics, sensors and optics in the Trail 3 will be just fine on any rifle in your rack.

RANGE WORK

The Pulsar Trail 3 LRF XR50 was evaluated in daylight and low-light on both a bolt-action rifle in .300 Winchester



Focus can be tuned at the eyepiece. Menu functions are quickly navigated using the top wheel and selected by enter buttons at the sides and rear, a quick-action camera button, and a back arrow.

Magnum, an AR-10 in 7.62 NATO and an M4 in 5.56 NATO. It was preferable to shoot without the additional rubber eyecup due to the 2½-inch eye relief, but there are situations where the provided eyepiece is useful. Recoil did not affect the performance of the unit or the quality of the image.

One annoying hangup was the non-uniformity correction (NUC) rate was more frequent than previous Pulsars I've used. A clicking sound is audible and the screen freezes momentarily until heat is dissipated and the image is refreshed. I'd hate this if I

were about to take a shot on game. I recommend learning to navigate the menu and turn the refresh from automatic to manual. In future Pulsar models, I'd prefer to see a separate "NUCing" button to have direct control of the NUC rate.

Every Trail 3 thermal features a precise, built-in laser rangefinder that returns accurate measurements on deer-size targets to 1,312 yards. Image quality is even better when looking through a Trail 3 than captured images suggest. Once again, Pulsar leveled up thermal technology and made it attainable for many outdoorsmen and shooting enthusiasts.  — E. Poole

C&G HOLSTERS

TACTICAL COMBAT THE DARKNESS

Our GEN6 TACTICAL (Light-Bearing) Holster is precision-engineered with universal optic-ready cuts, reinforced durability with stiffening ribs, and an open-bottom design that accommodates threaded barrels, compensators and sight setups. Built from rugged Kydex with secure retention and premium hardware, the GEN6 standard delivers reliable everyday carry performance you can trust.

BUILT FOR ALL THAT YOU HOLD CLOSE

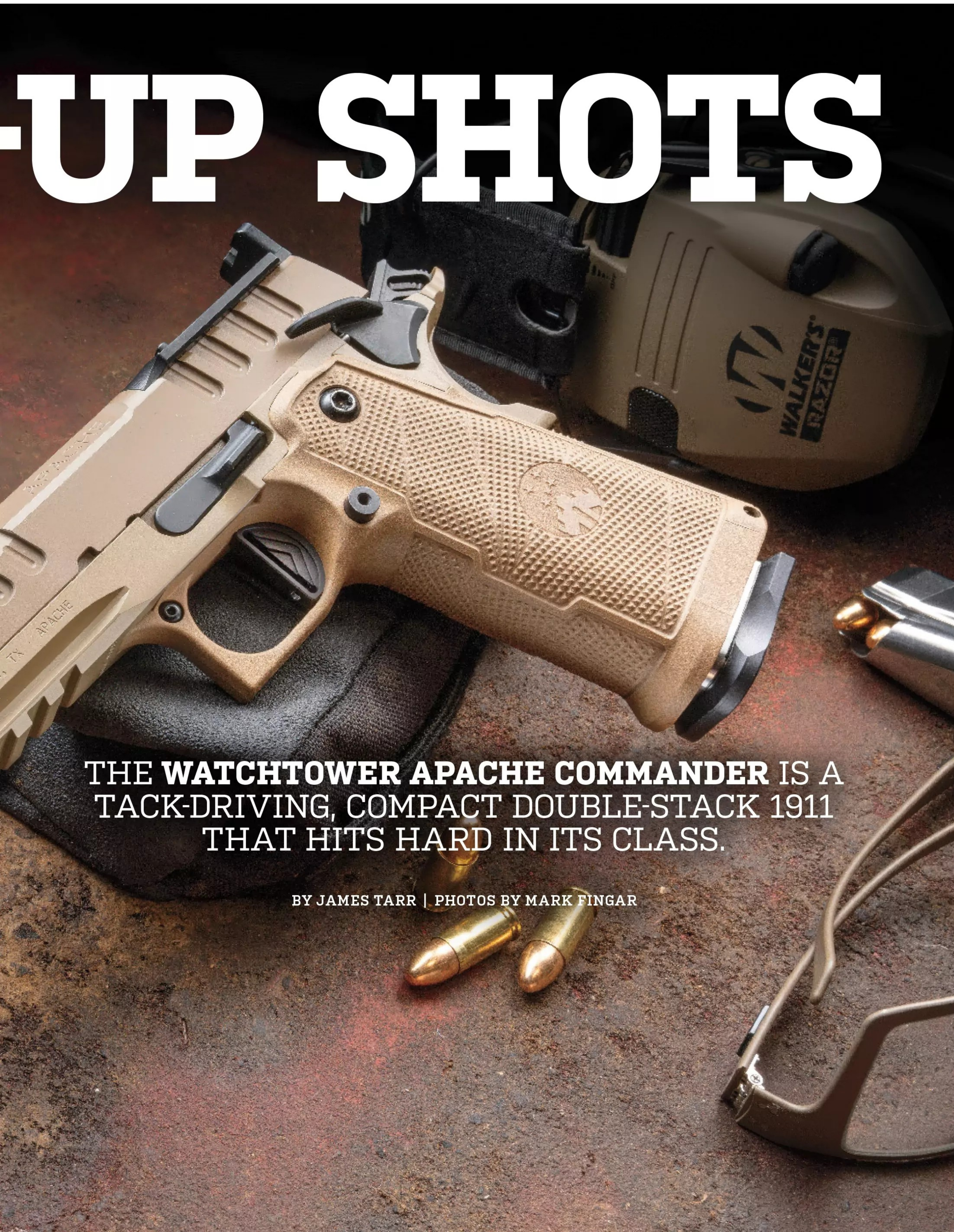
FOLLOW



UP SHOTS

THE **WATCHTOWER APACHE COMMANDER** IS A TACK-DRIVING, COMPACT DOUBLE-STACK 1911 THAT HITS HARD IN ITS CLASS.

BY JAMES TARR | PHOTOS BY MARK FINGAR





The Watchtower Apache Commander is available with either an FDE-color Cerakote finish, or a black nitride finish. Both barrels are protected by black PVD. Price for either color is the same. **\$3,299**

WATCHTOWER has grown rapidly since its inception in 2024 offering impressive double-stack 1911s. I tested the original Apache for the May 2024 issue of Guns & Ammo. Meant for duty or carry, the Apache Commander is a slightly downsized and lightened version of that model. The company is located in Spring, Texas, and named after Operation Watchtower, the campaign for Guadalcanal during World War II. Watchtower CEO Jason Colosky is a second-generation Recon Marine. These pistols are named after Operation Apache Snow, what most people know as the Battle of Hamburger Hill in Vietnam during May 1969. When I evaluated the original, full-size, compensated Apache, I wrote, “...it wouldn’t surprise me at all if Watchtower followed it up with a compact carry model.” Well, well, here we are.

SPEC'D OUT

Traditionally, a Government Model 1911 has a 5-inch barrel and a Commander has a 4.25-inch barrel. The Apache Commander is a bit more abbreviated than that, sporting what they claim is a “4.1-inch barrel.” (My calipers put it at 4.2 inches.) With an empty magazine in place and no optic, it weighed 36.2 ounces. This pistol is 7.9-inches long, 6.1-inches tall with a magazine inserted, and 1.6-inches wide at the thumb safety. (The grips are 1¼-inches thick.) Currently, this pistol is only available in 9mm, and it’s supplied with three flush-fit 17-round stainless-steel magazines.



WATCHTOWER APACHE COMMANDER	
TYPE	Hammer fired, single action, semiautomatic
CARTRIDGE	9mm
CAPACITY	17+1 rds.
BARREL	4.2 in., 416R stainless, black PVD finish
LENGTH	7.9 in.
WIDTH	1.6 in.
HEIGHT	6.1 in.
WEIGHT	2 lbs., 4.2 oz.
SLIDE	416R stainless steel, FDE Cerakote (tested)
FRAME	17-4 PH stainless steel
GRIP	Carbon fiber/Kevlar and glass fiber-reinforced, FDE
SIGHTS	TruGlo day/night (front), notch (rear), optic ready
TRIGGER	4 lbs. (tested)
SAFETY	Grip lever, thumb lever
ACCESSORIES	Three 17-round magazines, cable lock, semi-rigid clamshell case
MSRP	\$3,299
MANUFACTURER	Watchtower Firearms, 832-299-6100, watchtowerfirearms.com

Note that Watchtower offers both an Apache Commander and Tactical Commander models. Size-wise they are the same. Though they have different texturing on the frame and slide, the biggest difference is the frame material. The Apache Commander evaluated here has a steel frame, but the Tactical Commander is a lighter model with an aluminum frame. It seems like this is the best spot to stop and explain the construction of these double-stack 1911s, as they have both a frame and a grip module.

A GRIP ON LIFE

As designed by John Browning, the single-stack Model 1911 has a steel frame with walnut panels screwed onto the outside to add thickness and contour. The grip section of the Apache is polymer. In this case, it’s carbon-fiber/Kevlar and glass fiber-reinforced nylon made into a grip module and designed by MJD Solutions. As grip modules eliminate the need for grip panels, we can have a thicker magazine inside the grip with the same outside width, although it is closer to a rectangle than an oval in cross-section.

That polymer grip module is screwed onto the steel frame at the top of the grip and the front of the trigger-guard. That steel frame on which the slide rides is the

DON'T TAKE THE PUNCH

ELIMINATE
UP TO 95% FELT RECOIL



 **CALDWELL**
LEAD SLEDs®



**NEW AND
IMPROVED**

**SEE HOW WE IMPROVED THE
MOST POPULAR SHOOTING
RESTS ON THE MARKET**



The Commander-size Apache pairs a shortened slide assembly — just more than 4-inches — with a full-size grip. The polymer grip module is attached to a steel frame on which the slide rides.



The grip of the Apache Commander is a combination of polymer, carbon fiber and Kevlar, and glass fiber-reinforced nylon. Manufactured by MJD Solutions, it has a raised pyramid texture.



The Apache Commander slide has a low optic cut for a 1911, and the pistol ships with a plate to accept optics with the Trijicon RMR footprint. The tall steel rear sight is integral to the optic plate.

actual serialized part. On the Apache, you'll find the serial number visible on the underside of the frame just forward of the triggerguard. Its modularity means we can easily replace the grip with just a hex wrench and no paperwork.

I remember when the 2011 design was new, and the frame-grip module was only sold as a package that had to be built as a complete gun. The original 2011 grip modules were thicker than this, and many — including me — filed and stippled them down to make them slimmer and more ergonomic. During the heat of

competition, a lot of guys actually cracked their plastic grips while squeezing hard. With modern manufacturing and improved materials, the grip frame can be made as slender as my 25-year-old Franken-STI. The so-called “checkering” on the grip module is actually a texture of small raised pyramids, aggressive enough to ensure a hand doesn't move around it while shooting.

The original Apache frame was made from 4140 steel. The Commander frame is 17-4 PH stainless steel. Both the slide and barrel are 416R stainless steel. The barrel wears a black PVD coating, and the frame



888-338-3220 | HORNADY.COM

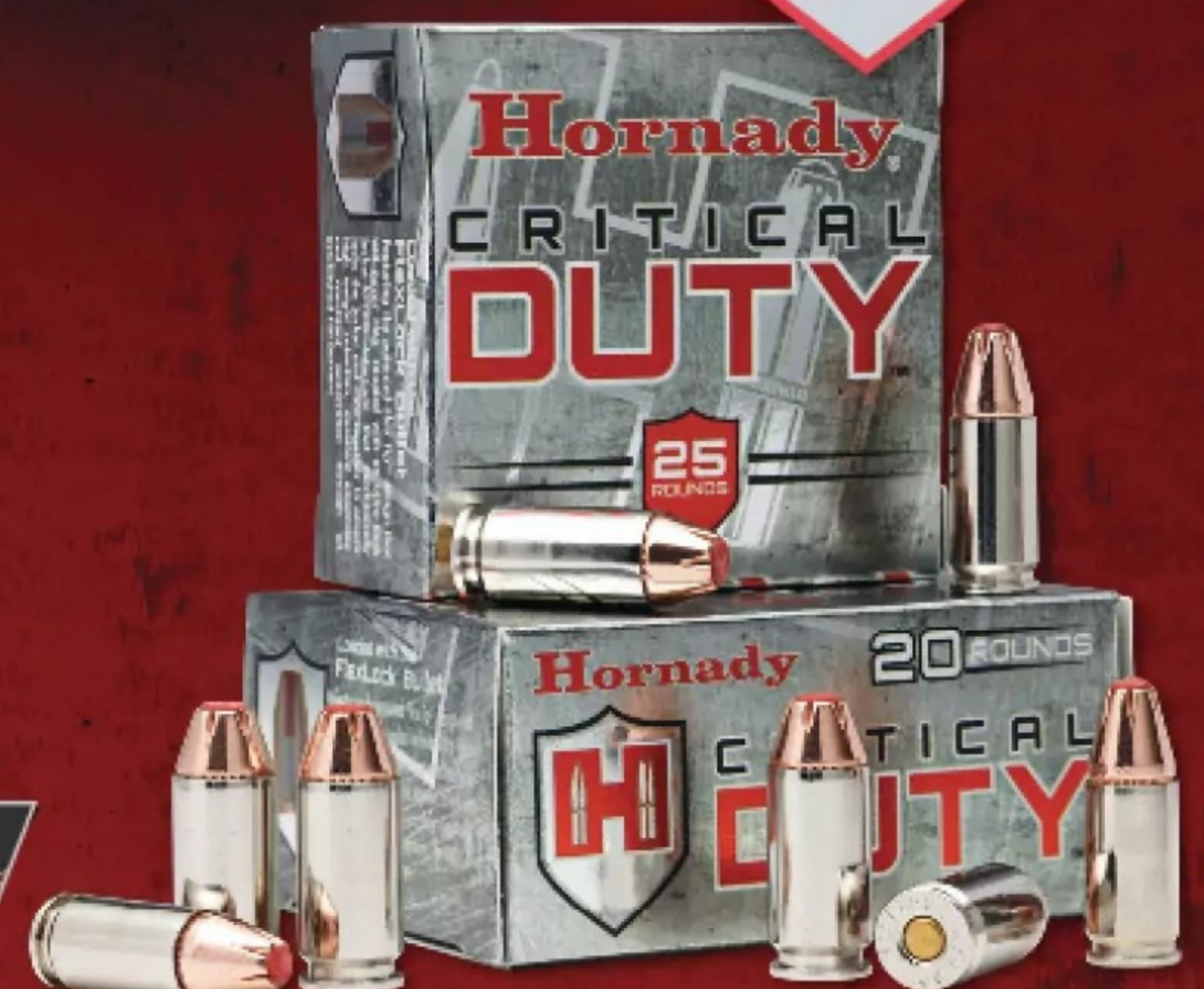
BARRIER BLIND PERFORMANCE

BREAKING BARRIERS FOR 15 YEARS.

Designed to meet the needs of those who demand superior barrier penetration. Critical Duty® is loaded with Hornady® FlexLock® bullets that have delivered “barrier blind” performance *since 2011*.

 **FBI** TESTED AND
SELECTED

**AMERICAN MADE.
AMERICAN OWNED.**



BARE GELATIN

HEAVY CLOTHING

PLYWOOD

WALLBOARD

SHEET METAL

GLASS



Learn more at
hornady.com/duty



Bull barrels often require unique design approaches for disassembly. The Apache Commander's recoil spring has a lever that pivots out to capture the recoil spring to ease slide disassembly.



The aluminum trigger has a flat face and a staggered relief cut. It's adjustable for overtravel.



The rear sight is serrated black, and the front sight is a high-visibility day/night TruGlo dot.



The magazine well and mainspring housing is contoured like a large funnel for magazines, despite the circumference of the grip not appearing that large. The flare at the front supports a high grip.



The full-length dustcover extends to the flush muzzle and includes a five-slot accessory rail to mount devices such as a light. Continuing the FDE theme, a SureFire X300U-A Ultra was tested. **\$400**

and slide are given a black nitride coating for the black model and a Cerakote finish for the FDE version.

Guns & Ammo received both a black sample and an FDE Commander for testing. I decided to do most of my shooting and all of my accuracy testing with the FDE version. I will warn you: If you've got OCD and need everything to match, the FDE gun is going to get you twitching. The slide is a slightly different color than the frame, which is slightly different than the grip module. I like it, but I'm also a fan of the FN SCAR-esque "Fifty Shades of FDE" aesthetic.

UP TOP

The pistol has a fat, bushingless bull barrel. The muzzle sits flush with the end of the frame. Below it is a full-length recoil spring guiderod, around which you'll find a single flat-wire recoil spring. The top of the slide is flattened and serrated. Front and back, the sides of the slide are aggressively serrated. The serrations are wide and flat-bottomed and reach around toward the top of the slide. The front sight is steel and dovetailed into place. It is a day/night sight made by TruGlo, with a

tritium insert surrounded by a white ring that's visible in all lighting conditions.

The slide is cut for a Trijicon RMR, and a mounting plate is included. The plate has a rear sight attached, too, and it is tall enough that you will be able to use it through the window of an optic. The rear sight is plain black and fully serrated. The sights, optic plate, and all the controls and small parts on the gun (minus the grip safety) are black, which provides a nice color contrast.

The fit was perfect. There was a tiny bit of play between the slide and frame, which means the gun will run even if dirty. The barrel locked up tight with no movement at all, ensuring the utmost accuracy. The thumb safety is extended and bilateral.

The magazine release is a little extended but it's not oversized. It is smooth, but I wish it was checkered for aesthetics. I didn't have any issues working it, though.

DOWN BELOW

The grip frame has a nicely contoured integral magazine well that doesn't add bulk, which is important. Most people don't want to carry a gun this big, but

M&P[®] 10 M2.0[®]



RELIABILITY YOU CAN TRUST.

Trust in Smith & Wesson's Legacy - The M&P[®] 10MM M2.0[®]

Our commitment to excellence shines through our M&P[®] family of polymer-frame pistols, renowned for their reliability and performance. As the landscape continued to shift, we rose to the challenge, developing cutting-edge polymer-frame, striker-fired pistols that have become top sellers in the industry. Today, our M&P[®] M2.0[®] stands as a testament to our dedication to constant improvement, addressing critiques to deliver the best-in-class firearms.



Scan for
More Info



Smith & Wesson[®]

EMPOWERING AMERICANS™

smith-wesson.com

©2026 Smith & Wesson Inc. All Rights Reserved.



those who do — I’m one of them — know that it’s the butt that prints against a cover garment. (People always seem to notice big butts.) The triggerguard is squared off at the front, and it is undercut at the rear for a high grip. The front of the triggerguard is smooth, and speaking on behalf of the minority of people who puts their support-hand index finger on the triggerguard while shooting, I’d love to see some texture there, as well.

At the front of the frame is a five-slot accessory rail where a light could go. People are going to mount both a red-dot optic and a light and, perhaps, make something too big to carry concealed. That said, 2011s sporting red dots and white lights are the cutting-edge hotness with the young concealed-carry lifestyle crowd, so I’m not going to tell you “No.” The cooler you think your carry gun is, the more likely you are to practice with it and have it with you if needed.

TRIGGER TIME

The trigger has a stylish black-anodized aluminum shoe with a slot, and a smooth flat face. It is a medium-length trigger, but with the flat face I think the center of the trigger is nearly the same distance from the frame as the center of a curved long trigger would be.

The original Apache had a trigger pull advertised between 3 and 4 pounds. Watchtower indicated that the Com-

PERFORMANCE

LOAD	VEL. (FPS)	ES	SD	BEST GROUP (IN.)	AVG. GROUP (IN.)
Hornady Am. Gunner 115-gr. XTP	1,141	30	10	1.9	2.2
Black Hills 115-gr. FMJ	1,138	22	8	1.8	2.8
Black Hills 115-gr. TAC-XP +P	1,189	20	11	2.4	3
Wilson Combat 135-gr. HBFN Reman	946	40	21	2.1	2.5
Federal 147-gr. HST	961	24	11	2.2	2.7

Notes: Accuracy is the average of four five-shot groups shot at 25 yards from a sandbag rest. Velocity is the average of 10 shots measured with a Garmin Xero C1 Pro chronograph placed adjacent to the muzzle.

mander has a “Duty Tuned” trigger. It doesn’t list a spec for the trigger. The trigger on the FDE Commander exhibited minimal takeup and overtravel with its crisp 4-pound pull. I tested the black Commander I had on hand, and it produced an identical experience.

AT THE RANGE

The Watchtower Apache does not have an especially light recoil spring. During my first range session, I had two failures to extract in the first 50 rounds, one where I had a too-light grip on the gun and the second when I while trying some noticeably light ammo. After that, I didn’t have any problems.

While it is smaller than the compensated Apache, the Commander is still a full-size gun chambered in 9mm, so it’s very controllable. The speed at which you can shoot it will be limited by your eyes and finger. Accuracy was what we’d expect — hell, demand! — from a gun with this pricetag.

ABOUT THE COST

I hate when expensive firearms are sold in a cheap way, such as a gun which costs thousands of dollars being shipped in a cardboard box with only one magazine or no accessories. The Apache Commander includes three magazines, and I liked the case it is shipped in.

I’ve never seen anything like the case provided by Watchtower. It is a semi-rigid clamshell case made of ripstop Cordura nylon with a flexible plastic shell underneath. The two halves of the case are bowed outward to make a lot of room inside. Inside, there are zippered pockets, each large enough to accommodate the gun. It is a really nice case and definitely a value-add.

The market is getting crowded with high-capacity

1911s, in my opinion. Watchtower’s are priced about halfway between the budget Turkish-made guns and the high-end works of art coming out of the custom competition gunsmiths. In that range, Watchtower has struck a good balance of performance and price. It’s Apache has a unique look you won’t get anywhere else. **GA**



The beavertail grip safety allows the shooter’s hand to ride all the way up on the gun with a smooth finish and a positive activation bump. Below, the pyramidal texture wraps around the grip.



 **CALDWELL™**

«« CLAYCOPTER *SURFACE-TO-AIR™*

HANDS-FREE ELECTRIC
TARGET LAUNCHER

A NEW WAY
TO CLAY™

ECO-FRIENDLY TARGETS
REALISTIC FLIGHT PATTERNS
LIGHTWEIGHT & ULTRA PORTABLE

SEE IT IN
ACTION





BEST OF BOTH

WALTHER COMBINES ITS PRO-X AND F-SERIES PISTOLS INTO ONE DO-ALL GUN: MEET THE **PDP F-SERIES PRO-X PMM**.

BY JACK OLLER | PHOTOS BY MARK FINGAR

GOOD IDEAS rise to the top, regardless of original intent. The Walther Performance Duty Pistol (PDP) F-Series design was intended for women, but everyone appreciates a grip that feels made for their own the hand. That's how I felt at the introductory media event for the original PDP. It's now the handgun against which I judge all others, and the line's subsequent variants continue to add value. A combination of line extensions is what we have in the Walther PDP F-Series Pro-X PMM. It married the popular F-Series grip with the accessory features of the Pro-X line. To evaluate this gun, I decided to shoot it in an International Defensive Pistol Association (IDPA) match. First, I shot my first-generation PDP, then shot another match with the F-Series Pro-X PMM. I learned a lot.



FIRST IMPRESSIONS

I was surprised by how much I didn't like the F-Series grip when I first handled it. At 6 feet, 4 inches, I'm a large guy with big mitts. The grip felt too short for me, and the flared magwell pushed my fingers together tightly. I didn't consider this to be an issue, though, just a grip designed for different people. Shooting a match changed my opinion of the grip, but more on that later.

Regarding other features on the PDP F-Series Pro-X PPM, subscribers to Guns & Ammo may also want to reference previous articles (April 2021, March 2024 and November 2024). Both the F-Series and Pro-X PPM have proved to be excellent variants of the PDP, which was G&A's 2021 Handgun of the Year. This version combines the best qualities of the F-Series and Pro-X PPM. Hence, there's no need to get bogged down in the specs, but there are a few worth reiterating.

MITIGATING MUZZLE FLIP

Most impressive is the compensator, a collaborative effort with Parker Mountain Machine (PMM, parker-mountainmachine.com). In my experience, many comps on short 3½-inch-barrel 9mm pistols have no discernable impact with standard velocity ammunition. Typically, rounds in short barrels are not achieving velocities to use a comp to effect. However, I noticed a substantial increase in muzzle flip after I removed the PMM comp. It's not just another marketing bullet point. It works.

The PMM comp matches the contour of the muzzle, preventing its rotation. It is not secured with a set

WALTHER PDP F-SERIES PRO-X PPM	
TYPE	Recoil operated, striker fire, semiautomatic
CARTRIDGE	9mm
CAPACITY	10 rds., 18 rds.
BARREL	3.5 in., PMM compensator
LENGTH	6.5 in.
WIDTH	1.4 in.
HEIGHT	5 in.
WEIGHT	1 lb., 8 oz. (w/o optic)
FINISH	Tenifer (steel)
GRIP	Polymer, Walther F-Series, Performance Duty texture
SIGHTS	Polymer, white dot (front); two white dot, adj. (rear); Glock pattern
TRIGGER	Walther DPT-F; 3 lbs., 11 oz. (tested)
SAFETY	Striker drop safety, trigger lever
MSRP	\$1,149
MANUFACTURER	Walther Arms, Inc., 479-242-8500, waltherarms.com

screw, welded pin, or other attachment method. Ostensibly, Rockset is used to further secure the comp but G&A's sample was only hand-tight and unscrewed with ease. When re-attached, it did not return to its original position and sat at a 45-degree angle beyond alignment. The comp's contour keeps it in place and functions without cycling issues, but it did wobble once I reinstalled it. Additional thread locker may be necessary should you remove the comp for maintenance. Despite the loose comp, there were no malfunctions.

TRIGGER TIME

The initial PDP trigger set a new standard for factory striker-fire triggers, and Walther further improved its design with the Dynamic Performance Trigger F-Series (DPT-F), a carryover from the F-Series frame. The take-up and pull weight are nearly identical to the original PDP, but the trigger shoe is a flat-face design and made of aluminum instead of polymer. The flat profile encourages consistent finger placement, which is important for repeatable precision from the draw. I like the premium sensation I feel when pressing metal versus polymer.

Finishing my thoughts on notable features, the aluminum magazine basepads and magwell need mentioning. Many PDP models include a flared and funneled

VP9A1



COMPARE IF YOU DARE.



HK-USA.COM/VP9A1





The magazine follower is colored “Walther blue.” The extended basepads prevent them from insertion into an original PDP. Each hold 18 rounds, and three are included.



The factory iron sights are the one weak point of this pistol. They’re made of polymer instead of steel and won’t co-witness with an optic.



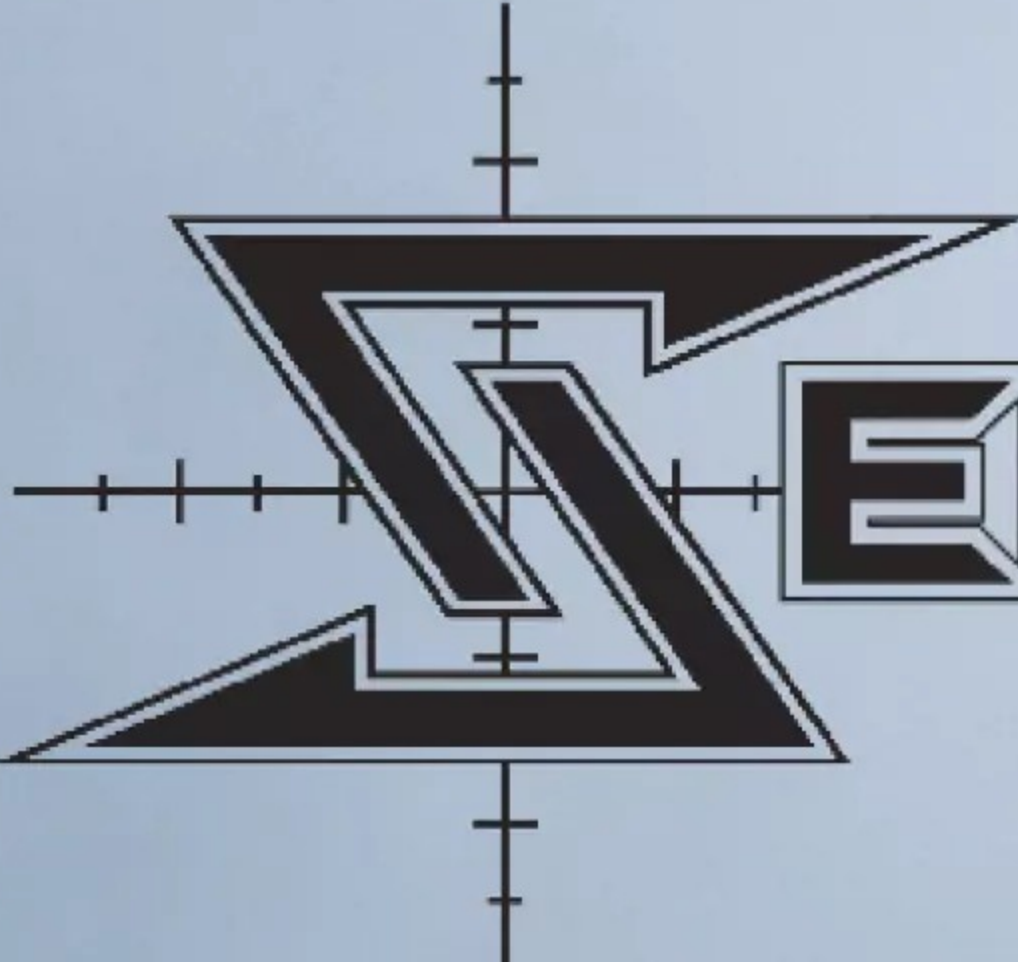
magazine well. The magwell on this model is not as pronounced as the one on the PDP Match series; this is aimed toward everyday carry (EDC). Reloads are still quick and seamless, but the magwell is not so large that it impedes concealability.

Metal basepads are less likely to deform or break when dropped on hard surfaces during a reload. Walther’s basepads also increase capacity to 18 rounds, and three are included. The basepad prevents my ability to seat these new mags in my first-gen PDP, but original full-size PDP mags fit in the F-Series Pro-X

PMM. That’s a nice incentive for a new gun, knowing you’ll have extra mags that work if you already own the original.

MATCH PREP

The PDP F-Series Pro-X PMM is one of the most effortlessly accurate pistols I’ve shot in its class of \$600 to \$1,200 striker-fire 9mm pistols. Some handguns require a lot of concentration to extract their accuracy potential, but this gun did not — especially when set up with a red-dot sight. For performance

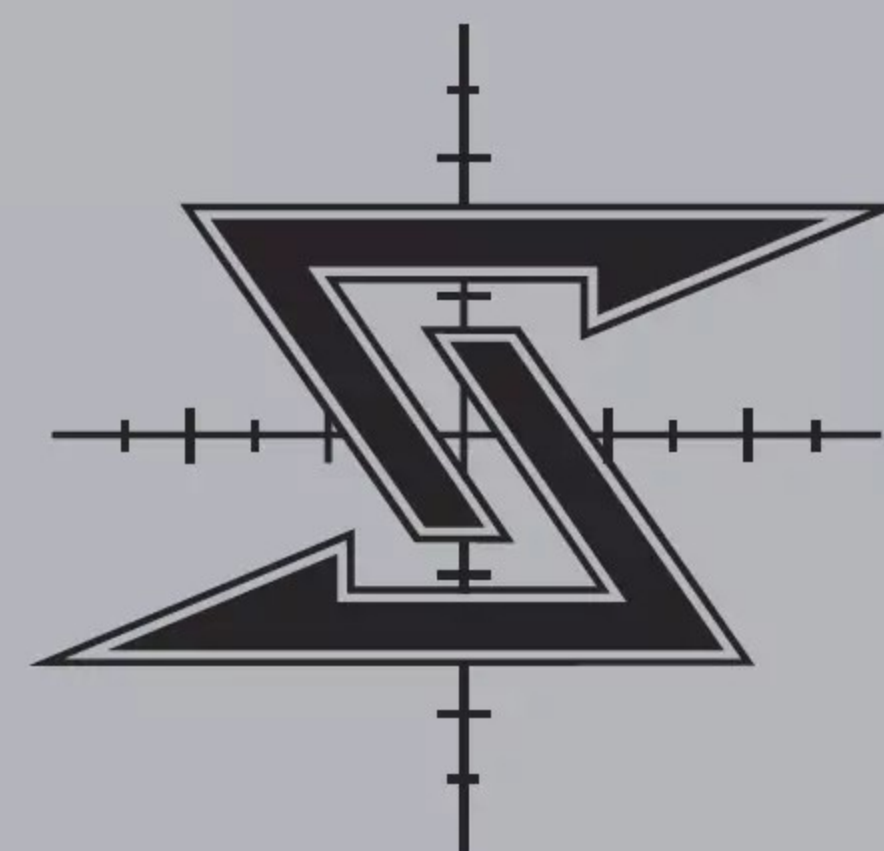


SEEKINS PRECISION

UNRIVALED INNOVATION



Experience the pinnacle of innovation with Seekins Precision's HAVAK ELEMENT HUNTER—the ultimate hybrid hunting rifle. Feather-light at just 5.5lbs, it's engineered for excellence and backed by our unwavering Lifetime Guarantee. Step into your ELEMENT with Seekins.



www.seekinsprecision.com
Proudly made in the USA



The slide release is longer than comparable handguns. The length offers great leverage when releasing the slide or engaging the slide lock. It is also bi-lateral.



The flat-face trigger is made of aluminum. The flat design and hook at the bottom of the trigger shoe makes it easier for some to place the shooting finger consistently from the draw.



Spacers are used to align the compensator with the muzzle. The comp is cut to match the contour of the PDP, which also helps prevent rotation under fire. The comp made a significant difference reducing muzzle rise.

testing and competition, I attached an EOTech EFLX CE enclosed reflex sight (\$479, eotechinc.com), which turned out to be the Goldilocks red dot for this gun. The EFLX CE is a medium-size red dot for a medium-size gun. It's not quite as large as a full-size, but bigger than a "micro."

Using the center aiming point of EOTech's circle-dot reticle, I shot with precision at 25-yard targets and beyond. At 10 yards, I only needed the circle portion of the reticle to engage an 8-inch steel plate. As soon as I saw the circle hover the target, I'd pull the trigger knowing I'd have a fast clean hit. The circle-dot reticle was beneficial in competition during stages with near-to-far target transitions. It really was a big deal.

The Walther shot everything well during testing, and velocities were as expected for a 3½-inch barrel. Unex-

pected was the "Ammo to Avoid" list on the F-Series Pro-X webpage. I can't recall a company of Walther's size highlighting such a comprehensive list of preferred ammo and loads to avoid for a single gun. Walther states the gun will run well with most 115-, 124- and 147-grain 9mm loads. However, the company states that 115-grain loads from Armscor, Blazer, PMC, and Winchester's White Box should be avoided, along with all reloads and reman ammo. It's normal that guns or barrels may not perform as well with certain loads, but I found the recommended avoidance of reloaded and "reman" ammo fascinating. The original PDP did not have this disclaimer. Perhaps there is a liability concern that affects Walther's limited lifetime warranty. Buyer beware.



"SHOOTER READY!"

I'm fortunate to live near the Green Valley Rifle & Pistol Club (gvshoot.com) in Missouri, home of the CMP Bianchi Cup. During the summer and fall, they host a small local match on Tuesday evenings, the "Tuesday Night Thunder" as it's called. It's only three stages, but it's perfect practice and quick to shoot. It's open to the public, too, just \$15 to compete.

To get a baseline evaluation for the F-Series Pro-X PMM, I shot an IDPA match on June 6, 2026, with my original PDP. It was more than a year since my last pistol competition, so I was pleased with how I shot, taking fourth place out of 19 shooters. I turned in a raw score of 64.22 and had 14 seconds of shots outside the A-zone, mostly from the weak-hand stage of the match. I used a Safariland 6390 ALS (\$205, safariland.com) and was glad it fit the new F-Series Pro-X PMM. My draws were consistent.

On June 23rd, I returned with the F-Series Pro-X PMM. The match layout was different, of course, but comparable enough to fairly evaluate the gun against

XC3[®] SERIES



THE SUREFIRE XC3 SERIES

The XC3[®] Series delivers all the duty-grade durability and dependability of our full-size X-Series weaponlights in a form factor that fits subcompact and micro-compact handguns. The new XC3 Sub adds to the family's reputation of unmatched performance and switching ergonomics, incorporating a new mount, and 80% more candela and lumens when powered by its included SFRGR123 rechargeable battery.

XC3[®]



OUTPUT: 550 LUMENS / 7,200 CANDELA
FIREARM: FULL-SIZE / COMPACT

NEW XC3[®]SUB



OUTPUT: 1,000 LUMENS / 13,000 CANDELA
FIREARM: SUBCOMPACT / MICRO-COMPACT

» DUTY & CONCEALMENT

Lightweight and compact, yet robust and rugged enough for duty use as well as for concealed-carry applications

» INTUITIVE SWITCHING

Intuitive, ambidextrous switching provides positive tactile feel for unmatched control in momentary- and constant-on activation modes

» VERSATILE

The XC3's streamlined design results in a form factor that fits numerous holsters already commercially available





Walther’s aluminum extended basepads are more durable and won’t dent or damage as easily when dropped on rough surfaces. Paired with the flared magwell, reloads were fast.



The PDP F-Series Pro-X PMM was outfitted with an EOTech EFLX CE enclosed red-dot sight. The medium profile fit the PDP well, and the enclosed emitter is ready for any type of pistol shooting. **\$479**



Internally, the action parts are identical to a standard F-Series PDP with a Dynamic Performance Trigger F-Series installed. This is as far as most users will disassemble the PDP.

my previous competition. I shot better, and I attribute that to the F-Series grip and PMM comp. The grip I had initially disliked offered the greatest advantage. At first, it felt like the flared magwell squished my pinky into my ring finger, but it actually provided additional leverage against muzzle climb. During strings of fire, I could use my pinky to add pressure to the ledge of the magwell, helping get the muzzle back on target faster. Paired with the PMM comp, the PDP F-Series Pro-X PMM produced no detectable muzzle flip.

I shot a raw score of 61.77 with only 12 seconds of shots outside the A-zone and 6 seconds were added procedurally. I shot them remarkably similar, but the PDP F-Series Pro-X PMM edged out the original PDP by a few seconds. With more practice, I think I would shoot matches better with the F-Series Pro-X PMM. It’s the comp and grip that made a difference in terms of shootability.

ONE MORE THING ...

Let’s consider cost. The Walther PDP F-Series Pro-X PMM is above reproach when considering perfor-



PERFORMANCE

LOAD	VEL. (FPS)	ES	SD	BEST GROUP (IN.)	AVG. GROUP (IN.)
Black Hills 115-gr. JHP EXP	1,190	32	11	1.3	1.5
Fiocchi Range Dynamics 115-gr. FMJ	1,108	36	13	1.4	1.9
Remington UMC 115-gr. FMJ	1,126	57	20	1.7	2.2
Hornady Critical Defense 115-gr. FTX	1,128	28	9	1.9	2.4

Notes: Accuracy is the average of five five-shot groups fired from a rest at 25 yards. Velocity is the average of five shots measured with a Garmin Xero C2 chronograph placed adjacent to the muzzle.

mance. After more than 400 round of practice, testing and competition, there were no malfunctions to report, and it remains consistently accurate. The suggested retail price is \$1,149, and before some of us “hem and haw” at the cost, it would cost more to add the upgrades on the F-Series Pro-X to a base PDP.

This gun can do it all, but it’ll print more than a thinner pistol for carry. I would tote it in an off-body backpack or fanny pack. “Duty” is in the PDP name, and I would not hesitate to recommend this pistol for those in law enforcement. Finally, I see a strong competition pistol. The names for all the PDP models are becoming a mouthful, but these are not all talk and no action. This gun shoots. **G&A**

THE 7MM THAT THRIVES UNDER SUPPRESSION.

NEW 7MM BACKCOUNTRY™

FEATURING



PEAK ALLOY™
CASE TECHNOLOGY

One-piece high-strength steel alloy redefines
the limit of a rifle hunting cartridge.



**WHEN THE SHOT STRETCHES,
THIS IS WHAT YOU CARRY.**

The 7mm Backcountry in Premier Long Range was built for hunters who don't guess at distance; they prepare for it. High ballistic coefficient performance, consistent flight, and terminal reliability come together in a load that holds its line when it matters most. Speer® Impact™ projectiles paired with the new Peak Alloy™ Case Technology - whether it's wind, elevation, or the unknown between you and the target, this is suppressor-optimized confidence you don't have to talk about.



Remington.com





HELL FOR STOUT

HAMMERS ARE BACK, JUST HIDDEN INSIDE THE **WILSON COMBAT BULWARK.**

BY PATRICK SWEENEY | PHOTOS BY MICHAEL ANSCHUETZ

NOT EVERYONE is enamored with striker-fire pistols.

Hammers have advantages. While polymer has advantages, too, it also has drawbacks. Bill Wilson set out to craft a duty and everyday carry (EDC) size pistol that had all the advantages and none of the disadvantages. The end result was the Bulwark.

The starting point was overall size. The Glock 19 is considered by many to be the best combination of size, weight and capacity for defensive carry. The Bulwark corresponds to the G19 in size, while the weight — since the Bulwark is made of metal, aluminum and steel, — is 33 ounces to the G19's 29 ounces, hardly enough to consider the Bulwark to be heavy.

ALL METAL

Like the G19, the magazine holds 15 rounds plus one in the chamber. Bulwark magazines are all-steel and the same as Wilson Combat's EDC X9 magazines. Though proprietary to Wilson Combat, the company's history shows it has no problems producing enough magazines for its pistols and meeting demand for spares (\$42.36, wilsoncombat.com).

The frame of the Bulwark is aluminum, machined from billet as a single piece with an internal stainless-steel chassis that holds the Fire Control Unit (FCU). It also incorporates the rails that the slide moves along, so the 7075-series aluminum shell does not take the wear and tear of the tens of thousands of rounds the Bulwark is fully capable of handling.



Unlike some other chassis designs, the fire control unit (FCU) in the Bulwark is machined from billet stainless steel. It is also the serialized firearm, as the serial number of the Bulwark is on the FCU, visible through a slot machined in the aluminum frame and shell.

The trigger is not pivoting but slides like that of the 1911. It has a trigger-pad safety as one of four built-in safety systems. The trigger weight is set to a weight between 3¾ and 4¼ pounds. The other three safety mechanisms include a grip safety that blocks the sear from movement. The grip safety also blocks the trigger bar until depressed, and when depressed it levers the firing pin block out of the path of the firing pin.

The aluminum frame and shell incorporate an accessory rail on the dust cover for lights or lasers. It has a squared triggerguard, and the frontstrap and backstrap are machined in the Wilson Combat “brick” pattern. This is an aggressive non-slip texture that won’t slice up your hands just from a day’s practice. It won’t let your hand slip on the grip, either. The grips are made from G10 and are also machined in the brick pattern. (Yes, G10 is that tough.)

The bottom of the



WILSON COMBAT BULWARK	
TYPE	Internal hammer fired, single action, semiautomatic
CARTRIDGE	9mm
CAPACITY	15+1 rds.
BARREL	4 in.
LENGTH	7.5 in.
HEIGHT	5.375 in.
WIDTH	1.35 in.
WEIGHT	33 oz.
FINISH	Anodized aluminum, black nitride steel
GRIPS	G10 (inserts)
SIGHTS	Red fiber-optic post (front), serrated U-notch (rear)
SAFETY	Trigger lever, grip
TRIGGER	4 lbs., 2 oz. (tested)
MSRP	\$1,899
MANUFACTURER	Wilson Combat, 800-955-4856, wilsoncombat.com

The Wilson Combat Bulwark is an internal-hammer-fired 9mm semiautomatic pistol sharing similar dimensions to a Glock 19. It is compatible with many G19 pattern holsters, but it has a thinner profile and all-metal construction.

frame features a magazine well with an integral funnel to make reloads faster and smoother. The steel magazines are slimmer than the polymer-coated magazines used by Glock. As a result, the X9 magazines permit the Bulwark to be slightly more compact in the grip area. If a Glock feels a bit large or blocky to your hands, the Bulwark will not. On the left side, the slide-stop lever is recessed into the machined outline of the Bulwark grip frame. This makes it much less likely to catch on clothing during carry or to be inadvertently manipulated during firing or normal gun handling.

INTERNAL HAMMER

The internal hammer of the Bulwark is there both to provide the advantages of a hammer and to avoid the shortcomings of a striker system. The spring-loaded hammer acts to soak up some of the slide movement, and thus dampen felt recoil. It also provides more of a margin of firing force than a lightweight striker



Inside the aluminum grip module, the stainless-steel fire control unit is the serialized component of the firearm. The number is viewable through a slot in the chassis on the top right side of the grip.



The Bulwark trigger is exceptional, providing a 1911-style feel when pressed straight and to the rear. The front of the triggerguard is squared without texture, and the safety lever is distinctively red.



The grip safety is reminiscent of Springfield Armory's XD pistols. It protrudes more than a standard Model 1911 grip safety, but positively deactivates the internal hammer block when pressed.

can. With its enclosed design, the Bulwark protects the hammer and its fitting lines from entry by dust, debris or clothing lint. One issue for those who carry the G19 daily is clothing lint getting into the firing mechanism and keeping the G19 (and other striker-fire-type pistols) from firing. The weight and force of the Bulwark hammer — and its being enclosed — greatly reduce

that likelihood.

Moving up to the slide, the first detail to note is that the rear of the slide has a small port machined into the bottom edge. The hammer is coated red, and when cocked, you can clearly see the red visible through the port. When the hammer is down the red is barely visible, and then only in good light. Otherwise, it isn't

norma® USA
Precision with Purpose

f i x
@NormaAmmo_USA

August 1st to November 30th 2026

\$5 BACK ON EVERY BOX!



WHITETAIL

TIPSTRIKE

ORYX

BONDSTRIKE



NORMAUSA.COM/REBATE

Redemptions for WHITETAIL, TIPSTRIKE, ORYX, and BONDSTRIKE only, in any caliber. Must be submitted by December 31st, 2026. Maximum redemption of 20 boxes (\$100) per household/address. Valid only in USA. Retail price must exceed the rebate. Pre-orders, rain checks and back-ordered products will not be honoured. Void where prohibited by law. Visit website for terms and conditions.

Now it's up
to you.



Though it resembles common striker-fire pistols, the Wilson Combat Bulwark is similar in proportions only. It is a hammer-fired design where the hammer is shrouded by the slide, and the slide, barrel and guiderod assemblies are removed in a similar manner as the Model 1911. The 15-round magazine features witness holes to visually confirm its status.



The magwell is flared slightly and was machined as part of the frame. G10 grip inserts share the same Wilson Combat Brick pattern. The Bulwark grip is narrower than the standard G19 grip, too.



The grip is akin to a chassis and is machined from billet aluminum. The one-piece design is strong, providing a more precise mounting underneath the dustcover for lights and lasers.

there. While the hammer is enclosed, it is still possible to ascertain if it is cocked or not.

The slide starts as a billet of stainless steel and is given extensive and aggressive serrations for ease of handling. There are cocking serrations on the front of

the slide and behind the ejection port. The extractor is external and quite large. The sights on the Bulwark are a fixed front with a red fiber-optic insert and a U-notch rear, with the rear sight at the back edge of the slide in order to make room for a red-dot optic. The Bulwark



The magazine release is reversible, and the slide stop is flush-cut into the metal frame. The release protrudes slightly in a half-oval shape and is rounded to prevent snagging during the draw.

slide is machined for optics, and the method Wilson Combat uses is to machine a large flat on the top of the slide. If you wish to just use irons, then the slide comes with a filler plate bolted down in the recess. To mount an optic, remove the plate and use the provided Combat Pin Technology (CPT) pins to secure the red-dot sight in place. These pins take the shear forces of recoil



The Wilson Combat Bulwark has a low bore axis, greatly aiding shooters with controlling muzzle rise. Serrations at the front support press checks.

that on other designs are borne by the screws holding the optic in place. In the CPT system, solid steel pins take that load. As a result, there is no need for filler or adapter plates.

The slide also features top serrations, and the rear of the slide is serrated for both good looks and to cut down on glare when shooting. The engineering and



HAUL UP TO 2,000 LBS. WITH A DR® VERSA-TRAILER

- ▶ **PIVOTING HITCH** allows your Versa-Trailer and tow vehicle to ride independently over rough terrain, reducing the risk of tipping
- ▶ **35-DEGREE DUMPING ANGLE**, removable end panel, and available winch-assisted dumping make unloading heavy loads quick and easy
- ▶ **SWINGING BOOM LIFT** lifts up to 440 lbs. safely, while side stabilizers keep everything steady during loading and unloading

Get the Power to Haul, Dump, and Lift More with a DR® Versa-Trailer

Shop **DRPower.com** Today



Toll-Free: 800-790-5917 | FREE SHIPPING Options Available

PRO XL2000



Sights are made by Wilson Combat and are tall enough to co-witness through many optics. The front includes a red fiber-optic insert, and the black rear sits far back to accommodate an optic.



Cut for the Shield RMSc and Leupold DeltaPoint Pro optic footprint, reflex sights are supported with steel pins. These CPT pins bear the force of recoil so mounting screws don't have to.



Even though the hammer is internal, a bright red portion of the hammer can be seen through the viewing port (above right), and it is not easily visible when uncocked (above left).



A loaded chamber indicator can be used to confirm a firearm's status at a glance. The top of the slide is serrated to prevent glare from interfering with sighting while also enhancing aesthetics.

ergonomics of the Bulwark have combined to produce a low bore axis, which helps to reduce muzzle rise during recoil and to bring the dot back into view upon recovery.

Inside the slide, the stainless-steel barrel uses an angled cam surface to lock and unlock, eliminating the link found on 1911 pistols. At 4 inches, it provides sufficient velocity from the 9mm ammunition (standard or +P) it is chambered for, while still staying compact enough to be easy to use as an everyday carry pistol. The Bulwark comes with two 15-round magazines and will fit most G19 holsters. The fit depends more on how tightly molded the particular holster is than anything else.

AT THE RANGE

In testing, the Bulwark delivered on all promises. It proved to be accurate, soft in recoil, utterly reliable in function and fit a selection of Glock-specific holsters. One might question if the world needs a Glock-sized pistol with a larger-than-Glock price tag. That

PERFORMANCE

LOAD	VEL. (FPS)	ES	SD	BEST GROUP (IN.)	AVG. GROUP (IN.)
Hornady Critical Duty 135-gr. FTX	1,027	21	14	1.8	1.6
Federal Punch 124-gr. JHP	1,135	18	8	1.9	1.7
Black Hills 100-gr. Honey Badger	1,249	38	18	2	1.8
American Eagle Syntech 115-gr. JFN	1,127	23	12	2.1	1.8

Notes: Accuracy is the average of four five-shot groups at 25 yards from a Champion shooting rest. Velocity is the average of 10 shots measured with a Garmin Xero C1 chronograph placed adjacent to the muzzle.

answer is only one each shooter can provide for themselves, but the big differences of the steel magazines and the internal hammer cannot be overlooked. While it is possible to improve on the Glock trigger (and there are many who offer their

services to do just that), it will always be at best a step behind even an average 1911 trigger. The Bulwark, meant to replicate the 1911 trigger (and succeeding at that), is a great advantage. While the Glock trigger upgrade doesn't cost as much as the extra price of the Bulwark, the Glock still falls short, regardless of the savings. The slimmer Bulwark magazines make the grip smaller. Combined with the replaceable grips, you can customize the Bulwark to fit your hand exactly at less cost and risk.

Wilson Combat has brought us to a new plateau, improving on what many consider the standard EDC pistol. With a suggested retail price of \$1,899, the Wilson Combat Bulwark is not inexpensive, but then quality never is. **G&A**



EASY TO CONCEAL. EASY TO CONTROL.
PDP F-SERIES PRO X PMM - OUR LATEST FACTORY-COMPENSATED 9MM



PDP
F-SERIES
PRO - X PMM



WaltherArms.com



PDP Pro-X PMM
Full-Size



PDP Pro-X PMM
Compact



PDP Pro-X PMM
F-Series

Walther PDP Pro-X PMM Series:
Flat-shooting, low-recoil perfection that dominates duty, competition, and carry.

PDP
PRO-X





SPEED THROUGH STRENGTH

INTRODUCING **FEDERAL'S 6.5 CREEDMOOR +PEAK.**

BY TOM BECKSTRAND | PHOTOS BY MARK FINGAR

RIFLEMEN now have the option of shooting cartridges factory-loaded to 80,000 pounds per square inch (psi) instead of the traditional 50,000 to 60,000 psi. The 7mm Backcountry — introduced in 2025 and Guns & Ammo's 2025 Ammo of the Year — was one of the first cartridges commercially available. It demonstrated the capability of a monolithic steel-alloy case made for a new cartridge developed for new rifles. On June 5, 2026, Federal released a second high-pressure cartridge for the existing 6.5 Creedmoor. "6.5mm Creedmoor +Peak" is its full name, and it allows everyone with a rifle chambered in 6.5 Creedmoor to experience the benefits of a high-pressure shooting.

WILL IT EXPLODE?

We've all been conditioned to avoid high pressure signs in our rifles — and for good reason! Too much pressure

in a rifle can cause the recoil lug abutments to set back, creating too much headspace. This causes ruptured cases and other calamities, all in close proximity to the shooter's head.

The above is true when dealing with brass-cased cartridges because brass starts to flow at about 65,000 psi. When that happens, the amount of pressure the brass case head puts on the bolt's face spikes. What if we changed cartridge case material to something that didn't flow at 65,000 psi? That's exactly what Federal did when developing its Peak Alloy case technology.

Peak Alloy is an alloy of metals that can be made with a high degree of precision. We get the same controlled internal volume and consistent neck tension that yields great accuracy. That's usually hard to do when working with steel, which is a big reason why no one has done this successfully until now.



A sample of Federal's 6.5 Creedmoor +Peak steel alloy case reveals the primer, case-wall thickness and taper, rim thickness and flash-hole design. Inside the cavity was a charge of spherical Ball propellant.

Peak Alloy being made with enough precision to work in a rifle cartridge opens up a new world of performance. It allows for a significant and safe increase in pressure because the steel alloy doesn't flow at 65,000 psi as brass does. (I don't know where Peak Alloy begins to flow, but that number is far above the 80,000 psi of pressure to which these cartridges are loaded.)

Peak Alloy in 6.5 Creedmoor might be new to us, but I know of two rifle manufacturers that have been working with it for 2 years. Part of the work was devoted to destructive testing to investigate what happens with bore blockages and wet or oily chambers, and the results of that testing was summarized for Guns & Ammo by Weapons Test Specialist Greg Hamilton, Proof Research.

"I worry more about bad things happening in brass than I do in steel because the steel is so much stronger," Hamilton said. "The chamber and bore obstruction of a monolithic steel case at 80,000 psi is far less troubling than a chamber or bore obstruction of brass at 60,000 psi."

His reason for making that statement was because the brass can't contain much of anything, allowing more pressure and debris to move back toward the shooter.

The cautious among us also wring their hands over imperfect chamber conditions, including moisture and oil coating the chamber walls. It's a legitimate concern with either brass or steel cases because they act like a lubricant and allow a tapered case to slip rearward, greatly increasing the amount of pressure it puts on the bolt face. Go to any rifle match on a misty or wet morning where competitors are stepping hard on velocity — often way past the 64,000-psi max of any brass case — and you'll see pierced primers, dropped primers from fired cases, and ejector swipes. Short and fat cases fair the worst because the chamber didn't have much to hold on to.

Steel will struggle alongside brass under these conditions, but steel remains a better containment vessel for pressure. Proof Research tested wet and oiled Peak Alloy cases and bolt thrust, i.e., the amount of force the case head puts on the bolt face increased. Proof Research could never get Peak Alloy cases to rupture, even after multiple firings in wet and oily conditions. It was possible to get chamber headspace to grow if they tried hard and long enough. Growing headspace means the recoil lug abutments in the receiver are moving. Move them far enough and a case will rupture from firing. No one that I've talked to has been able to make it happen with a Peak Alloy case yet.

WHY 6.5MM? WHY NOW?

When Federal first made the decision to use its Peak Alloy steel case technology for a rifle cartridge, it looked at the big-game hunting market and saw that many rifles sold were chambered for new 7mm cartridges. Federal wanted to create the best 7mm factory cartridge, leading to the creation of the 7mm Backcountry.

For the second effort, Federal wanted to use the performance from Peak Alloy cases and share it with as many rifle shooters as possible, which meant developing it for a popular cartridge that wouldn't require the need to buy a new rifle.

Again, targeting big-game hunters and mass appeal, the 6.5 Creedmoor was the obvious choice, allowing Federal to fine-tune its manufacturing process and grow reloading infrastructure for the firearms industry. It's would be important to ease the transition from manufacturing brass-case ammo to steel cased loads.

Choosing the 6.5 Creedmoor guaranteed its use in modern-manufactured rifles having a proper twist rate to support its use with heavy-for-caliber bullets. Given the popularity of 6.5 Creedmoor, the choice also meant an advantage to support a significant number of rifles cham-



Limited engineering samples were available for Guns & Ammo's initial evaluation. However, early results suggest that Peak Alloy technology for modern cartridges will produce great benefits.



bered for it in the last 20 years.

Being able to move from the 62,000-psi maximum of 6.5 Creedmoor to the 80,000 psi of 6.5 Creedmoor +Peak added, according to my testing, some 231 feet per second (fps). I compared Federal's factory-loaded 130-grain Terminal Ascent projectile in a standard 6.5 Creedmoor to factory-loaded +Peak engineering samples containing the same bullet. While engineering samples were never meant to be tested for accuracy, I checked anyways. (Results in the performance chart.)

Adding 231 fps to a 6.5 Creedmoor puts it in the same league as 6.5 PRC, so I shot some of Federal's factory-loaded 130-grain Terminal Ascent in 6.5 PRC out of a 24-inch barrel — the same length of barrel as on the rifle in 6.5 CM I used — to see how the velocity compared. What I measured with my chronograph indicated the 6.5 PRC had a muzzle velocity of 3,111 fps against the 6.5 Creedmoor +Peak's 3,093 fps. That's Federal's factory-loaded ammunition of the same bullet from the same barrel length.

I contacted Senior Product Line Manager for Centerfire Rifle Ammunition Josh Vickers and Product

PERFORMANCE

LOAD	VEL. (FPS)	ES	SD	BEST GROUP (IN.)	AVG. GROUP (IN.)
Fed. 130-gr. Terminal Ascent (6.5 PRC)	3,111	46.4	18.2	.35	.47*
Fed. 130-gr. Term. As. +Peak (6.5 CM)	3,093	33.2	8.4	.63	.84
Federal 130-gr. Terminal Ascent (6.5 CM)	2,847	38.4	12.5	.96	1.04

Notes: Accuracy is the result of three five-shot groups from a bench at 100 yards. Velocity is the average of 10 shots measured with a Garmin Xero C1 Pro chronograph placed adjacent to the muzzle. * Indicates a three-shot group rather than a five-shot group.

Development Engineer Brad Abramowski to discuss +Peak and share my chronograph numbers.

“You’ve got the fastest 6.5 PRC ammunition Federal has ever produced!” said Vickers.

“Look at the box and it’ll show our test barrels in 6.5 PRC result in 3,000 fps with that ammunition.”

He was right. The box read “3,000 fps,” but my Garmin chrono indicated “3,111.” That’s a big difference, and I don’t have an explanation. Either way, the new 6.5 Creedmoor +Peak matches even the fastest 6.5 PRC ammunition and generates less recoil.

TABLE MANNERS

When I first heard about high-pressure ammunition a few years ago, I thought it was a horrible idea. I assumed that recoil and muzzle blast would be similar to standard-pressure magnums, but I was wrong. It turns out that combustion materials have mass, and the volume of powder in the case is a significant contributing factor to the amount of recoil firing the cartridge produces. It’s not just a matter of bullet weight and velocity that determines recoil, but its those factors



Federal's Terminal Ascent has an optimized boat-tail with AccuChannel on the nickel-plated bullet, and a Slipstream tip with a hollow core to initiate expansion at all distances.

combined with the weight of the powder charge in the case.

I first realized that recoil was a lot less than I expected when I fired a SIG Sauer Cross rifle chambered in .277 SIG Fury. The muzzle blast was about what I envisioned, but the recoil felt like any other short-action cartridge in a light rifle. I encountered the same phenomenon when testing Federal's +Peak. Shooting standard pressure 6.5 Creedmoor rounds loaded with 130-grain Terminal Ascent bullets followed by a magazine of 6.5 Creedmoor +Peak only served to reinforce my earlier conclusion. I then loaded a single magazine in a Seekins SIC alternating +Peak rounds with standard pressure Federal loads. The recoil difference between the two loads was so slight that the only way I could tell the difference was I loaded the magazine and knew where the high-pressure rounds were. This was with a 12-pound rifle, too. I'm sure the difference would be easier to discern with a 6-pound rifle, but high-pressure ammunition has disproportionately low recoil for the velocity it produces.

Comparing powder charges for regular 6.5 versus +Peak versus 6.5 PRC meant comparing approximately 41 grains of powder versus 43 grains versus 56 grains. I used the same 12-pound rifle for the 6.5 Creedmoor loads and couldn't discern a difference in recoil. The test rifle in 6.5 PRC was significantly lighter, so it had a lot more recoil. The big takeaway for me was the negligible difference in recoil between standard and high pressure. Peak Alloy means riflemen can get magnum velocity and magnum terminal performance without magnum recoil. As soon as hunters realizes

SEEKINS SIC, 6.5 CM, MSRP: \$8,900



this, I expect to see demand for high-pressure cartridges to skyrocket.

Barrel wear is the next concern. Both Seekins Precision and Proof Research said that it's not much different than the standard pressure 6.5 Creedmoor. There are a couple grains more powder with the high-pressure stuff, so that means more hot burning gas moving past the throat and into the bore. That's not great for barrel life, but the increase in wear appears minimal. Unburned powder moving past the barrel's throat and into the rifling does the real damage. That's what happens when setting off 56 grains of powder and cram-

ming it into a 6.5mm hole, *a la* 6.5 PRC. The unburned powder scours the throat every time the rifle fires. Guns & Ammo's experience is that a 6.5 Creedmoor is good for about 2,500 rounds and a 6.5 PRC is good for about 1,200 rounds. We anticipate the 6.5 Creedmoor +Peak will maintain consistency for 2,300 rounds.

There's going to be a ton of purse-swinging and slap fights over the real reloadability of 6.5 Creedmoor +Peak, but the guys who are already doing it said it's not much different than standard reloading. Sizing the neck requires .0005 inch of neck tension instead of the usual .002 inch, but that's about it. Porter's Precision Products (portersprecisionproducts.com) already has the mandrels and dies that manufacturers are using.

One common characteristic of high-pressure cartridges is small extreme spreads and standard deviations. Higher pressure seems to result in more consistent powder burns from one cartridge to the next.

Get used to seeing more high-pressure cartridges. The military got this ball rolling years ago and the benefits are now public. Based on cartridges used by U.S. Special Operations and knowing its desire for performance, I expect a .308

Winchester and one of the .338 Magnums will appear soon — not necessarily from Federal.

Federal indicated that the 130-grain Terminal Ascent and 155-grain Fusion Tipped should be on store shelves as you read this article. There will be additional loads offered with a 127-grain Barnes LRX, 153-grain Sierra Tipped Matchking, and the 156-grain Berger Elite Hunter to follow. That's an all-star lineup. 

Howa™

LIGHT & FAST

22 ARC

VARMINT / TARGET PRECISION MINI ACTIONS



CERAKOTE

NEW

SHIPPING NOW!

- Available in 22" Std, 20" Steel Light Varmint & 20" Carbon Fiber
- Threaded Barrel / Suppressor Ready
- Machined Receiver & Forged Bolt
- Large Integral Front Barrel Lug
- Tool-Less Firing Pin Removal
- Mini Actions Also Available in .223, 7.62x39, 6.5 Grendel, 350 Legend, 6mmARC
- M-16 Style Extractor
- 5 rd Detachable Mag
- 3 Position Safety
- 12% Shorter Bolt Throw Than Std. Short Actions

- 22 ARC outperforms all 22 caliber cartridges in its class
- 22 ARC rivals 22-250 performance from a mini action
- 22 ARC dual-purpose match and varmint applications
- 22 ARC designed to take advantage of today's long ogive, high-BC bullets



FOR MORE INFORMATION ABOUT HOWA'S 22ARC MA

SUB-MOA GUARANTEE

LIFETIME WARRANTY



LEARN MORE AT HORNADY.COM

FOR MORE INFORMATION VISIT: LEGACYSPO RTS.COM

CATALOG OUT NOW - REQUEST YOUR FREE COPY TODAY: 1.800.553.4229



LegacySportsIntl



LegacySportsInternational



LegacySportsInt

LEGACY SPORTS INTERNATIONAL®



.69-CAL. MUSKET BALL

.44-CAL. COLT DRAGOON

.50-CAL. GALLAGER CARBINE

.36-CAL. PISTOL BALL

.44-CAL. REVOLVER

CIVIL WAR BALLISTICS

PART I: FROM BUCK & BALL TO THE MINIÉ.

BY DAVE EMARY | PHOTO BY MICHAEL ANSCHUETZ

IN RECOGNITION of America's 250th anniversary, it is good to reflect on our country's history and consider where we've been and where we think we're going. Political unrest and foundational disagreements led to such tremendous upheaval and political discord to the point that a brother was willing to kill their brother. May that never happen again. More interesting, let's consider the ballistics and projectiles available during the War Between the States.

The period of 1820 to 1865 produced several evolutionary changes for firearms and ammunition. The rapid advancement in ballistics forced new tactics on the battlefield simply to survive engagements. The war started on April 12, 1861, and was followed by the First Battle of Bull Run on July 21, 1861, which is widely accepted as the first significant land battle. Engagements occurred much as they had for the previous 300 years. Large formations of men advanced in line to confront their enemy at ranges averaging 100 yards or less, while smaller elements ambushed troops from behind protective cover. Elongated, heavy projectiles for rifles advanced ballistics, though, which were developed just a decade preceding the U.S. Civil War. The effectiveness of the projectiles hadn't been considered by military planners before the outset of the war. The external and terminal ballistics of new projectiles produced enormous casualties on both sides because the killing and wounding ability of the ammunition was a factor, as was the range. In the span of about 10 years, the effectiveness of long

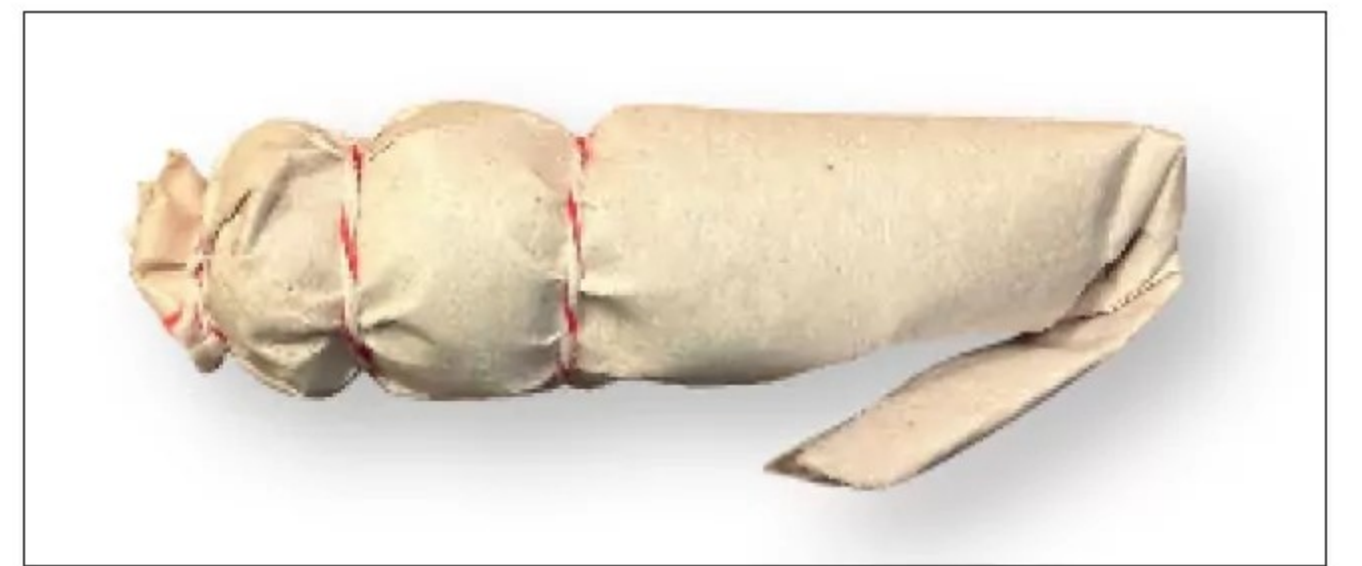
arms went from 70 to 100 yards to 300 to 400 yards. Hence, the Civil War saw the expanded use of marksmen for sniping.

Let's take a look at the predominant projectile types used in the Civil War and their ballistics. This column will consider the predominantly available projectile types used during the Civil War and the ballistics. The effort will not attempt to mention or describe every projectile and firearm employed during the war. Volumes have been written on Civil War arms and ammunition. Instead, I will review the use of round balls through the development of the Minié-type bullet in "Part 1," while "Part 2" will describe the use of Minié-style bullets in Civil War rifles.

Ballistics shown in this article are based on nominal values for projectile diameter, weight and ballistic coefficient (BC). I have some test data for rounds balls and the conical bullets, but the remaining BCs were estimated based on the data I have for similar projectiles. The BC for the round balls is a sketchy determination since BC depends heavily on the surface roughness of the sphere. Therefore, round ball ballistics are estimates.

ROUND BALLS

Round balls in smoothbore firearms — and to a lesser extent in rifled firearms — was the projectile of choice for at least 300 to 350 years until the Civil War started. At the start of the Civil War, the Union and Confederate States of America (CSA) armies were in the process of converting to rifles firing some sort of Minié ball projectile.



“Buck and ball” was a common load for muzzleloading muskets, usually consisting of a .50- to .75-caliber lead ball and three to six buckshot pellets prepared in a paper cartridge with blackpowder.

Details about the Minié ball will follow and continue to Part II of this series. Many state militias were still armed with smoothbore Model 1842 Springfield Armory and Harper’s Ferry muskets. Many of those smoothbore muskets were in the process of being converted to rifles in 1860, often by simply rifling the .69-caliber barrel.

The load of choice for the many smoothbore 1842 muskets that remained was referred to as the “Buck and Ball.” The type of load was used for a long time prior and became a preferred choice for American troops during the Revolutionary War. In the 1842 Springfield musket form, it consisted of a .65-caliber lead ball that weighed a nominal 465 grains topped with three .31-caliber buckshot balls, essentially “1½” buckshot. This ammunition was issued to troops as a cartridge with the powder charge, round ball and buckshot in a paper cartridge that was rammed into the bore. These loads were fired with nominally a 110-grain powder charge producing an average velocity of about 1,250 feet per second (fps).

As you might have assumed, the results were not a precision affair. However, against an opposing massed troop formation positioned 70 yards away, they were absolutely devastating due to the number of projectiles fired. Though the .65-caliber ball carried enough energy to kill to 300 yards, it was difficult for troops to hit anything reliably beyond 100 yards. Round balls were aerodynamically inefficient, losing velocity rapidly. Additionally, aiming beyond 100 yards was a challenge for soldiers issued the 1842 with no sights. Troops simply used it like a shotgun and aimed down the top of



May 1861: A studio portrait of Second Lieutenant Joseph Lentilhon standing with a Model 1855 Harpers Ferry musket looking down on fellow soldiers First Lt. James Ray and Samuel Curtis, Co. K, 7th NY Infantry Regiment. (Photo: Library of Congress)

the barrel. Further, the paper cartridge was rather loose when loaded in a clean bore. With no lubrication, bores quickly became fouled and made loading more difficult. Table 1 shows the ballistics of this load to 200 yards.

As you can see in Table 1, it would have been increasingly difficult to hit a target with intent beyond 150 yards. The excessive drop and the growing difference in point of impact of the .65-caliber ball and the .31-inch buckshot — not to mention the inherent inaccuracy of a smoothbore musket firing a round ball. Within 100 yards, the load was devastating when fired at mass troops formation. Imagine 100 troops shoulder-to-shoulder fired upon by 100 troops from a range of 75 yards. There could be 400 projectiles coming at them, all potentially lethal. It was a truly insane form of combat.

Several state militia units insisted on keeping smoothbore 1842 Springfields well into 1863. Why? Some leaders felt the tactics up to that point in the war were incredibly effective. Indeed, it was. Period 50-round tests at 100 yards confirmed the results for the Army, showing buck-and-ball loads delivered more projectile hits on man-sized targets at 100 yards than Minié ammunition, albeit roughly 30 percent of the balls and 50 percent of the buckshot missed the targets. Strength was in numbers.

The 12th New Jersey Infantry Regiment, known as the “Buck and Ball Regiment,” was on the right of the Union line on July 3, 1863, and faced the wrath of



SPRINGFIELD ARMORY MODEL 1842 (REPRO.), .69 CAL., MSRP: \$1,450



HARPER'S FERRY MODEL 1816/1842 RIFLED MUSKET CONVERSION, .69 CAL.: \$1,700

Pickett's Charge during the Battle of Gettysburg. Regimental Commander Colonel William Potter reported, "The Regiment was armed with the Springfield smoothbore musket caliber .69, a terrible weapon at close range. The usual cartridge carried a large ball and three buckshot, but many of the men, while awaiting the enemy's advance, had opened their [cartridge] boxes and prepared special cartridges from 10 to 25 buckshot alone ..." The evidence of the effectiveness at short range was borne out in the fact that Pickett's division was devastated and repulsed, though achieving a brief and small penetration of the

Union lines. The 12th New Jersey was credited with stopping the breakthrough.

The rifled version of the Model 1842 was used by both sides and fired a round ball with a powder charge of 70 to 80 grains of musket powder, which is equivalent to today's FFG blackpowder. The load produced a muzzle velocity of about 800 fps. Paper cartridges were issued that contained both the powder and ball. Although ballistics of the .69-caliber round ball was rather unspectacular, the massive diameter of the ball would have made it a devastating projectile at short range. These rifled

muskets were quickly supplied with Minié-style bullet ammunition after the war commenced.

BUCK & BALL BALLISTICS

TABLE 1

.65-IN. ROUND BALL, 465 GRAINS, BC: .050				.31-IN. OO BUCKSHOT, BC: .025			
RANGE (YDS.)	DROP (IN.)	VEL. (FPS)	ENERGY (FT.-LBS.)	RANGE (YDS.)	DROP (IN.)	VEL. (FPS)	ENERGY (FT.-LBS.)
0	-1.5	1,250	1,613	0	-1.5	1,250	156
50	4	956	943	50	3.3	684	67
100	0	816	688	100	-5	446	39
150	-17	714	526	150	-36	283	24
200	-51	628	407	200	-104	175	14

CAP & BALL REVOLVERS

Rounds balls were also used in .36- and .44-caliber revolvers but rapidly fell out of vogue for stubby conical pointed bullets. There were many handgun types

TIMELESS

TRISTARARMS.COM



The pinnacle of craftsmanship, performance and versatility—the Cypher and Trinity II family of Over/Unders all feature durable solid frame and steel mono-block barrel construction, top tang safety/barrel selector and fiber optic sight. Each is available in gauges 12, 16, 20, 28 and .410. 5-Year Warranty.

TRINITY II & TRINITY II LT | DETAILED & DEPENDABLE

- Extractors
- Turkish Walnut Stock and Forearm
- Beretta®/Benelli® Mobil Style Chokes (SK, IC, M, IM, F)

CYPHER & CYPHER X | MODERN & LIGHT WEIGHT

- Auto Ejectors
- Deluxe Oil-Finished Turkish Walnut
- Extended/Color Coded Chokes (SK, IC, M, IM, F)



1816 Linn Street, North Kansas City, MO 64116 • 816.421.1400



used during the Civil War, but two common pistols were the 1851 Colt Navy and 1860 Colt Army. These guns were both made in .36 and .44 calibers with the 1860 being primarily in .44. They were considered reasonably accurate but were limited by crude sights consisting of a notch in the hammer for the rear and usually a bead on the front of the barrel. A soldier simply centered the front sight bead in the notch when the hammer was cocked and fired. There were no adjustments to the sights. A trooper had to know where the gun's shot impacted at a distance and then compensate. The revolvers of this period were considered effective to about 50 yards, although a practiced shooter with a well-aimed shot could hit a man at 100 yards.

The .36-caliber revolver loaded a .375-inch, 80-grain round ball with a charge of 17 grains of what is now FFFG blackpowder for a muzzle velocity of about 775 fps from a nominal 7½-inch barrel. The .44-caliber revolver fired a .454-inch, 140-grain round ball with an FFFG blackpowder charge of 30 grains from a 7½-inch barrel for a muzzle velocity of about 825 fps. Cartridges were issued to troops that consisted of the powder charge and ball wrapped in a paper cartridge that was rammed into the cylinder.

Table 2 shows the ballistics to 100 yards for the calibers. More on the ballistics of these revolvers with conical bullets in Part II of the series.

The .36-caliber revolvers would have been equivalent to about a current-day .32 Automatic load. The .44-caliber revolvers

COLT MODEL 1860 ARMY, .44 CAL.(REPRO.), MSRP: \$460
COLT MODEL 1851 NAVY, .36 CAL. 50%: \$5,000

Early during the Civil War, stubby conical Minié-style bullets replaced round balls in handguns. Three cast-lead handgun projectiles excavated from Civil War battlefield sites in Kentucky, above, from left to right: .44 cal., Colt Dragoon; .44 cal. revolver, .36 cal. Colt Navy revolver.

PISTOL ROUND-BALL BALLISTICS				TABLE 2			
.375-IN. ROUND BALL, 80 GRAINS, BC: .025				.454-IN. ROUND BALL, 140 GRAINS, BC: .035			
RANGE (YDS.)	DROP (IN.)	VEL. (FPS)	ENERGY (FT.-LBS.)	RANGE (YDS.)	DROP (IN.)	VEL. (FPS)	ENERGY (FT.-LBS.)
0	-0.8	775	107	0	-0.8	825	212
25	1.9	694	86	50	1.5	748	174
50	0	624	69	100	0	682	144
75	-7.5	562	56	150	-6.2	623	121
100	-21.8	505	45	200	-18.1	569	101

would have been equivalent to about a .38 Special load in modern times.

BULLET DEVELOPMENT
Many may be unfamiliar with the Burton/Benton Ball. The French were leaders in projectile development in the mid-19th

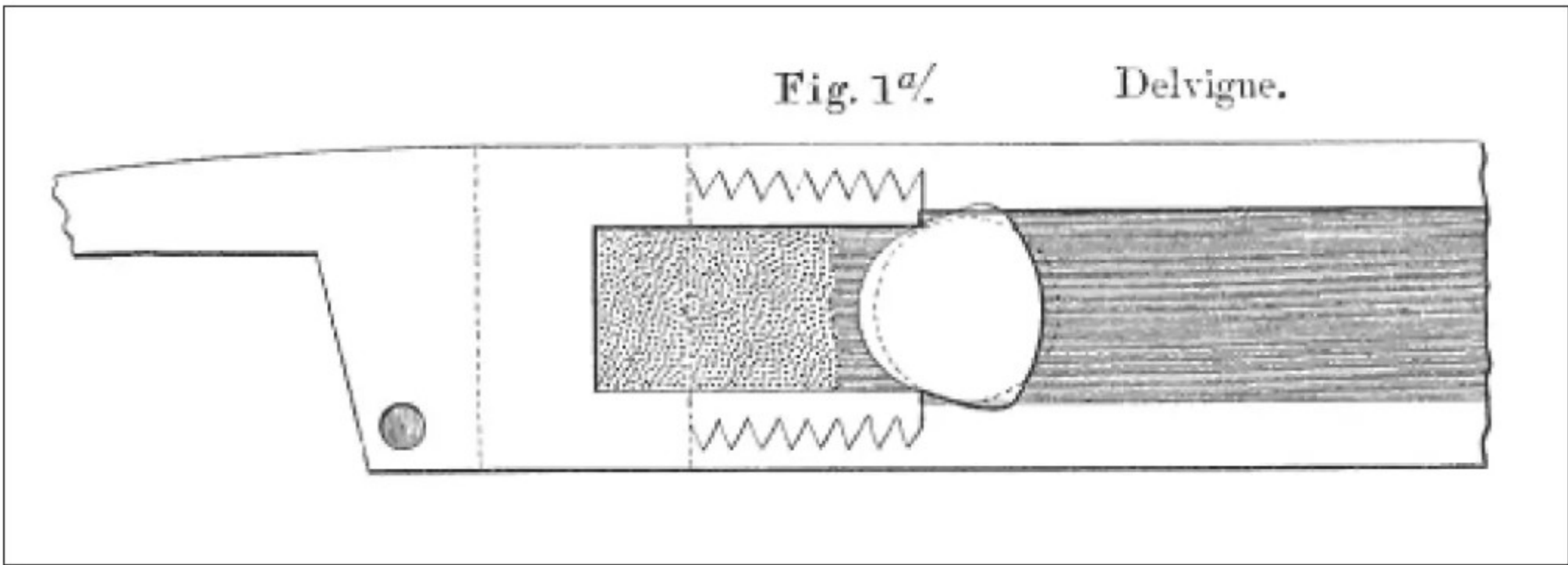
century. In 1843, Frenchman Gustav Delvigne was the first to conceive an elongated, pointed conical projectile with a hollow base that allowed gripping the rifling and obturating the projectile in the bore. For an unknown reason, he did little to promote the concept. His work was picked up, though, by fellow Frenchman Claude Minié who developed the Minié bullet in 1849. The

base of the bullet had a cylindrical cavity that had a cone-shaped iron insert pressed into it. Under powder pressure the iron cup pressed into the bullet base, forcing the lead to engage the rifling and obturate the projectile in the bore. The idea was a major improvement to rifle bullet performance, but it did not offer as consistent results as expected. Enter James Burton at Harper's Ferry.

Burton began working on an improved Minié ball in 1849 at the Harper's Ferry Armory in West Virginia. He sought to simplify and improve the performance of the original Minié ball and devised a projectile with a cylindrical hollow base

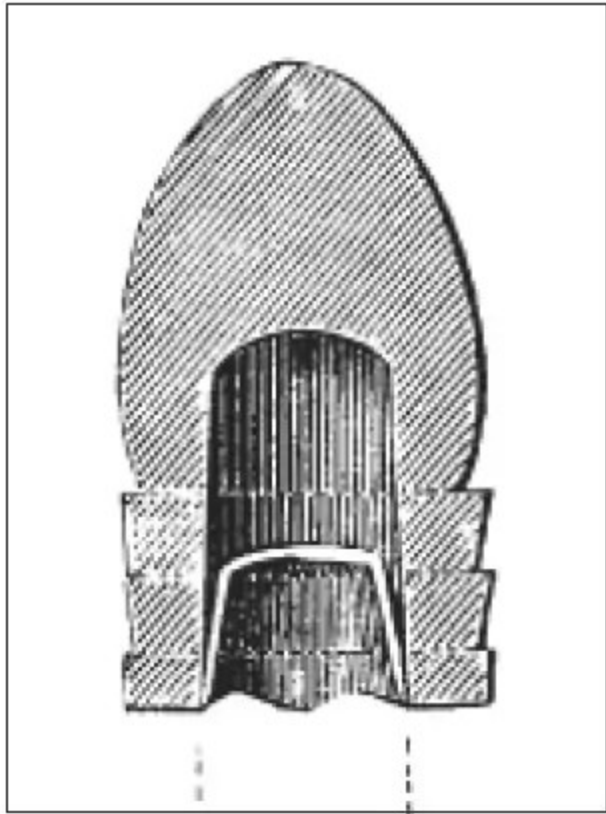


Capt. Henri-Gustave Delvigne served in the French infantry, later developing firearms and the first cylindro-conical bullet in 1843.

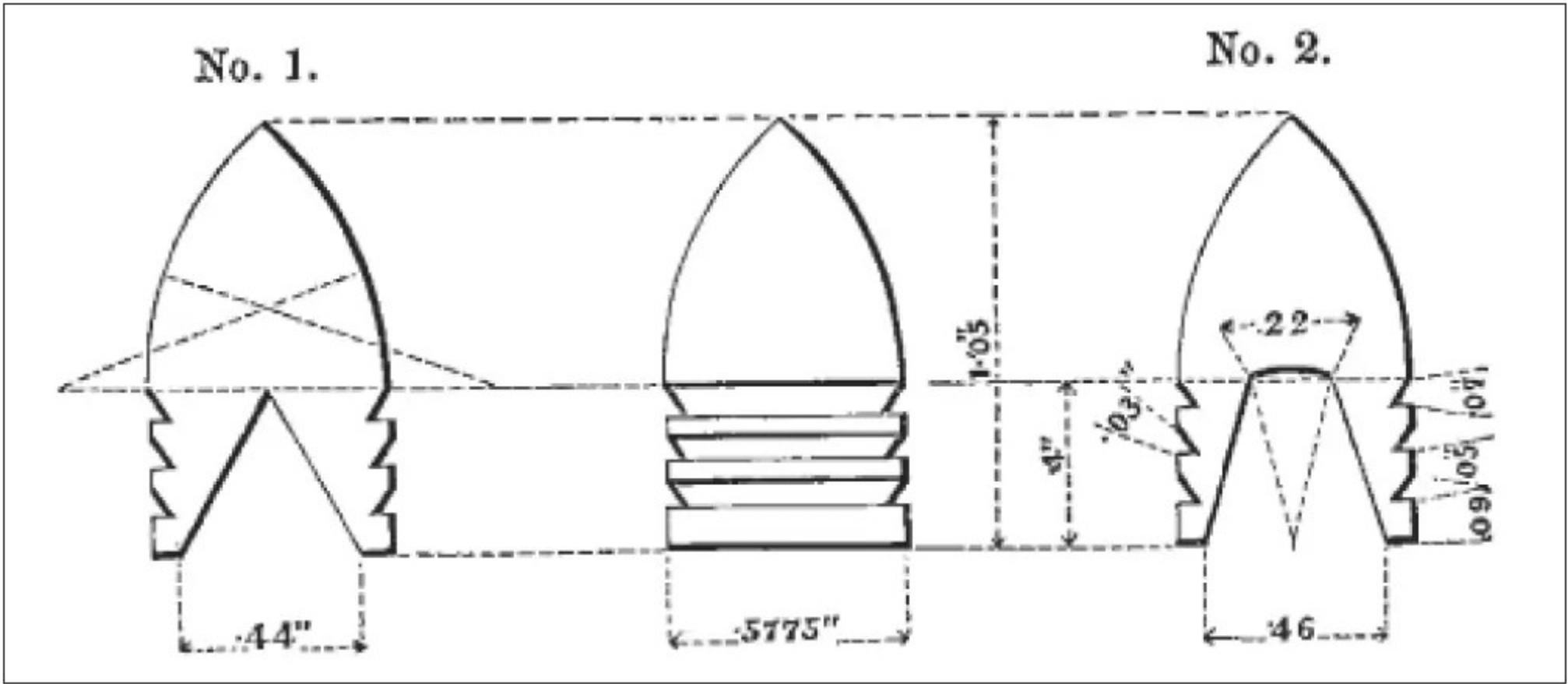


A sketch drawn showing Capt. Delvigne's bullet deformed atop the powder stack in a rifled bore, superseded by Capt. Minié's design.

and a thin skirt that easily engaged the rifling and obturated the projectile in the bore under pressure from the burning powder charge. It worked well but was limited to a 38-grain powder charge or the skirt failed and resulted in unspectacular performance. Burton wasn't employed long enough at Harper's Ferry to perfect the design and was fired in 1854. Several sources give Capt. James Benton of Harper's Ferry credit for perfecting Burton's design in 1855. The final Benton design was a conical-shaped cavity with a thicker skirt at the rear of the projectile that allowed much heavier powder charges to



The thimble-shaped French Minié hollow-base, soft-lead projectile with iron cup in the base.



Patent drawings show the cross-section of 500- (No. 1) and 450-grain (No. 2) hollow-base Burton bullets, a follow-on variation to the Minié invention.

be used. The bullets had several grooves on the outside to ease loading and accept lubricant. The conical hollow-base Minié-type bullet entered the Civil War on both sides of battle. There were many variations of the Burton/Benton ball, depending on who manufactured the molds.

Round balls were still extensively used through the first half of the war, but they were replaced by the Minié conical bullet. In Part II, we will detail the use and ballistics of conical projectiles and explore the effectiveness of these bullets for sniping. I will also introduce the development of self-contained rimfire cartridge and consider its impact on the outcome of the American Civil War. 



NEW FOR 2026 NIGHTFORCE
NX6

The new Nightforce NX6™ riflescope family is designed with lightweight configurations and versatile magnification ranges to meet the needs of performance hunters, tactical shooters, and rising competitors. NX6 optical performance is tailored for a wide field of view and clarity in varying field conditions, delivering bright views of the toughest targets. On the range, in the field, or at a competition, there is an NX6 configuration for just about every rifle shooting application.

LEARN MORE



TriStar KR.22 .22 LR

CHEAPER THE BETTER

TRISTAR is a purveyor of affordable shotguns, primarily imported from Turkey to its Kansas City headquarters, but it also imports many handguns including Model 1911s. The KR.22 represents the first step into the rifle segment for TriStar — and they've got a good one. It is manufactured by Kral Arms in Turkey.

KEEPING IT SIMPLE

As a direct-blowback .22 LR rifle, the KR.22 is a safe bet for TriStar. The action is straightforward, ammo is plentiful and inexpensive, and the chambering helps contribute to its affordable retail price between \$289 and \$309. Rimfire rifles also tend to be fun to shoot, regardless of price point, and they don't require much commitment to own. The KR.22 is at home at the range plinking cans or taking small game afield. However, the design of the semiauto has some quality-of-life features that elevate it.

The profile of the KR.22 is sleek with a synthetic stock and molded receiver that blends into one another. The rifle sent to Guns & Ammo for testing was the FDE variant. The handguard, receiver and adjustable cheekpad all colored opposite the black nitride barrel and stock. Olive Drab Green (ODG)/black and full-black synthetic versions are also available.

Sling mounting points are at the forend of the stock and beneath the stock's toe.

The overall weight of the rifle measured 4 pounds, 13 ounces. It feels light and balanced at the shoulder.

The blowback action is slightly recessed into the receiver, and the charging handle can be removed and threaded for left-hand use. The KR.22 doesn't have a bolt hold, so users will want to have a chamber flag. Two flush-fit rotary magazines come with the KR.22, but this rimfire accepts all first- and third-party Ruger 10/22 mags also.

Unlike other rimfire semiautomatic rifles, the KR.22 is standard with a lightweight stock with an adjustable comb. A screw in the side of the stock must be adjusted with one of the provided Allen wrenches to loosen and secure it in place.



The trigger assembly was tested at 4 pounds, 7 ounces. The polymer trigger housing contains a pinned hammer, trigger, safety lever and crossbolt safety, as well as the triggerguard, magazine well, and magazine catch and lever assemblies.



TRISTAR KR.22

TYPE	Direct blowback, semiautomatic
CARTRIDGE	.22 LR
CAPACITY	10+1 rds.
BARREL	18.6 in.; 1:16-in. twist, threaded
LENGTH	38 in.
WEIGHT	4 lbs., 13 oz.
FINISH	Black nitride (steel)
STOCK	Polymer, adj. comb
SIGHTS	Adj. fiber-optic (front), fixed 2-dot notch (rear)
TRIGGER	4 lbs., 7 oz. (tested)
SAFETY	Trigger lever; crossbolt
MSRP	\$289 (black), \$309 (FDE and ODG)
MANUFACTURER	Kral Arms, kralarms.com
IMPORTER	TriStar, 816-421-1400, tristararms.com



With the magazine removed, two screws allow the barreled upper receiver and trigger assemblies to separate from the stock system. A Vortex SPARC AR 2 MOA red dot was used throughout Guns & Ammo's evaluation. **\$280**



The handguard is molded polymer and features a single sling point at the forend tip. Deep grooves in the polymer are very tactile, but not uncomfortable.

A push-button crossbolt safety rests just above the triggerguard, while a red trigger blade safety must be completely depressed before firing.

The barrel measures 18.6 inches and is threaded $\frac{1}{2} \times 28$. Molded as part of the polymer receiver, the optic rail incorporates square open sights that pair with the red fiber-optic front sight. The height of the front sight can be adjusted to co-witness with some optics or clear the muzzle device's height.

RANGE TESTING

A Vortex SPARC AR (\$280, vortexoptics.com) with 2 MOA



The upper receiver housing is a molded polymer affair, containing two front and rear attachment points and the bolt assembly. A bumpstop at the rear safeguards the receiver from the bolt.

red dot was mounted to the upper receiver rail for testing.

On the first day of testing, the a dedicated rimfire suppressor wasn't available to evaluate the KR.22, so a Banish 9 suppressor was substituted (\$999, banishsuppressors.com). Running .22 rimfire through a 14-baffle 9mm suppressor produces near-Hollywood levels of noise despite the difference in bore size. It was a blast to send 40-grainers downrange as the rimfire ammo produced next to zero heat in the can. Shooting rapidly changed nothing. Later, a Banish 22 rimfire suppressor (\$599) replaced the 9, which felt more appropriate. Noise suppression was excellent, and the weight at the end of the barrel felt was ideal. Iron sights



WHEN YOUR MARGIN FOR ERROR IS ZERO.

IT'S ONE THING TO MAKE A PERFECT ROUND.
IT'S ANOTHER TO DELIVER THAT PERFORMANCE, ROUND AFTER ROUND.
ELITE SHOOTERS RELY ON BLACK HILLS FOR A REASON:
WE NEVER FADE, FAIL, OR FALL SHORT.



TO LOCATE A DEALER NEAR YOU, PLEASE CALL 800.568.6625
BLACK-HILLS.COM





The charging handle can be unscrewed from one side of the bolt body and reattached to the opposite side. Great for lefties, a left-side charger is useful for right-handers behind the gun.



Two 10-round rotary magazines are included with the KR.22, but factory and aftermarket 10/22 magazines are compatible. There were no feeding issues during G&A’s tests.



The muzzle is threaded 1/2x28, meaning that the KR.22 is suppressor ready. Even with a larger Banish 9 suppressor, the front sight was still usable. A Banish 22 (shown) is ideal, though. \$549



A fixed U-notch, two-dot sight is nestled inside the optic rail atop the receiver. The red fiber-optic front sight is height adjustable.



were tall enough for use with both suppressors.

The trigger presented a slight creep, though it only had an average weight of 4 pounds, 7 ounces. The reset was good and follow-up shots were easy. Even with a full magazine, suppressor and a red dot, the rifle weighed 5½ pounds, making off-hand shooting effortless. Grooved gripping surfaces were molded into the touch points, providing maximum grip. At the rear, the adjustable cheekrest was useful for aligning the eye behind the reticle for comfortable precision work.

Southpaw shooters also appreciated the reversible charging handle, which didn’t need tools to change. With no way to hold the bolt open, fixing minor errors such as stuck casings became finicky, but nothing that caused frustration.

Accuracy was never an issue with the KR.22. Groups were fired at 25 and then 50 yards. Ruger BX-25 mags were also used to verify function, which helped in making five, five-shot groups without needing to reload. Testing was done indoors, so accuracy wasn’t subject to wind.

Unexpectedly, bulk factory ammo produced the best groups from the KR.22. Match loads crept outside of 1 inch on average. Velocities and accuracy remained consistent with and without a suppressor attached, too.

One of the stock magazines fed effortlessly, while another produced some reliability concerns when loaded past six rounds. There were a few light primer strikes, too, throughout the day of plinking. It’s possible that more frequent maintenance could have

PERFORMANCE

LOAD	VEL. (FPS)	ES	SD	BEST GROUP (IN.)	AVG. GROUP (IN.)
Fiocchi Range Dynamics 40-gr. LRN	1,200	61.4	18.2	.7	1.1
Federal Target 40-gr. LRN	1,205	38.2	9.8	.9	1.3
CCI Velocitor 40-gr. CPHP	1,401	76.2	20.5	1.1	1.25
CCI Green Tag Comp. 40-gr. LRN	1,006	52	12.2	1.25	1.4

Notes: Accuracy is the average of five five-shot groups at 50 yards from a benchrest. Velocity is the average of five shots measured using a Garmin Pro Xero chronograph placed below the muzzle.



Sharp angles and grooves dominate the profile of the KR.22. Besides black and OD green, an FDE color scheme, tactile grip, red-accent safeties, and flared grip work together to enhance the rimfire's attractive, forward-looking appearance.

prevented the light-strike issue.

The KR.22 struggled with shooting more expensive match loads in terms of function, also. The rifle produced several light primer strikes on the match rounds, and sometimes match casings failed to extract, requiring a knife or tool to remove. Comparatively, bulk .22 fed almost effortlessly! We felt that it was fitting considering the price-point of the KR.22. Affordable ammo seemed to suit this plinker, reducing the serious competitive atmosphere and producing more fun. High-velocity rounds performed the best at getting the action to cycle.

Semiautomatic rimfire rifles can be picky with ammunition types, so we always recommend trying a few different loads before determining a preference. Fiocchi's 40-grain Range Dynamics was the most consistent and most accurate round

for us. The best overall performing load was also one of the most affordable.

PARTING SHOT

The KR.22 is a plinker and a woods gun. There's enough features to pique anyone's interest, and the price point makes it an attractive buy. The KR.22 may not be a competition rifle, but its groups will often cluster into one cloverleaf between 25 and 50 yards. It would be a great first rifle, and most onlookers liked its appearance. The KR.22 is an excellent value from TriStar. 

PIRATE PISTOL

**.380 PUMP
ACTION WITH
SLAM FIRE**



**SHIPS IN A CUSTOM
TREASURE CHEST!**

260.305.3365
TIPPMANNORDNANCE.COM

VIEW MORE



SAKO 90 Finnligh 7mm PRC

ATTAINABLE PERFECTION

SAKO IS A PREMIUM RIFLE MANUFACTURER based in Finland. The SAKO 90 Finnligh chambered in 7mm PRC is an example of a hunting rifle that has a combination of relevant. The “Finnlight” designation appeared in 1997 on the Model 75, configured as a stalking or mountain rifle with fluted barrel and lightweight stock. The 85 Finnligh followed in 2006, featuring a controlled-round-feed (CRF) action with six-lug bolt and adjustable single-stage trigger. The 90 arrived in 2025 with a rigid action and carbon-fiber-reinforced stock.

Key to performance of any bolt-action rifle is the amount of engagement between the action screws and receiver. The Model 700 pattern is a reference because it is well-known and has mediocre engagement that must be periodically checked. As a rifle throws odd flyers more frequently, first check the actions screws because they’ve probably come loose. The SAKO 90 has more action screw engagement than the M700, meaning its receiver stays firmly attached to the stock when the rifle is fired. The screws are



SAKO 90 FINNLIGHT	
TYPE	Bolt action
CARTRIDGE	7mm PRC
CAPACITY	4+1 rds.
BARREL	22 in., 1:8-in. twist, stainless steel
LENGTH	43 in.
WEIGHT	7 lbs., 12 oz.
STOCK	Injection-molded polymer, adj. comb, textured
GRIPS	Swept, textured
LENGTH OF PULL	14 in.
FINISH	Matte (stainless)
TRIGGER	1 lb., 12 oz. to 4 lbs., adj.
SIGHTS	None
MSRP	\$2,199
MANUFACTURER	SAKO, sako.fi
IMPORTER	Beretta USA, 800-237-3882, beretta.com



The aluminum bedding block captures the oblong recoil lug and a long action screw secures it to the stock. Even without the action screw, the lug-to-bedding block fit is tight.



The recoil lug is integral to the SAKO 90 receiver. Both action screws thread deeply into the receiver. With the stock removed, the user has easy access to the trigger adjustment screws.



Also machined integrally on top of the receiver are scope-mounting rails. Integral rails never work loose and are low-profile, allowing a scope to sit close to the barrel.



The bolt was designed for tool-less disassembly for easy field maintenance. The bolt face has two ears that drop down into the magazine for positive engagement and reliable feeding.



SPRINGFIELD ARMORY[®]

ECHELON[™]

UNPARALLELED



N



SPRINGFIELD-ARMORY.COM



The SAKO 90 has a soft and wide rubber recoil pad. It did an excellent job taming the recoil of 7mm PRC.



The comb has a wide range of height adjustment. To adjust your eye position behind the stock, depress the button on the side of the stock and release to set it.

less likely to work loose and accuracy is more consistent between groups.

The SAKO 90 receiver is wide and flat on the bottom and has an integral oblong recoil lug that protrudes down into the aluminum bedding block of the injection-molded polymer stock. Fitting



The grip is swept slightly for comfortable handling when shooting in the field. The touchpoints are a synthetic leather.



Flush cups in the forend and toe support push-button sling loops that are quick to install or detach.



The SAKO 90 Finnlight with camouflage stock pattern is only available for the U.S. market in several different calibers.

the receiver to the stock and checking for wiggle revealed no movement between receiver and stock prior to reinstalling the action screws. Once the front action screws torque into place, the large surface area between receiver and bedding block immobilize the receiver.

The receiver has low-profile integral Picatinny-style rail bases that allow for mounting the scope low, keeping the scope's objective bell close to the barrel, which ensures the shooter's head stays firmly attached to the stock during recoil. Having the head move with the rifle under recoil makes for faster follow-up shots and also



SAKO magazines are engineered per cartridge. A 7mm PRC could not feed more reliably into a rifle action. SAKO does not use a one-size-fits-all approach in designing its magazines.

increases the probability of seeing the round impact and speeding corrections in case of an errant shot.

The bolt face uses dual-plunging ejectors, instead of the more common single ejector. Dual ejectors allowed SAKO to engineer less spring tension than what's found on a single ejector, greatly prolonging the life of the ejector springs. Using dual ejectors also yields better results with magnum-sized cases. Heavy cases sometimes need a shove to get them out of the receiver, so two ejectors do the job better than one.

The lug layout on the SAKO 90 bolt face is typical for a SAKO. When the bolt is open, there is one lug at 12-o'clock and two lugs at 4- and 8-o'clock. Putting one lug at 12-o'clock is a great way to prevent the bolt from binding when it's pushed off-axis by an inexperienced shooter or by someone trying to cycle the action in a hurry.

The lugs at the 4- and 8-o'clock positions appear new and demonstrate just how thorough SAKO is in improving its rifles. There are ears that protrude down from the bolt face and ride just inside the detachable box magazine feed lips. This thoughtful arrangement allows for substantial contact between the bolt face and cartridges feeding out of the double-stack magazine. Even as the cartridges nose up out of the magazine, the bolt face never loses contact with the case head.



In addition to adjustments for engagement and pull weight, the trigger blade is also adjustable fore and aft for optimal position to ensure a comfortable reach with an individual's hand.

The lug geometry of the bolt face exists because SAKO uses detachable double-stack magazines in its 90 models. Magazines frequently get treated like an afterthought, but not by SAKO. A double-stack magazine will feed with less effort than a center-fed magazine, yet most detachable box

TOP-SHELF TOUR 5-CIGAR SAMPLER

\$12⁹⁹

ONLY

\$63⁰⁹ VALUE!



\$10 OFF
 YOUR NEXT PURCHASE

+ \$10 BCP VOUCHER



MUST VISIT
[BESTCIGARPRICES.COM/AP670](https://bestcigarprices.com/AP670)
 TO GET THIS OFFER
VALID UNTIL: NOVEMBER 1, 2026



*Purchase may be subject to state or local taxes where applicable. You can also call 1.888.412.4427 and mention code AP670 to purchase this offer. Shipped via BCP Ship Saver. Orders placed by 2 PM ET ships same day. Some exclusions apply. In stock items only. Continental US only. We do not ship to Utah or Hawaii. First-time purchasers only. One per household. Qualified items are subject to change at any time. Cannot be combined with any other offers or promotions. Free shipping offer does not apply to Alaska. Best Cigar Prices does not sell cigars or tobacco products to anyone under the age of 21.

WARNING: Cigars can expose you to chemicals including tobacco smoke, which is known to the State of California to cause cancer, and nicotine, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.



magazines are center fed. The reason this occurs is it's easier to make a center-fed detachable box magazine reliable. There are opposing feed lips to hold the cartridge being presented to the bolt face, so it can only move towards the chamber. The problem with center-fed magazines is they take more effort to push the cartridge out of the magazine and into the chamber.

A correctly designed double-stack magazine will have the top cartridge sit flush against a single feed lip and be held in place by another cartridge next to and slightly below it. Additionally, there needs to be a rib in the side of the magazine that sits just in front of the cartridge shoulder to prevent the rounds from sliding back-and-forth under recoil. The location of the rib varies with the cartridge body length, so most of the time the rib is eliminated or placed for the longest cartridge body that'll be used in that particular magazine (usually a .300 Winchester Magnum). This means the rib sits too far forward to do its job for



The SAKO 90 arrives with a muzzle-brake installed. Remove to thread on a can or replace it with the knurled cap.



The bolt stop is on the left side of the receiver. With the bolt drawn to the rear, press the button to remove the bolt.



The receiver's ejection port is large with a scalloped perimeter. The design allows for easy top-loading of the SAKO 90.

any other cartridge.

However, SAKO didn't cut any corners with the magazines in the 90. Guns & Ammo's test rifle had the rib in the correct location and the feed lips were oriented for the minimal body taper of the 7mm PRC. The magazine

*Dates
our choice*

Own Three Scarce Collector Classics!

*Long vanished from circulation, get these coins for **ONLY \$4.95**. Order within 7 days, and you'll get a **FREE** gift, and **FREE** Shipping!*

You'll also receive a handpicked trial selection of fascinating coins from our No-Obligation Coins-on-Approval Service, from which you may purchase any or none of the coins – return balance within 15 days – with option to cancel at any time.

Mail Coupon Today!
For Faster Service Visit:
LittletonCoin.com/Respond
 Serving Collectors Since 1945

©2026 LCC, Inc.

☒ **YES!** Please send me the following:

QTY	DESCRIPTION	PRICE	TOTAL
	3-Coin Collector's Set (<i>limit 4</i>)	\$4.95	
	Display Folder	\$5.95	
1	Wheat Ears Cent		FREE
ORDER MUST BE RECEIVED WITHIN 7 DAYS		Shipping	FREE
		Sales Tax	FREE
TOTAL \$			

☐ Check **Charge:** ☐ VISA ☐ MC ☐ AmEx ☐ Disc

Card #: Exp. Date

 /

[illegible]

Name _____

Address _____ Apt # _____

City _____ State _____ Zip _____

E-Mail _____



Littleton Coin Company **Offer Code: 56B200**
1309 Mt. Eustis Rd Littleton NH 03561-3737



With the stock on, the trigger can be adjusted through a hole in the triggerguard using the provided T-handle Torx wrench. Five settings adjust pull weight between 1¾- to 3¾-pounds.

for the Model 90 Finnlight is a functional work of art that feeds more smoothly than almost all other magazines. The SAKO magazine also has toolless disassembly. Push the rear-most part of the follower down all the way in the magazine, grab the forward portion, lift and twist and the follower and spring pull out the top. Not only does this magazine support effortless feeding, it is also easy to maintain.

The trigger is just as beautifully executed as the magazine. Inserting the SAKO-supplied T-25 Torx wrench through a small hole in the triggerguard allows the shooter to adjust the trigger between five settings, one click at a time. The trigger measured 1¾ pounds at its lightest setting and 3¾ pounds at its heaviest. The let-off was clean with no hint of creep detected.

The stock is polymer with metal flush cups installed at the forend's tip and the buttstock's toe. This allows for conventional sling use, but the stock will still rest solidly on front and rear supports at a bench or in the prone.

Typically retailing between \$2,000 and \$2,400, the 90 Finnlight series is one of the least expensive Model 90s offered by SAKO. These rifles were never meant to compete for the lowest price, though. Instead, what SAKO offers is a thoroughly refined hunting rifle containing every meaningful feature SAKO's engineers could envision for its flagship. That is an impressive list, making the 90 Finnlight an incredible value. 

PERFORMANCE

LOAD	VELOCITY (FPS)	ES	SD	BEST GROUP (IN.)	AVERAGE GROUP (IN.)
Hornady 180-gr. ELD-M	2,856	23	7	.58	.73
Federal 175-gr. ELD-X	2,955	34	14	.66	.78
Hornady 175-gr. ELD-X	2,933	46	16	.71	.78

Notes: Accuracy is the average of five three-shot groups fired at 100 yards from a benchrest. Velocity is the average of 10 shots measured with a Garmin Xero C1 chronograph placed adjacent to the barrel.

HIGH PERFORMANCE FIREARM LUBRICANTS

PROTECT YOUR FIREARMS

Wide operating temperature range
FMO GUN OIL: -5°F to 430°F
SFL GUN GREASE: -50°F to 350°F

Lubricating film remains after being wiped away.

Fortified with extreme pressure and anti-wear additives.

Provides high boundary lubrication film protection.

Includes oxidation inhibitors to prevent gummy.

Anti-corrosion additives protect against rust and corrosion.

CELEBRATING OVER
150 YEARS
OF CONTINUOUS
OPERATIONS



Lubriplate®
FIREARM LUBRICANTS

Newark, NJ 07105 / Toledo, OH 43605 / 800-733-4755
To Order Visit: www.lubriplate.com/falubes Or Scan QR Code



MODERN CARBON RIFLE

DAY 1

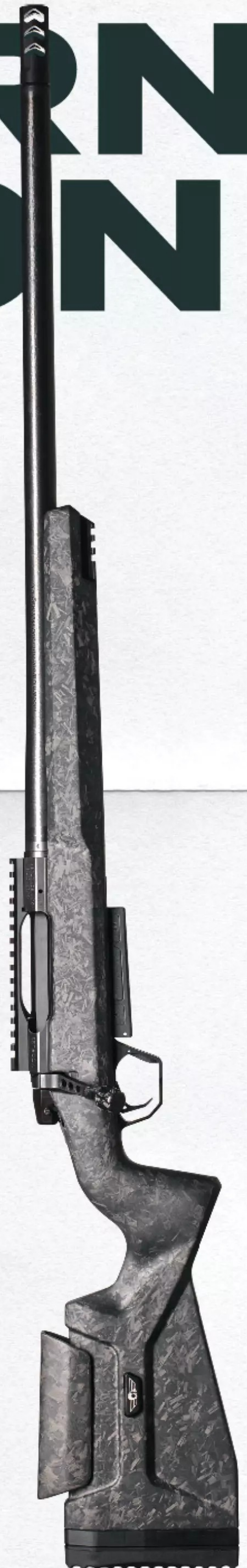
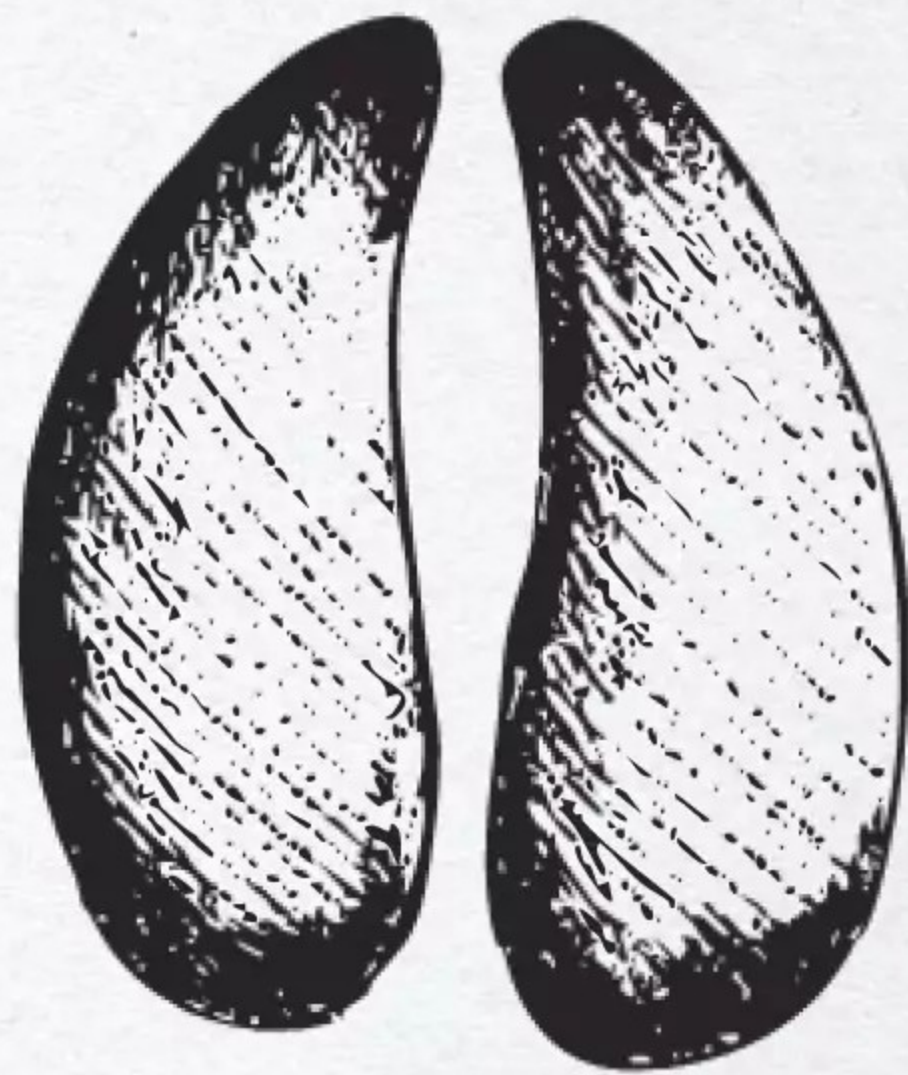
42°46'44.4"N 110°25'55.6"W

Overcast, 28°F, wind from NW

Fresh rub line 200yds above camp

Hit dirt at 0500. Ridge is steeper than mapped. Saw three cows. Bull sign old. Wind swirled hard around noon. Left knee barking as always. Good day to have a good day.

*Roughly
4.75 in*



What do you shoot, and why do you shoot it?

THE RIGHT STUFF

I'VE FOUND myself tinkering more and more with my gun collection. As a southpaw shooter, I have few dedicated left-hand guns. For the most part, I've adapted just fine to using the controls and actions of more common firearms, however, this has changed the more I've explore suppressed ARs and other gas guns. Excess gas from canned guns is a concern for extended shooting, but having my face adjacent to the ejection port on a right-hand-eject AR amplifies the problem. I could simply get a left-hand AR, but I don't want the simple solution because I frequently evaluate parts and suppressors for standard AR-pattern firearms. The goal was to reduce gas to the face as much as possible.

I recently tested new bolt carrier groups in an AR to reduce gas in my face, then an adjustable gas block, a new buffer and spring, and finally a gas-reducing charging handle. Eventually, I replaced everything save the barrel and receivers! I tried shooting a friend's lefty AR and found that I was experiencing significantly less gas in my face compared to my project

ARs FOR HUNTING VS. BOLT-ACTIONS

Bolt guns and AR-pattern rifles offer different advantages for hunters. Choosing which platform is right for you comes down to personal preference, your quarry, and the conditions where you intend to hunt.



PLAINS GAME WINNERS

While there is no single round perfect for all African game, Boddington names a few cartridges ready for plains game.



rifle. It's never fun to find out that you should have chosen the obvious option to begin with, but it made me question why I wanted to lower back-pressure so much. Would I be putting enough rounds through this rifle to benefit from less backpressure? Would it be a field gun or a home defense rifle? I realized that my conundrum was simply an excuse to put together another project rifle. I'm better off with a left-eject AR for defensive use.

The experience reminded me of other times I had to stop and ask myself a similar question before purchasing another gun. What role will it fulfill? Will I use it to shoot long range or short? What's my budget? How

UNDERSTANDING SHOTGUN SHELLS

Don't be confused by numbers and lingo on a box of shotgun shells. Frank Meloni breaks down what they mean.



ANTONIO ACITELLI

often will I actually take it to the range? Will ever need to endure adverse conditions such as rain, snow or dust? Will it be suppressed, and if it's a gas gun will I keep the suppressor on it permanently or occasionally? Luckily, I work with a team of gun-obsessed colleagues loaded with opinions.

For me, Craig Boddington is the be-all and end-all source for rifles and ammunition intended for hunting. He is always happy to share his knowledge and experience with Guns & Ammo's readers. For gunsandammo.com, he's explained the best cartridge and rifle combos for Africa, Alaska, mountain hunting, deer and more.

While Boddington tends to prefer classic bolt-actions for big game, some prefer a modern gas gun thanks to new cartridges such as the .350 Legend. Brad Fitzpatrick shared his thoughts on using ARs versus bolt guns for hunting in a recent story.

Shotguns and shotshells are another topic. The load used greatly affects the performance of a shotgun. Frank Meloni described the differences and considerations in "Understanding Shotgun Shells." There is always something to consider when selecting a gun and load, and Guns & Ammo's staff invites you to let us know what topics we should explore.

Do your guns serve a specific purpose? Are you working on a project? If you're considering a new gun in the future, we'd love to hear about what you look for in a specific firearm. Email us at gaeditor@outdoorsg.com with the subject line "Sound Off." We'd be happy to offer a second opinion. **GA**



SOUND OFF

Respond to articles, find community and join the conversation in the Guns & Ammo forums and by engaging with us on social media:



Guns & Ammo Magazine



@gunsandammomag



@GunsAndAmmoMag



gaeditor@outdoorsg.com



KEITH WOOD

Project Appleseed is sowing seeds of freedom.

SLEEPING PATRIOTS

ON OCTOBER 7, 1777, a single shot set the course of American history. Legend has it that during fierce fighting at the Battle of Saratoga, a rifleman named Timothy Murphy took careful aim at a high-ranking British officer using what many believe was a double-barrel muzzleloading rifle. His third attempt from 300 yards killed General Simon Fraser. Soon after, Murphy took out Sir Francis Clerke, another senior British officer.

Fraser's death led to the surrender of the British troops at Saratoga, which led the French to enter the war as an ally. Four years later, the emboldened patriots defeated their colonial masters at Yorktown. The events that led to victory was influenced by an act of marksmanship from an individual raised on the frontier. A lone rifleman changed the world. Skill with a firearm is part of our nation's heritage, and it continues to help weave the fabric of our freedom. Project Appleseed aims to keep it that way.

Project Appleseed is a nonprofit organization formed in 2006 with a simple, ambitious mission: "Promote the fundamentals of marksmanship while preserving the history that led to our nation's founding."

Appleseed started small, holding weekend-long clinics in a handful of states. Twenty years later, the all-volunteer organization has grown tremendously, training an estimated 250,000 Americans.

Project Appleseed isn't just a shooting course—it is a history lesson. Participants are taught about the sacrifices made by the Founders, particularly those who stood up to the mighty British army at Lexington and Concord on April 19, 1775. Project Appleseed's founder, Jack "Fred" Dailey, believes strongly in the importance of that date. "Why is it that regular Americans, farmers and shopkeepers picked up mus-

kets and took on the British Empire?" he rhetorically asked. "The key element on April 19th was the marksmanship skill exhibited by our forebearers. It was that marksmanship, which was so superior to the British, that pushed them back to Boston."

Project Appleseed operates on the principle that inside every American is a sleeping patriot. By telling the story of April 19, 1775, participants can be inspired to honor that event by carrying on our marksmanship tradition.

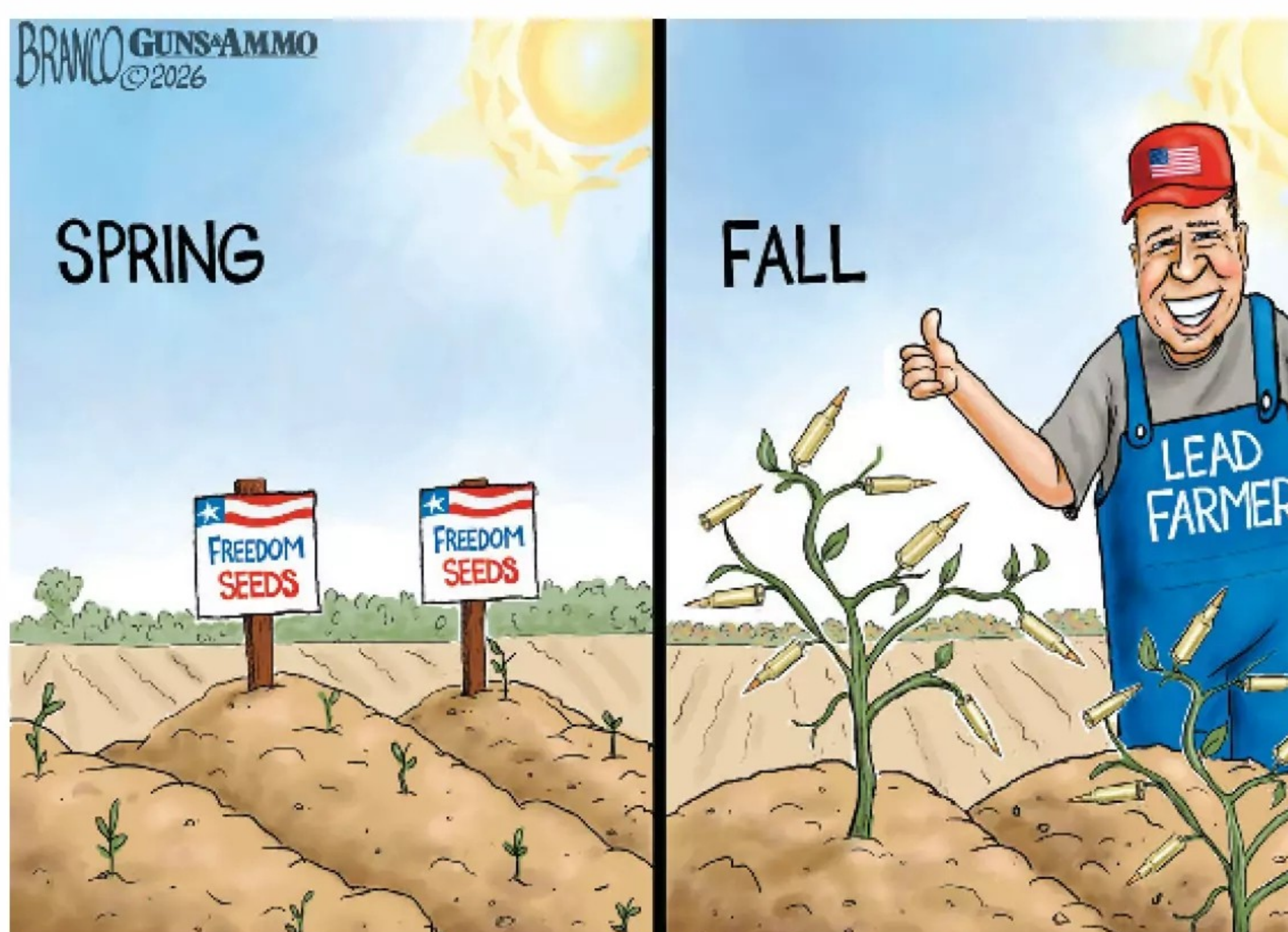
Project Appleseed holds regular events throughout the country, training individuals of all ages and backgrounds to become better shooters. Just as Johnny Appleseed planted

trees, Project Appleseed is sowing patriotism.

The patriots who died on April 19, 1775, ranged in age from 13 to 80 years old. In that spirit, Project Appleseed is open to all age groups. The program isn't just for beginners, in fact many experienced shooters have found value in the program — even members of the military. Project Appleseed has helped train National Guard soldiers before their deployment during the Global War on Terror.

Appleseedinfo.org provides a full schedule as well as tips on how to prepare for a Project Appleseed event. Memberships are also available, and the organization welcomes donations to support the cause.

Most of us agree that the key to the future of firearms rights and traditions is to build our base. The more individuals we can introduce to the shooting sports, the better. Project Appleseed is doing that work and sharing American history along the way. If that's a cause you can get behind, consider joining as a member or attend an event in person. Let's make our forefathers proud. 



FOR MORE INFORMATION:
appleseedinfo.org



RECOIL NOT INCLUDED

RM1C-COMP. Integral compensator for faster, more accurate shots. Optics-ready, flat-face trigger, extra-short reset, ambidextrous controls, match-grade barrel. 15+1 and 17+1. **Swap bounce for bullseyes.**

 **ROST MARTIN**

Kimber®

2K II
TARGET



ALUMINUM GRIP MODULE

TOOLLESS GUIDE ROD

GT MATCH GRADE TRIGGER

EXTERNAL EXTRACTOR

3-4LB PULL

STAN CHEN CUSTOMS® MAGWELL

9MM & 45ACP

DURANGO, CO.
STAN CHEN
CUSTOMS

Height: 5.74"

Weight: 40.9oz | 9mm & 40.1oz | 45ACP (Empty Magazine)

Length: 8.56"

Recoil spring: 10lbs | 9mm & 16lbs | 45ACP

**DESIGNED TO COMPETE
ENGINEERED TO WIN!**

KIMBERAMERICA.COM