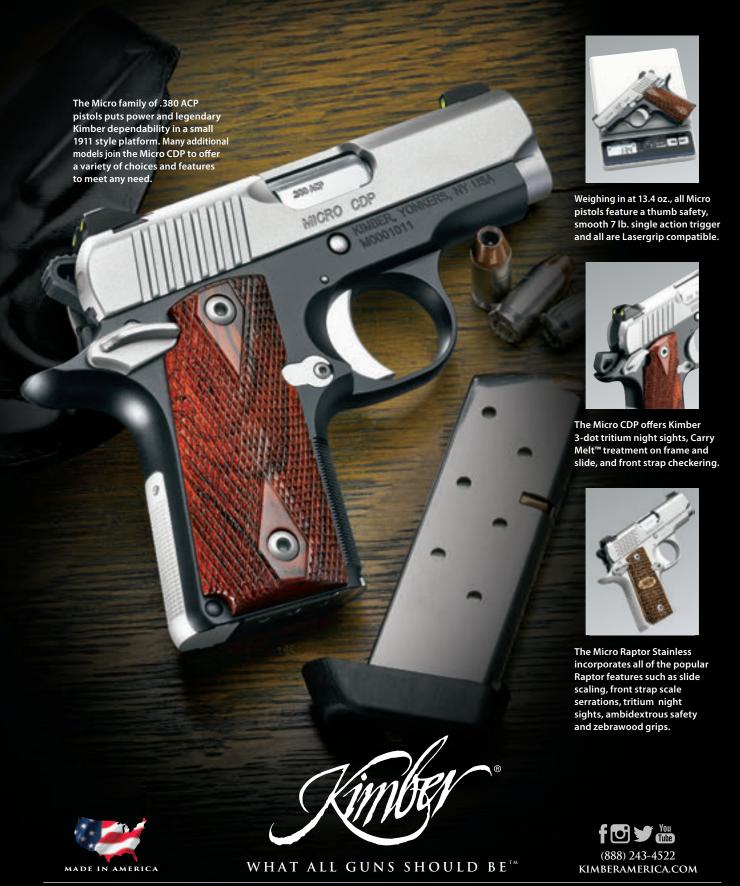




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OCTOBER 2015 LINEUP

INTERMEDIATE SNIPER WEAPONS FOR LAW ENFORCEMENT

Workable Options

What is the ideal weapon for a law enforcement sniper and, since we don't live in an ideal world, how can we get it?

BY NICK PERNA

COVER STORY

LONG RANGE? NO PROBLEM!

Ruger Precision Rifle at FTW Ranch



Loaded with advanced features. this rifle made a great showing over three days in the Texas Hill Country shooting at long range.

BY DENNY HANSEN

PHOTOS BY ROBBIE BARRKMAN



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52 STOP BLAMING THE TRIGGER!
Negligent Discharges
BY PATRICK A. ROGERS

PISTON POWER
Replacing the Div

Replacing the Direct Impingement System BY DAVE MORELLI



64 TEUTONIC TITAN
German MP40

We take a close look at the archetypal German military firearm, a treasured addition to any advanced gun collection. **BY WILL DABBS, M.D.**

70 BEER-BUDGET BLASTER
Century International Arms C15 M4
BY TODD BURGREEN

SURE AND SILENT
SureFire Ryder Sound Suppressor
BY EUGENE NIELSEN

FULL-FEATURED COMPACT
Beretta M92FS Compact

Often a compact handgun has advantages over the full-size version. The differences are in handling, heft and balance.

BY ROBERT CAMPBELL

34 SURVIVAL'S BIG SEVEN

Must-Have Basics
BY RICHARD DUARTE



COLUMNS

6 BRIEFING ROOM

Is Another Buying Panic on the Horizon?
BY DENNY HANSEN

16 STREET SMARTS

Run, Rabbit, Run BY BRENT T. WHEAT

20 AGAINST ALL ODDS

Traditional Skills for the Modern Outdoorsman: Part 2 BY REUBEN BOLIEU

30 ENEMY AT THE GATE

Hate Speech Is Free Speech BY KURT HOFMANN

34 FRONTLINE DEBRIEFS

Why Train?
BY SCOTT REITZ

96 GOOD GUYS WIN!
BY TAMARA KEEL

98 TRAINING AND TACTICS

Fighting Mindset
BY LOUIS AWERBUCK

DEPARTMENTS

8 MAIL ROOM Letters from Our Readers

12 LAWFUL CARRY
Front Line Holsters

BY FLINT HANSEN

36 LONG GUNS
M1D Garand Sniper Rifle
BY LEROY THOMPSON

90 THE CUTTING EDGE
Hutton's Edge Tactical Knife and
Fighting System

BY BOB PILGRIM

92 OFFBEAT

LaserLyte Trigger Tyme Compact Pro Kit BY EUGENE NIELSEN

94 GEAR LOCKER

New Products and Accessories

97 ADVERTISERS' INDEX

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PUBLISHER

Richard J. Lucibella

EDITOR-IN-CHIEF

Denny Hansen

PRODUCTION DIRECTOR

Kathleen Allard

DESIGN DIRECTION

B. Bigler | WestPub Inc.

OPERATIONS MANAGER

Grit Salewski

TACTICAL CONSULTANT

Louis Awerbuck In Memoriam

TRAINING CONSULTANT

Patrick A. Rogers

LAW ENFORCEMENT CONSULTANT

Brent Wheat

FIREARMS DESIGN AND TESTING CONSULTANT

Ashley Emerson, MN

STAFF PHOTOGRAPHERS

Robbie Barrkman Straight 8 Photography

CONTRIBUTING STAFF

Reuben Bolieu, Todd Burgreen, Jeff Hall, Flint Hansen, Ethan Johns, Seth Nadel, Eugene Nielsen, Bob Pilgrim, Rob Pincus, Jeff Randall, Scott Reitz, Clint Smith, Leroy Thompson, Claire Wolfe

CIRCULATION DIRECTOR



ONLINE INFORMATION TECHNOLOGY

Justin Guyett

SOCIAL MEDIA COORDINATOR

Tamara Keel

ADVERTISING SALES REPRESENTATIVE

Billy Rogers

360-244-9185

billy@swatmag.com

BRIEFING ROOM

BY DENNY HANSEN

Is Another Buying Panic on the Horizon?

While still not plentiful, .22 Long Rifle is becoming more available and its cost is finally coming down from the scalper's rates of just a few short years ago. The question is, for how long?

Seeing the writing on the wall, I began buying reloading components and .22 ammo almost a year before the 2008 general election.

At the time, the going rate for Federal .22 Long Rifle 36-grain plated lead hollow points (which shoot and run well in all my rimfire firearms) was between \$16 and \$20 per box of 525. I bought it here and there when I found it on sale. Once, the Cabela's closest to me had it on sale for \$10.80 a box. I bought ten boxes (5,250 rounds) and there were still tens of thousands of rounds left on the aisle cap display.

By the time Obama was elected, I had a bit over 15,000 rounds of .22 Long Rifle ammo. This saw me through the "hard years," when the same box of 525 rounds was selling for \$50 and more.

Lower receivers for AR-15s could still be found at somewhat reasonable prices, but the parts kit to finish assembling them was scarce as hen's teeth and in some locations went for as much as the lower itself.

Once more I did not feel the pain like many folks did, because I have long believed in keeping spare parts for all my "social" guns.

What's my point?

Another general election is on the horizon. The field of conservative candidates—and those who at least do not lean toward the left—is already crowded. As happened in the 2012 elections, they will probably throw so much mud at each other during the debates and the time leading up to the primaries that none of them may appear to be POTUS material.

That may leave some people looking seriously at current frontrunner Hillary Clinton. And whether or not she is ultimately elected, the simple fact that the avowed anti-gun, anti-Constitutionalist candidate is even running may start another buying panic as the election draws closer.

I'm not saying rush out and buy everything you can, but start thinking about buying a bulk pack of .22 and maybe some primers and powder as your budget allows.

You may be glad you did.

Until next time, stay low and watch your back.



SWAT

EDITORIAL INFORMATION

For editorial submissions, press releases or questions, contact the editor at:

denny@swatmag.com

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POCKET CARRY

I enjoyed the *Lawful Carry* column by Paul D'Angelo (*Pocket Carry Realities*, June 2015 *S.W.A.T.*). I became a CCW holder shortly after the CCW law went into effect in my state in 2004. I tried carrying my favorite pistol, the Glock G30, with a Wilderness brand belt. Unfortunately, a rash developed where the buckle from the belt and the holstered pistol were touching my skin, causing me much discomfort.

After a trip to the doctor's office, I discovered I'm allergic to Chromium. I'm sure I'm not the only person with this issue, but sometimes it feels like I am. I believe if there's a will, there's a way. I ordered the Wilderness Frequent Flyer belt with Delrin buckle. I bought an S&W J-Frame and a good pocket holster to mask its silhouette. Last year I decided to update my CCW handgun to a SIG P938. It carries and presents very well for me.

I pocket carry seven days a week, all year round, without any further issues from my allergy. I hope this can help somebody who may have a similar problem.

T. Sanner, Ohio

I am glad you enjoyed my article on pocket carry. Everyone has their particular preferences on what type of gun to carry, and comfort is most important. You're not alone when it comes to skin issues. I have an allergy to nickel. It does not, however, interfere with my concealed carry options. Stay safe and keep on practicing.

Paul D'Angelo

SCOPE SWITCH-UP?

I was rereading the article *DRIVEN PERFORMER* by Todd Burgreen (*Adams Arms C.O.R. Rifle*, May 2015 *S.W.A.T.*). The write-up was good, but it seemed like the author was pushing the

Meopta MepStar R2 1X6 scope. The odd thing is the rifle shown in the article is wearing a Leupold Mark 6 1-6X20mm scope. Maybe he could have included this item in the article?

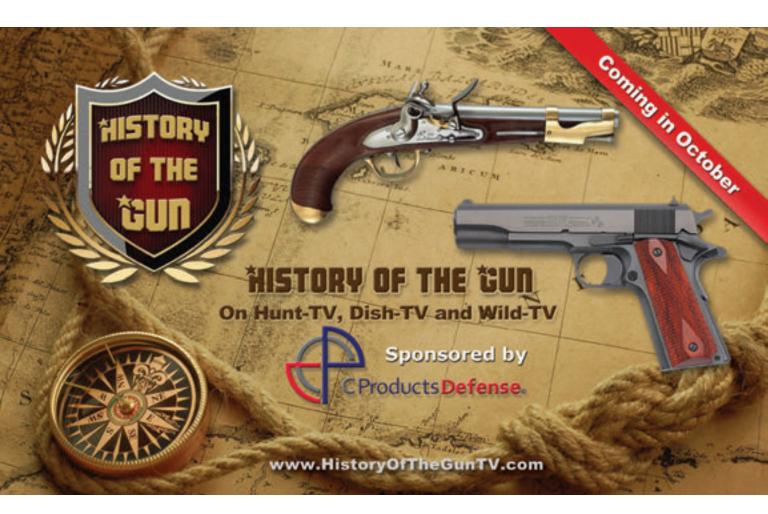
J. Risher, email

Thanks for taking the time to call us on this and allow us to explain. By the time the article was scheduled to run, the loan period for the rifle had expired and Todd had sent it back to Adams Arms. However, we thought it would make a great cover story and ordered a duplicate of the rifle for our photographer. He photographed it with the Leupold scope for the simple reason that he did not have a Meopta scope in-house to use for the photo session.

Denny Hansen

NEW WORD: DISARMIST

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subscriber. Have you ever considered using the term "disarmist" to describe people who want to disarm us? "Ists" are always popular (alarmist, racist, supremacist, Islamist, etc). And disarm fits their philosophy, even though they don't want to admit it.

The advantage of calling someone a disarmist is that they will usually backpedal from the term. It puts them on the defensive—which is where they belong. Just a thought. Thanks.

J. Prun, email

Thanks for the suggestion. This might catch on.

Denny Hansen

MEMORIAM TAG

I received the Louis Awerbuck memoriam tag in the mail today. Thank you so much for that. Last year, my wife and I drove to Scottsdale, Arizona all the way from San Jose, California to attend the celebration of Louis' life. It was well worth the drive. I was impressed by how many people were there. I attended several courses with Louis and Leigh over the years. I learned the most from Louis out of all the instructors

I have trained under. I also felt a kinship with him. I am a police officer in the Bay area, and have applied what I learned from him—and not just in the area of firearms—on the street for the past 15 years.

I will never forget Louis till the day I die. Thank you again!

G. Lee, email

Louis was truly one of a kind. It's been over a year since he passed, but not a day goes by that I don't think of him. I miss him deeply.

While no longer physically with us, Louis will live on through the thousands of people he trained and his words of wisdom here in S.W.A.T. Magazine.

Denny Hansen

THE WHITE COVER

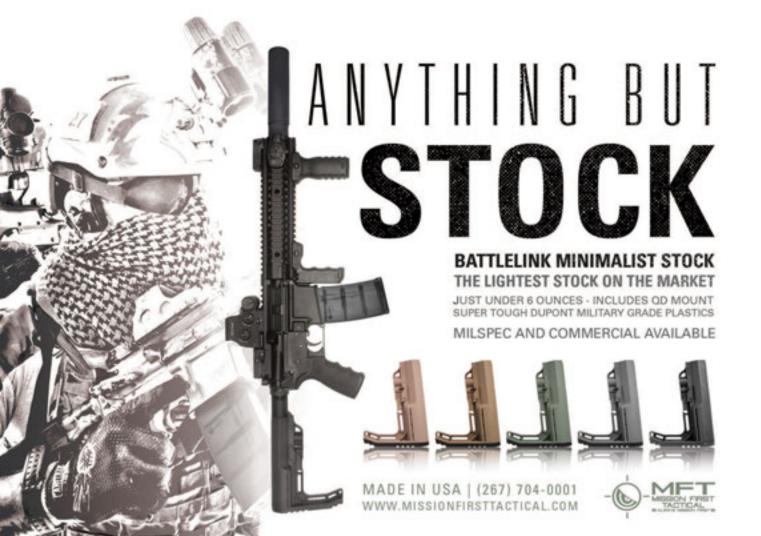
I just received my August issue and wanted to say how much I like the white cover—hey, it worked for the Beatles, right? Seriously, the LWRC rifle seems to jump off the page and is in focus from the tip of the flash hider to the recoil pad on the stock. Major kudos to both the photographer and graphic designer.



Also I like the way you alternate covers between "gun porn" and people shooting them, as it strikes a good balance and shows you have not forgotten your roots.

W. MacLeod, email

Thanks for the kind comments. We try hard to keep our covers as well as the editorial content fresh.



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Front Line Holsters

I have always been a fan of carrying pistols in larger calibers, e.g. .45 ACP. For many years, the only pistol I really wanted to carry was the 1911. And while I still have several 1911s and qualify expert with them, I have recently switched to Springfield .45 XDs. Don't get me wrong—the 1911 will always have a place in my heart, and I will never stop carrying one altogether.

Maybe one of the reasons it took me so long to change to the XD is that I was raised with the 1911. My Dad and Grandpa both carried the 1911 in law enforcement and I even carried Grandpa's Commander when I was starting out. Now it mostly stays in the safe and is shot very little—it has earned a good retirement.

When it came down to it, I crossed over to the XD for a few solid reasons. To begin with, I am just a little faster and more accurate with the XD. That's probably reason enough, but having six more rounds in the gun is also comforting. Finally, the XD is not nearly as finicky when it comes to maintenance.

I have always said that you should

stay with what works. If the XD is good enough to trust my life to on duty, why would I choose a smaller gun in a smaller caliber when I'm off duty? Not to mention that I don't have back-up, a radio, and all the other niceties I have when on duty.

I still have to do my part, but if I'm forced to defend myself or a family member, I want to know that my gun is the best it can be. This all starts before your fight—with the proper mindset, situational awareness, and a good holster.

I recently received two holsters for



Front of KNG70 holster. Holster has nylon shell covered with Kydex. One-way snap to remove holster is visible at lower left.



Belt loops on KNG70 are secured with two screws at the top and a quick-release strap at the bottom.



Leading edge of KNG70 is not covered.

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the XD from Front Line, and the more I evaluated them, the better I liked them. The first holster is the QUAD70C-BK, a very good off-duty concealment-style holster. The body of the holster is leather with an open bottom. The inside has suede leather to protect the gun's finish. At the rear are two tension screws with rubber spacers so you can adjust the amount of tension.

This holster can be worn two different ways, either inside (IWB) or outside the waistband (OWB). On the rear of the holster is a removable paddle for



Paddle device on rear of QUAD70C-BK holster.

OWB wear, and on the front is a removable Kydex[®] belt clip for IWB. Both fit into a leather pocket that is sewn to the body of the holster and held in place by a single screw. Changing from one to the other takes only seconds.

Personally I'm not crazy about paddle holsters, but the fact that it comes with both attachments gives the user options.

The second holster is the KNG70. This is a great range holster and can



Both the clip for carrying IWB and the paddle slide into a pocket, where they are held in place with a single screw.



Front of QUAD70C-BK holster. Both IWB clip and OWB paddle are attached.

also be a good concealment holster if a cover garment is worn. The body of the holster is nylon with a Kydex covering. The only part of the holster not covered by Kydex is the front edge. The bottom of the holster is open.

Two tension screws with rubber spacers are at the rear of the holster. The inside has a fabric that feels like crushed velvet to protect the pistol's finish. The belt loops on the back are attached with two screws at the top of the holster. At the bottom is a strap that runs from back to front and secures with a one-way snap. At the end of the day, you don't have to unthread the belt—just break the snap and pull the holster straight up.

Overall I found these holsters to be

very well thought out and I believe they will stand up to hard use. These are just two of the many different holsters made by Front Line. If these aren't your speed, I'll bet Front Line has another one you'd find to your liking.

Flint Hansen has been with the Maricopa County Sheriff's Office (AZ) for 12 years. He is an NRA and Arizona DPS certified Firearms Instructor. He has written numerous articles for S.W.A.T. in addition to his monthly Lawful Carry column.





A CHARGING HANDLE FOR THE 21ST CENTURY GUNFIGHTER! BCMGUNFIGHTER CHARGING HANDLE

Like everything else in the last 45 years, tactics and weaponry have undergone a continuing evolution. Current CQB techniques have the shooter maintaining a firing grip while using their non dominant hand in the operation of the charging handle for loading or immediate action. This enables the shooter to utilize a faster and more efficient weapon manipulation technique in an effort to bring a hot weapon back into the fight. The drawback of this technique was that the entire operation became contingent on the sheer strength of the tiny roll pin securing the tactical latch.



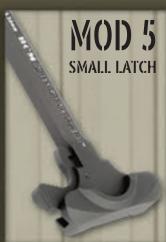


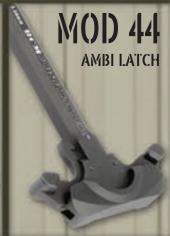
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Run, Rabbit, Run

There you are, steely eyed dealer of death, walking through the doors of your local Stop-N-Rob when you observe some low-life puke holding a gun on the clerk.

Uh-oh. What shall we do?

If you're like me, your first thought would be to immediately "un-ass" the area and place a couple of ZIP codes between yourself and the robbery in progress. Sorry for the clerk and his overall life expectancy rating, but there's no point in two of us getting killed rather than one.

I've often talked of the "scared bunny" defense: scurrying like a frightened little rodent in the opposite direction away from danger. It's a great way to keep you hale and hearty, but it's also one of those things that is easy to explain yet difficult to practice.

In the above scenario, I'm being a tad facetious about fleeing to the next state,

but the point I'm trying to illustrate is the age-old tactical maxim that sometimes a controlled "rearward re-deployment" is the smartest thing you can do for everyone. Therefore, let's have a short discussion concerning the finer points of avoidance in lieu of combat. assault with the subtlety of an elephant stampede. For instance, if you're a cop or in the military, it is your sacred duty to put yourself in harm's way to defeat the bad guys. Even if you haven't taken such a formal oath, I believe most readers of *S.W.A.T.* have enough fortitude, honor,



Avoidance is essentially a tactical art just like shooting, moving, and communicating.

Plunging into the middle of situation where the odds are stacked against you isn't the smartest thing in the world, yet it is done every day all across the country. It might be brave, but it may not be the optimal choice if you want to get maximum value from your lifetime memberships.

That's not to say there aren't times to

character, and backbone to likewise place themselves at risk to help others.

And if the danger is directed at you from the start, you need to respond instantly with all the kindness of a wounded grizzly bear.

However, I merely point out that if you were carefully monitoring your surroundings and embrace the idea of

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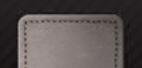


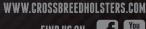
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avoiding and extricating from high-risk situations, there might not be a need to test your stress-shooting and hand-to-hand skills in the first place.

Thus, the "avoidance paradigm" begins well before the trouble itself starts. If you have any level of situational awareness at all, you should see the signs of impending problems and take that opportunity to quickly bid adieu. Though it seems improbable, my experience with literally thousands of crime scenes has shown that people routinely ignore their senses (including the quite accurate "sixth sense") and blindly walk into danger that even

the most clueless person could have seen coming.

Standing in the way of avoidance is a varying combination of our sense of duty, the normal human aversion to changing plans, and a strong delusion that "it won't happen to me, here, to-day." Honestly, it probably won't, but you don't get to pick the moment when calamity does occur. On the other hand, if you aren't present, bad karma will have to look for another victim.

How does this work in practice? Say it's 2200 hours and you need gasoline. You pull into a gas station and a couple of shady characters are loitering outside the front doors. Yes, you are armed, highly trained and willing to engage if necessary. But rather than enjoying the sweet whisper of bullets flying past your head or the refreshing sensation of a knife in your guts, how about staying in your vehicle with the motor running until they leave, or simply going to another gas station? Either way, you will avoid a possible fight, the result of which could be that you end up injured or dead for trying to save three cents a gallon.

Even if an attack has started, any opportunity to disengage and retreat should be taken if realistically possible. What this does is give you options—highly desirable during any emergency.

Using our first example of the store robbery, immediately reversing out of the front door "kill box" gives you options. You might station yourself outside, using a vehicle for cover, and wait for the bad guy to do something stupid like step out the door and try to engage your fixed defensive position.

Or you could drive off the lot and sit across the street, cell phone in hand, to provide responding police with a play-by-play of the action before they arrive. Or depending on your personal morals, you could flee the area and never look back.

Regardless of which tactic you choose, the odds of survival become far greater than if you stand toe-to-toe and draw your gun to find out whose luck and skills are better at that moment in time.

Avoidance is essentially a tactical art just like shooting, moving, and communicating. It is not something to be disdained or looked upon as cowardice. This idea is exceptionally valuable but rarely promoted during training.

That's too bad because, while there are certainly times to hitch up your panties and wade into the fight like a lion, a smart man knows that the scared little rabbit can be a role model too.

Just don't tell anyone your heroes are Thumper and Peter Cottontail.

Brent T. Wheat is a former SWAT officer, canine handler, detective and patrol supervisor who retired after a 30-year law enforcement career in the Midwest. A prolific freelance writer and photographer, he is the publisher of WildIndiana Magazine, a new regionally focused outdoors magazine. He can be reached at btwheat@wildindiana.com



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Traditional Skills for the Modern Outdoorsman: Part 2

IN the September issue, I covered rustic camp living, with open fires for warmth and cooking using minimal but effective tools like the axe and knife. A cook fire is great, but you need a way to get the food to the fire without it falling in or becoming burned beyond recognition.

Many kettles from yesteryear and today have a bail that allows them to be suspended over a fire or coals. Besides a camper taking along a pot-chain with "S" hooks, there are other ways of suspending a kettle or pot over a fire. This type of woodcraft is usually done with a knife and axe, depending on your style and preference.

In order to suspend pots and kettles over the fire, pothooks must be made out of green wood. A plethora of woodcraft techniques can be used to accomplish this. The best resource I have come across is Daniel Beard's *The Book of Camp-Lore and Woodcraft*.

FIXTURES Pot Claw

Arguably the most common fixture for suspending cookware is the pot claw. Using whatever green, stout, flexible wood is available, cut a green stick that has a natural fork or offshoot branch about three inches from the junction, and leave several inches of wood lengthwise to hang. The stick is inverted so it hangs on the waugan (cross) stick. At the opposite end of the stick, carve a V notch into the stick by using a knife to lightly baton an X into the green wood about one inch from the end. Carve out

the top section, down, so that it creates a bird's beak shape that the pot bail will hang from.

Hake

The hake is quite simple. It starts off like the pot claw, with a V-shaped green branch that must be trimmed above the junction and inverted to hang down off the waugan stick. Instead of carving a V notch to support the kettle bail, drive a nail into the bottom part of the stick about one inch from the end and at a 45-degree angle. This is a very simple yet effective way to suspend cookware.

Gil

The most time consuming and possibly the most difficult is the gib. Two separate green branches with a natural fork



Pot hangers all fashioned from green materials on recent bush trip. Left to right: pot claw, gallow crook, the gib, and the hake.



Author used variable-level pot hanger to adjust kettle's level over low flames. To the side are two gallow-crook holders that have been sharpened not only to hold kettles, but also roast sausages. The hake can be seen at far right.



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or offshoot branch must be sized up, then each flat end notched and split so the two ends fit perfectly together, with the forks facing away from each other. This lets one end hang on the waugan stick and the other end hold the kettle. I have used a nail to join the two parts that have been notched and split, but I like the idea of using an awl or nail to burrow a hole through the green wood, then use a stick as a wooden wedge to hold the two pieces together.

Gallow Crook

This type of pot hanger requires very flexible wood, like willow or mountain mahogany. Trim a V-shaped branch just a few inches above the junction, but this time it will serve as the potholder. The top of the green branch must be left long and have a thin taper. The technique is to bend the top portion of the green stick in a circle, interlocking it to itself. The downside of this fixture is that it cannot be removed easily without taking off or lifting the waugan stick.

SHELTER CRAFT

My favorite piece of literature ever written and that I believe captures the essence of wilderness living is *Woodcraft and Camping* by George Sears Washington, known as Nessmuk. He describes the simple construction of what he calls an Indian camp.



Cooking Range aka Hunter's Fire.
Section has been flattened for resting smaller cookware. Split and lashing technique has been used on flat post rather than procuring another Y-forked branch.

A-Frame Brush Shelter

The shelter depicted in his story is an A-frame brush shelter that uses the bushiest possible branches. Starting with a 10- to 12-foot ridgepole (no thicker than your wrist), sharpen one end slightly and jam it into the ground, and the other end into the rough bark of a scraggly tree. Using a variety of different-sized sticks, construct the ribs with dry sticks found on the forest floor and build up the sides until the structure roughly resembles a dinosaur skeleton.

Then with a small tomahawk, hatchet, machete or saw, harvest boughs from trees that provide large surface area coverage. Pine may be abundant in most places, and spruce, fir, or hemlock if you are in the northern forests. When any of these types of branches are turned over, they have the ability to shed water and snow and deflect wind. Starting at the bottom or foot, lay the smallest boughs at a steep angle and shingle them onto your ridgepole, moving the thatching upward. This makes a sort of bear den, very well calculated to give you a comfortable night's rest.

Using pinecones (if available), fill the interior of the shelter with pine straw, cones or boughs from trees. It must be two to three feet high so when compressed, it equals at least six inches of loft. This is vital to insulate the body from heat loss through to the ground, which is called conduction.

Lean-To Shelter

Another popular traditional shelter is the open-faced lean-to shelter. It is perhaps the most commonly made natural shelter used around the world that utilizes an open fire in front of the structure to provide warmth and protection.

It consists of a ridgepole about eight feet long and no larger than wrist thickness in diameter. Lash the ridgepole between two trees or place it in the crotches of two Y-shaped trees, about shoulder or chest high. Eight to ten poles, no thicker than your wrist and six



During Randall's Adventure & Training survival class, author constructed an Indian camp as described in Nessmuk's book Woodcraft and Camping.

In survival class, students were taught how to make a lean-to shelter out of natural materials. Open-face shelter of a lean-to is preferred shelter of most woodcrafters for its simplicity and benefit from the open fire.

2.2.

to eight feet long, should be laid across the ridgepole at a 45-degree angle.

Gather smaller, thinner sticks and weave them in between the diagonal poles to complete the framework for the lean-to. Thatch the framework with boughs starting at the bottom, and shingle the structure so no light can be seen from the inside.

The last step is to pile up enough brush so there are at least six inches of compressed loft. Depending on your weight, this can mean anywhere from two to three feet of branches or pine straw to start with.

Now all that is needed is a long fire about five feet long positioned one good step in front of the lean-to. Use hardwoods such as oak, maple, sweetgum, or hickory because they put out the most BTUs and the least amount of embers will shoot back at you when you are sleeping. Soft wood like pine, alder, willow, hemlock, and birch are great for getting the fire stated, but are like the fourth of July when you're trying to sleep.

Nessmuk wrote about an Indian camp: "Ten o'clock comes. The time has not passed tediously. You are warm, dry and well fed. Your old friends, the owls, come near the fire-light and salute you with their strange wild notes; a distant fox sets up for himself with his odd, barking cry and you turn in. Not ready to sleep just yet. But you drop off; and it is two bells in the morning watch when you waken with a sense of chill and darkness. The fire has burned low, and snow is falling. The owls have left, and a deep silence broods over the cold, still forest. You rouse the fire.... The smoke curls lazily upward; the fire makes you warm and drowsy, and again you lie down-to again awaken with a sense of chilliness-to find the fire burned low, and daylight breaking. You have slept better than you would in your own room at home. You have slept in an Indian camp." (1)

Reuben Bolieu is an adventurer, writer, photographer, and survival instructor for Randall's Adventure & Training. He has spent most of his life hiking and backpacking through the wildernesses of the world, from the cold of Alaska to the desert heat of Egypt to the humid conditions of Southeast Asia and South America. A lifetime student of survival, he has studied primitive survival techniques from all over the world.



INTERMEDIATE

SNIPER WEAPONS

FOR

LAW ENFORCEMENT



BY NICK PERNA

Above: SWAT officer/sniper uses Leupold system on his M4 during tactical firearms training.

Right: M4 with Leupold 1-4X variable optic.

24

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omparisons are often drawn between law enforcement (LE) and military snipers. LE snipers deal with significantly shorter ranges compared to their military counterparts. Although trained to do rural operations, most LE sniper ops are urban in nature.

LE snipers operate almost exclusively with their tactical entry teams directly supporting them. Military snipers will often conduct standalone missions seeking out particular targets or focusing on known enemy areas of concentration. Furthermore, not all LE snipers are dedicated solely to that role. Many pull double duty as entry team members and only as snipers when the mission dictates. Not an ideal situation, but with smaller departments and limited budgets, it's often a necessity.

A strong argument can be made for separate teams of entry team members and snipers, but if the money and manpower aren't there, it simply isn't

going to happen. I'm not saying military snipers don't fulfill various roles, but generally other tasks are an offshoot of their long-gun job, such as reconnaissance and overwatch.

The limited engagement ranges and multitasking of LE snipers are reflected in the weapons they use. The ideal weapon for an LE sniper is a gun that can double as an entry weapon as well as a long-range engagement weapon and have the optics and other accessories to accomplish this. This is where things can get difficult.

.308 AR IN MULTIPLE ROLES

An ideal platform would most likely be a .308 AR. The .308 round has proven to be successful at long ranges and has been the primary sniping round for many years. The .308 is a good barrier penetrating round when using TAP ammo and is effective on windshields (or as effective as a round can be given the unpredictable nature of bullets when they hit tempered automobile glass). By sheer size and bullet weight, it is superior to .223 in that regard.

A few issues with using a .308 AR as

a multi-role platform in LE operations exist. First, interoperability. Most teams use .223 ARs and M4s for entry weapons. On a bad tactical day when a .308 operator runs low on ammo in a protracted gunfight, he can't use ammo from any of the .223 gunners. Albeit an unlikely occurrence, but it is still a tactical concern.

The second issue is price. Quality .308 ARs are expensive—anywhere from \$3,000 to \$8,000. This doesn't include items like scopes, bipods, and other sniper gear. These price tags are out of reach of most agencies.

THE OPTICS ISSUE

Another issue related to .308 ARs is optics. To maximize the potential of the round, most are equipped with highpower scopes. An ideal sniper optic makes a lousy entry optic and vice versa. A 3-12X scope is pretty much useless when clearing rooms, even on the lowest setting.

Optics are available that can mount on top of scopes, but there can be a significant offset from where the optic is mounted and where the bullet exits the



barrel. This offset can be three inches or more. On the flip side, a non-magnified red dot optic doesn't do a sniper much good at distance.

Enter the multi-power red dot scope. These scopes are often in the 1-4 or 1-6 category. These optics allow operators to put it on a low power setting while conducting a tactical entry and to crank it up for scouting or sniping missions.

As with everything, there are draw-backs. A 4 or even 6X scope doesn't provide the same level of clarity or detail as a 12X or higher. This can be important during scouting operations, when more detail is necessary. Conversely, some

optics' lowest settings are actually 1.25 or 1.5X, making it slightly slower to engage targets.

The tactical team I currently serve on has our snipers in dual roles (entry team members and snipers). We have traditionally used only Remington 700s as our primary sniping gun. When we put on our "entry hats," we use M4s with standard optics like EOTechs and Aimpoint PROs, both unmagnified. Both are good weapons, but both fill specific roles and can't be used interchangeably (try clearing a house with a bolt-action rifle with a 24-inch barrel).



IN-BETWEEN SOLUTION

As an in-between solution, we purchased Leupold 1.25-4X scopes with the FireDot reticle. We have mounted these on our M4s, which has given us the ability to use the weapon for entries when set on 1.25X and for sniper and perimeter missions when set at 4X. Granted the 4X is a little anemic when doing sniper-related scouting, but it is good enough for ad-hoc sniper missions, especially when paired with a good set of binoculars.

To further enhance the functionality, we used American Defense Recon quick-release mounts. If the operator chooses not to use the optic, he can remove it and use iron sights or mount an Aimpoint PRO, which has a built-in quick release. American Defense guarantees the scope will return to zero when remounted. We've tested these mounts by shooting with them, taking them off, remounting them, and shooting again. The mount maintained its zero with no notable shift at 25 yards. Given that we're not taking 1,000-yard shots, I feel comfortable with that.

This is in many ways similar to the United States Army's Designated Marksman Program. DMs receive special training at the Army Marksmanship unit at Fort Benning in extended engagements. They may receive an accurized M4 or other weapon with enhanced (magnified) optics. Their purpose is to fill the gap between infantrymen and snipers dealing with threats beyond the range of traditional weapons operated by soldiers who lack specialized training.

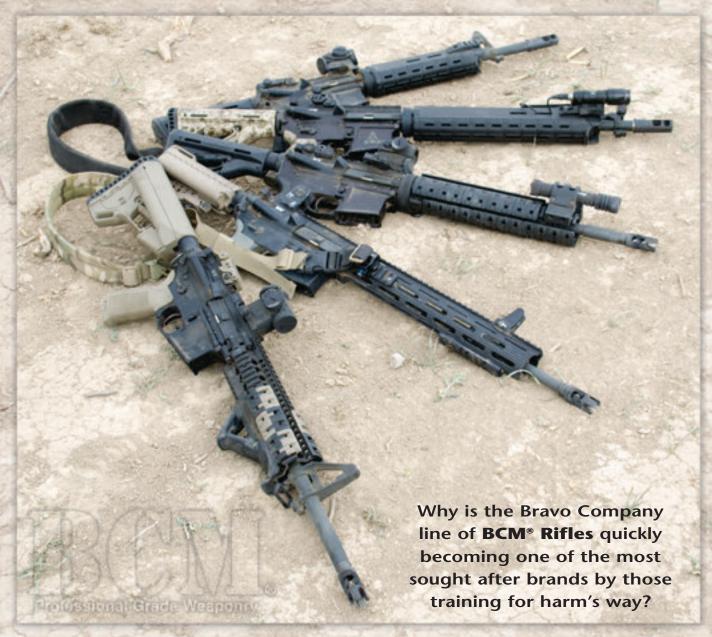
MULTIPURPOSE OPTICS

A lot of really good multipurpose optics exist today. Companies such as Vortex, Trijicon and others make excellent optics that serve as both red dot optics and scopes. You pay more for a true 1X, but the complete lack of magnification makes it easier to acquire targets. That being said, with a little training, an operator can pick up close targets about as quickly with a 1.5X.

If we deploy on a dedicated sniper mission, we still use the Remington 700s with a Leupold 3-12X. We recently acquired Nightforce 3-22X scopes for added magnification. Snipers generally deploy as teams, one with a 700 and the other with an M4 with its variable red dot optic.

I'm the first to admit the "golf bag"

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Group at 100 yards with M4 with optic set on 4X.



Group at 100 yards with Remington 700 on 12X.

approach isn't always ideal (one gun for getting off the green, another for putting). It would be better if one gun could fit every mission.

Arguably, a .308 AR comes pretty close to being a multi-role gun (except for the aforementioned ammunition/cost issues), especially with multiple optics with quick attach/detach capability like a high-power long-range

scope, 1-6X optic and pure red dot sight. But unless you are assigned to SEAL Team 6, this probably won't be part of your kit.

I conducted a comparison of my Remington 700 and my M4 with variable optic. I did a rapid fire drill at 50 yards, which I chose because it's a typical LE long-gun engagement range. Obviously the .308 on 12X shot tighter

groups, but the M4 on 4X definitely held its own.

CONCLUSION

No weapon works perfectly in every situation. What we carry is dictated by everything from the mission at hand to the amount of money available to buy what we need. In the case of the .223 AR with variable optic, it comes pretty close to meeting most requirements for LE long-gun applications.
①

Nick Perna is a sergeant with the Redwood City Police Department in northern California. He has spent much of his career as a gang and narcotics investigator, has been a member of a multi-jurisdictional SWAT team since 2001, and is currently a team leader. He previously served as a paratrooper in the U.S. Army and is a veteran of Operation Iraqi Freedom. He has a Master's Degree from the University of San Francisco.





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Hate Speech Is Free Speech

A poll conducted by YouGov in May found that 41% of Americans and 51% of Democrats favor outlawing public speech that would "stir up hatred" against certain groups of people. The idea was opposed by 37% of Americans in general and 26% of Democrats. That's right—the majority (by a nearly two-to-one margin) of Democrats surveyed want people who say unpleasant things about others to be forcibly apprehended by armed government enforcers and imprisoned.

This poll came right on the heels of an attack by two Islamic extremists on a Prophet Mohammed cartoon contest in Garland, Texas. Both jihadis, equipped with body armor and armed with semi-automatic detachable magazine-fed rifles—the dreaded "assault weapons"—were killed by one cop with a handgun (and apparently nerves of steel) before they could manage anything more than shooting one unarmed infidel security guard in the ankle.

That incident prompted CNN anchor Chris Cuomo to announce on Twitter that "hate speech" is excluded from Constitutional protection, and urged us not to just say that we love the Constitution, but to read it, too.

By that, he must mean we should read his version of the Constitution the one that says "hate speech" is not protected free speech—because that provision is notably absent from the original version. A journalist who wants free speech limited! The watchdog media ain't what it used to be....

Fox News commentator Megyn Kelly covered this and other media condemnation—condemnation not of the attempted massacre, but of the cartoon contest. In that segment, she asked UCLA Constitutional law Professor Eugene Volokh if cartoons that offend the Muslim community are Constitutionally protected free speech. Volokh made it quite clear that not only is such speech indeed protected by the First Amendment, but it also has real value—value in large part specifically because it offends, and provokes some to call for banning it.

The value of such speech, offensive as it may be, lies in the fact that it is an act of defiance against those who demand we sacrifice our right to say whatever we wish and offend whomever we wish. Free speech protection that protects only inoffensive speech would be worthless, because speech that offends no one (if there is any such speech) needs no such protection.

Furthermore, since any political or social commentary of significance is going to offend someone, one could argue that offensive speech is the only speech with real social value.

Right after the First Amendment comes another that also draws a great many calls from self-styled "progressives" and many of the same media talking heads for new limitations on it. A few favorite targets of these advocates of infringements on that which shall not be infringed are "assault weapons," the "high-capacity" magazines that feed them, and .50-caliber rifles.

Such arms are too powerful for private citizens, we are told, and allow one to kill too many, too easily, too quickly. They are, in other words, too effective in a conflict situation. We don't "need" such firearms for hunting deer, they tell us, as if hunting were the only legitimate use for firearms.

That thinking ignores the fact that the security of a free state will never be threatened by deer or other game animals. That threat will come in the form of foreign invaders or of our own government after it finishes the job of completely slipping the leash of the Constitutional limits on its power.

When that happens, the American people will need these "weapons of war," as their detractors call them, because fighting a war is precisely what will be needed to preserve liberty. The weapons' offensive capabilities, which the gun ban zealots claim are the rea-



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son the guns need to be banned, are the very capabilities that will make them vital for going on the offensive against a government gone rogue.

Vice President Biden's beloved double-barrel shotguns, which he and other Dems have promised will never be banned, would of course be better than nothing in a fight with the government's oath-breaking hired muscle, but that would not be a fight anyone would relish.

So just as inoffensive speech neither needs Constitutional protection nor is likely to advance society in any useful direction, firearms not suited for conflict are both unlikely to need the protection of the Second Amendment and unlikely to be of much utility to a people fighting for their freedom.

It should surprise no one that there is a great deal of overlap between those who advocate restrictive limits on speech and those who similarly want private citizens' access to useful firepower curtailed. Both limits serve the same purpose. Both foster a meek, compliant populace that not only cannot resist government's excesses but can hardly even imagine doing so.

Defending the right of the Westboro Baptist Church to spew their hateful filth, or the Klan to spew theirs, is not to defend the vileness of their messages. Similarly, defending the right of the people to own powerful firearms is not to defend the use of such firearms for slaughtering schoolchildren.

The expression "freedom isn't free" is more than the trite bumper sticker slogan it became when the merits of invading Iraq were being hotly debated. Freedom does indeed have its costs. The cost of not paying that price, though, is more than any American should be willing to spend.

To paraphrase an old saying for children, "Sticks and stones may break a tyrant's hired muscles' bones, but an AR-15 is a lot more effective, and words, if they're harsh enough, might goad him into making his evil apparent to even the most blindly oblivious."

Catchy, eh? (10)

A former paratrooper, Kurt Hofmann was paralyzed in a car accident in 2002. The helplessness inherent to confinement to a wheelchair prompted him to explore armed self-defense, only to discover that Illinois denied that right. This inspired him to become active in gun rights advocacy.



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Why Train?

I magine all those who have wished they had trained harder just before everything was taken from them. When the moment of truth comes, it will probably be unexpected, fast, and with little or no warning.

Police work is dangerous. This is precisely why it is police work. It exists to deal with those who are unreasonable at times, and this comes at a price. More than a few police officers have stated to me, "If the department wants me trained, they can pay for it!" This is a fair enough statement and I wish them luck, but it is far from practical.

Most police departments train to a certain standard of performance and no more. Most qualification courses remain the same year in and year out and will remain so decade after decade. Part of this is due to fiduciary concerns, part due to manpower needs, and part

due to the fact that "this is the way it has always been done."

Bad guys do not have a level of performance to which they train. But they do have one massive advantage: they set the time, the location and the event's initiation. No one can accurately predict when, where or under what circumstances this will be. Nobody.

one has experienced before, again and again *ad nauseam*. It means that you might perhaps grasp a somewhat literate comprehension of the English language and can follow simple instructions. That's all.

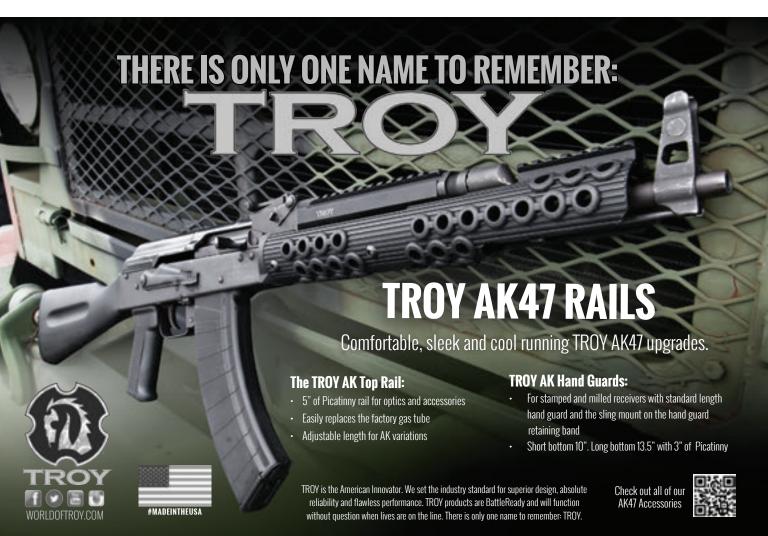
It does not mean you can solve complex and fluid problems in fast-evolving situations. It does not prepare you for



Checking off a box that says "Qualified" or even "Combat Qualified" means little to those who will oppose you. If the course of fire remains the same, one is simply repeating what

what might be taken from you or given to you at any specific moment when your life is on the line. Only advanced training can accomplish this.

LAPD SWAT had two individuals



who sought out additional training on their own and, by their efforts, the unit's proficiency greatly improved and eventually became a worldwide role model. They did this on their own just as I did when I joined D Platoon. Were it not for the efforts of these two men and the subsequent training, which I undertook at my own expense, time and travel, I would probably not be writing this.

Officers ask if such and such a class is POST certified. Some will not attend because POST will not reimburse them even if the school trains far and above the level POST deems adequate. The same officer might expend considerable sums on powerboats, motorcycles, or other such items without a second thought. But to spend funds for an intangible skill that might well save his life or avoid a bad shooting is simply out of the question.

I have watched officers argue over a single round that barely broke paper which, if not counted as a hit, would disqualify them. In the field, this round would count for absolutely nothing.

Such an argument borders on delusional insanity, and the streets will always be more than truthful—on that you can be sure. As I have stated in the past, the city may not pay for your training, but they will pay for your autopsy.

If you worry about your performance in the field, perhaps you should train. The training should be common sense, absent the smoke and mirrors and bells and whistles so prevalent these days. It should have a solid basis in reality and you should learn workable skills that can be called upon when you need them the most. The training should come from those who know and have experienced precisely what they are training, and within a verifiable format.

One does not have to have been in a deadly force encounter, but having experienced the tactics and problems of the streets over a protracted period of time is a definite prerequisite for any instructor in such a critical area.

"Intangible skills" only seem intangible until they are called upon.

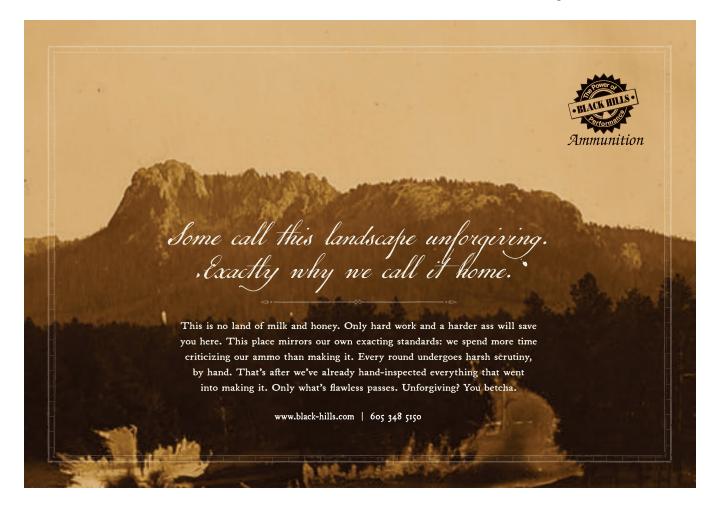
Pilots continually undergo intensive simulator training that can far exceed the demands they have experienced in actual flights. There is a reason for this. Taking off and landing are standard procedures. Overcoming in-flight critical issues when seconds count is entirely another matter. None of us would board a flight if all the pilot was able to accomplish were a safe takeoff and landing when all conditions were peachy-keen. I want the pilot who can overcome engine failures, control systems malfunctions, and flight surface degradation. I want the individual at the controls to be composed and skilled enough that he can properly and accurately address such issues if it all goes south. I'd like him to be highly trained. I'd like to land safely.

Deadly force is every bit of this and more.

If you want to prevail, if you want to return home, and if you want to retire someday, additional training should be high on your priority list.

You, your family, and your partners can only benefit from solid and practical advanced training.

Scott Reitz is a 30-year veteran of the Los Angeles Police Department and director of the highly acclaimed International Tactical Training Seminars. Course information and schedules are available at their website at www.internationaltactical.com. Looking Back, a free monthly newsletter, is available by email at itts@gte.net.



M1D Garand Sniper Rifle

Today's use by U.S. armed forces of highly accurate semi-auto sniping rifles such as the M110 SASS or the SR-25/Mk 11 Mod 0 is considered a tactical advantage. These rifles are so accurate that shots may be placed with precision that rivals bolt-action 7.62x51mm sniping rifles.

During World War II, the general issue of the semiautomatic M1 rifle (Garand) presented problems for development of a sniping rifle based on this system. One major problem was that positioning a scope above the bore would preclude using the Garand's eight-round clips. For much of

WWII, the solution was to use bolt-action sniping rifles based on the M1903 Springfield, including the 03A4.

But on 27 July 1944, a sniping version of the M1 designated M1C was adopted. To allow use of the eight-round clips, a mount designed by Griffin & Howe, which positioned the scope on the left of the receiver, was employed. The scope adopted was the Lyman Alaskan in two versions: M81 with crosshair reticle and M82 with tapered post reticle. Frankford Arsenal studies determined that the tapered post proved more effective with most shooters.

These rifles were equipped with the

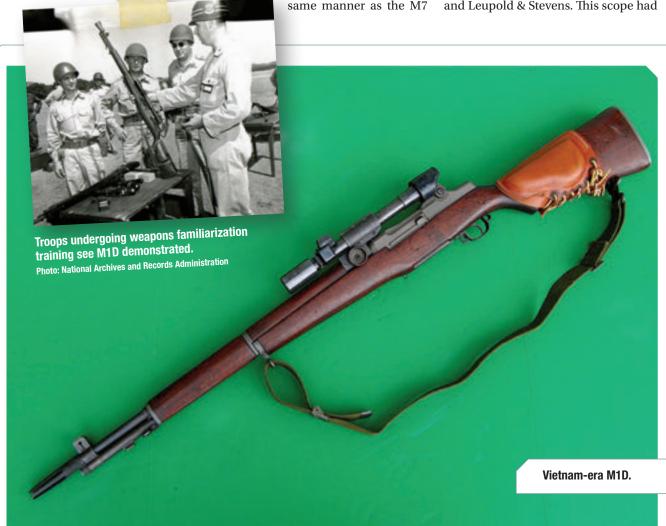
M2 conical flash suppressor, which attached in the same manner as the M7

grenade launcher. Many marksmen did not use this flash hider, as they found the mounting method adversely affected accuracy. To properly position the shooter's eye for the offset scope, a T4 leather cheek pad was fitted.

By the end of WWII, 7,971 M1C sniper's rifles had been produced, though they saw little use before the end of the war. The M1C was used during the Korean War along with the M1903A4.

Another sniping version of the M1 was the M1D, which used a different mount designed by John Garand. The mount fit directly onto a Garand barrel rather than on the rifle's receiver.

The scope was the M84 2.2X, which was produced by Libby-Owens-Ford and Leupold & Stevens. This scope had





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originally been built for the Springfield M1903A4 sniping rifle. The military bid specs reportedly called for a 27-foot field of view at 100 yards, which limited the magnification.

M1D rifles were also fitted with the M2 flash suppressor and T4 cheek pad. The M1D was adopted in September 1944 as substitute standard, but none were produced during WWII.

In December 1951, 14,325 rifles were requisitioned for conversion to M1Ds. Springfield Armory produced enough of the special M1D barrels from 1951 to 1953 to meet the demand for these conversions plus possible future conversions. The barrels were not special match barrels, but standard Garand barrels.

Many M1Ds were used in Vietnam, though often with the T37 pronged flash suppressor rather than the conical one. Many of these M1Ds saw service with Special Forces and Vietnamese troops operating with SF. The USMC also used M1D rifles in Vietnam, in at least some cases accurized by Marine armorers. Normally, match ammo was not available to troops using the M1D, so they used the heavier AP loads, which stabilized better and hence were more accurate.

The side-mounted scope also cre-

ates a parallax problem. If the scope is zeroed at 100 yards, it will shoot quite a bit to the right at 200 yards and even more at 300 yards. Zeroing at 200 yards is another option. The side-mounted scope does allow the iron sights to be used. Normally if they are zeroed at 25 yards, then elevation is raised one click, the rifle can be used relatively well between 0 and 400 yards. If the M84 scope is zeroed at 200 yards, shooting groups

should give some idea of windage adjustments at various ranges.

While working on a book about the M1 Garand a couple of years ago, I shot an M1D for the first time. I was most interested in evaluating its ergonomics and seeing how difficult it was to use the offset scope. I had some non-corrosive .30-06 ammo I had gotten from the CMP, already in eight-round clips, and used it for the testing. As I remember,



View from rear of offset scope, which allowed M1D to still be loaded with eight-round clips.











it was standard M2 150-grain ball from the early 1950s.

I have to admit that I am spoiled by modern scopes with options such as Leupold's BDC (Bullet Drop Compensation) dials that let me zero at 100 and just turn the elevation dial to the distance at which I want to shoot (e.g., "3" for 300 yards).

I zeroed the M84 scope at 200 yards—with some effort, I might add. I then fired multiple three- and five-shot groups. My best three-shot group at 200 yards fired from a rest was 5.75 inches. Most were closer to seven inches, plus or minus—more plus. I did manage one five-shot group that was seven inches. I was not using match or even AP ammo. I also tried shooting using the iron sights and actually did almost as well.

As I said, I was mostly shooting the M1D so I'd have some idea what the infantryman in Korea or Vietnam would have experienced when using it. First, the leather cheek pad is definitely needed to get a cheek weld that lets the shooter use the offset scope. The self-loading action would have been a boon, as it allowed a quick follow-up shot to adjust point of aim, especially if a spotter with more magnification were assisting.

On the other hand, recoil with the Garand is noticeable enough that it took me an instant to reac-



Right side view of cheek pad designed to position shooter's eye for use of offset scope on M1D.

quire my target after each shot, especially with the rather fine crosshairs of the M84. I know there were troops who did good work with the M1D in Korea and Vietnam. I would have to grant that they were better shooters than I am.

My own view is that the M1D is, being generous, a DMR (Designated Marksman Rifle). It is not a true precision sniping rifle capable of long-range kills. It would have been most effective when used from a concealed position at relatively short ranges, say under 300 yards.

Still, it is a very interesting U.S. mili-

tary collectible firearm. Any Garand or U.S. sniping rifle collection needs one. And if you get a chance to shoot one, definitely do so.

Leroy Thompson has trained hostage rescue, close protection, counterinsurgency, and anti-terrorist units in various parts of the world. Prior to Operation Desert Shield, he trained U.S. Army protective teams and hostage rescue units. He is the author of over 50 books on weapons and tactics and somewhere between 2,500 and 3,000 magazine articles.

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LONG RANGE?

NO PROBLEM!



Ruger Precision Rifle at FTW Ranch

BY DENNY HANSEN

PHOTOS BY ROBBIE BARRKMAN



RUGER

long with a few other "gun writers" and industry members, I recently attended a three-day long-range shooting course at the FTW Ranch near Barksdale, Texas. The purpose was to get some hands-on experience with the recently released Ruger Precision Rifle.

THE FACILITY

If it's true that a journey begins with the first step, then FTW Ranch is not a location—it's a destination. The FTW Ranch encompasses 12,000 acres of rugged hills and valleys in the southwestern region of the Texas Hill Country. This is the main "classroom" where FTW conducts its SAAM (Sportsman's All-Weather All-Terrain Marksmanship) Training courses.

The ranch has numerous ranges (21, to be exact) located throughout the property, most of which are covered and include life-size static and animated plains game, mountain species, and dangerous game targets. Some targets are as close as 10 to 100 yards, and the "Precision" on the ranges goes from 100 to 700 for hunter training. The military ranges go far beyond that, from 1,000 yards out as far as 2,300 yards.



RUGER PRECISION RIFLE

The SAAM program at the ranch focuses on reasonable shooting distances, with a great deal of emphasis on ethical hunter shots, not long-range killing, which they preach against. Since we were testing long-range precision rifles, we shot a great deal at extreme distances using many of the military ranges.

The ranch's lodge is an 8,000-squarefoot building that includes a lounge and dining area whose walls are adorned with trophies of animals from all over the world. It is a most impressive collection!

A separate modern classroom within the main lodge includes a state-of-theart video system including an 80-inch LED HDTV. Students and guests are housed in well-appointed private cabins. This was my second time at FTW and, while I would not have thought it possible on my first trip, FTW has made improvements that included adding additional ranges and cabins.

CLASS BEGINS

On the first morning, Tim Fallon, founder and owner of FTW, greeted us in the classroom. Tim introduced our lead instructors, Doug Prichard and Larry Summerfield, both of whom are former Navy SEALs and experts at their trade.

Doug passed out SAAM manuals and briefly discussed the difference between Milliradian (Mil Rad) and Minute of Angle (MOA) reticles, and first and second plane scopes. Most of the students were more familiar with MOA than Mil Rad, but since we would be using scopes with a mildot reticle, understanding the difference was important (one MOA equals one inch at 100 yards, and a Mil Rad covers 3.6 inches at 100 yards).

Ruger's Director of Product Management Mark Gurney thanked everyone for coming and talked briefly about the Ruger Precision Rifle. He introduced Jonathan Mather, who was instrumental in the design of the Ruger Precision Rifle and spoke at length about its features.

RUGER PRECISION RIFLE

Though its action is based on the Ruger American rifle, the Ruger Precision Rifle is unlike anything Ruger has made in the past. It features a 70-degree bolt lift with dual cocking cams and a large-diameter one-piece bolt.

An oversized bolt handle makes manipulation sure and quick. The bottom of the bolt handle will accept ¼-inch drive screwdriver bits and the bolt can be used as a wrench. Actually pretty ingenious....

A shroud covers the rear of the bolt, and a space machined into the bolt contains a disassembly tool and an Allen wrench to adjust the Ruger Marksman trigger. Incidentally, this same Allen wrench fits the zero return screws on most scopes. The trigger itself is adjustable from 2.25 to 5.0 pounds.

Unlike AR-type rifles, the upper receiver has the serial number and is CNC machined from pre-hardened 4140 Chrome/Moly steel alloy. The receiver has a 20 MOA Picatinny rail for increased long-range potential and is secured with four #8-40 screws.



One-piece bolt has a 70-degree bolt lift with dual cocking cams and oversized bolt handle. Bottom of bolt handle accepts ¼-inch drive screwdriver bits, and bolt can be used as a wrench (right). Very innovative!





Stock is fully adjustable for length of pull and height at comb.

Right: Folding stock snapped into open position without any wobble or play.

The lower receiver is very unique in that it is actually two machined halves made from 7075-T6 aluminum with Type III hard-coat anodizing. The reason the lower is made in two halves is to accommodate the patent-pending Universal Magazine Latch mechanism. Those who like to second guess manufacturers and say, "They should have made it to fit 'X' magazine" will be quickly silenced.

The magazine latch on the Ruger Precision Rifle allows both a side catch and rear catch to be operated with the same mag release. The rifle accepts M110, SR25, DPMS, Magpul, and Accuracy International magazines. Some AR-10 and M14 magazines *may* work, but Ruger does not guarantee those due to the wide tolerance ranges encountered. Each rifle is supplied with two ten-round Magpul mags.

The 24-inch barrel is cold hammer forged 4140 Chrome/Moly with minimum bore and groove diameter with

minimum headspace and centralized chamber. Twist rate is 1:10. The muzzle has the standard 5/8x24 threads for attaching a muzzle device or suppressor and comes with a thread protector.

The folding stock accepts any ARtype stock, but the rifle is supplied with a Ruger MSR stock. The stock is fully adjustable for a 3.5-inch length of pull range and has an adjustable cheek piece to raise the comb up to .75 inch. It has a bottom Picatinny rail for attaching a monopod and a soft rubber buttpad.

As this is written, the buttpad is not adjustable for height, but I was told Ruger is working on making it adjustable.

While any AR-style grip and handguard may be used, the rifle comes equipped with an extended trigger reach pistol grip and Samson KeyMod handguard with full length Picatinny rail.

The safety selector is reversible. Unlike the selector on an AR, which rotates 90 degrees from "safe" to "fire," the selector on the Ruger Precision Rifle rotates 45 degrees. Overall length is 42

RUGER PRECISION RIFLE



Muzzle features 5/8x24 threads for attaching a suppressor, and comes with a thread protector.

to 45.5 inches with stock unfolded, and weight is 10.6 pounds. The Ruger Precision Rifle will be available in .308 Win, 6.5 Creedmoor, and .243 Win. All rifles used at FTW were chambered for 6.5 Creedmoor.

GETTING READY FOR THE RANGE

Before heading to the home range to confirm zero, each student was issued a rifle and mounted scope with prerecorded serial numbers of each and the last three numbers of the rifle's serial number taped to the sling to ensure we would get the same rifle every day of the class.

While not included with purchase, the test rifles were equipped with an Accu-Shot monopod and Atlas BT10 bipod with QD lever. Both products are made by B&T Industries and are great products. I liked the BT10 so well that it's likely to replace the bipods I currently use.

Each student was given a range card with dial-in/come-ups and holdover info from 100 to 700 yards. FTW Ranch also provided each of us with a PAST Super Mag-Plus ambidextrous recoil pad and Dog's Paw shooting glove.

BURRIS XTR II

For precision shooting, especially at long range, the optic can be as important as the rifle. With the exception of two students who had specific writing assignments, the Ruger Precision Rifles mounted the Burris XTR II 4-20X50 scope with mil-dot reticle. Click values were in 1/10 mils.

The XTR II is a front focal plane reticle design, which allows the reticle size to increase or decrease as magnification is increased or decreased. Trajectory compensation is always correct and proportional for the selected power setting. It has dimensionally matched precision adjustment knobs and Zero Click Stop technology. This high-performance optic offers Hi-Lume® multi-coated lenses, which optimize target resolution, contrast, and low-light performance.

The side-mounted parallax adjustment can be set from 50 yards to infinity. Another dial, on the outside of the parallax adjustment, is for an illuminated reticle that has 11 brightness settings. The illumination turns off between each click to save power. The scope weighs 30.90 ounces, bringing





Safety selector is reversible and rotates only 45 degrees vice the 90-degree throw on ARs.

the total weight of the rifle as tested up to 12.5 pounds.

I have used the XTR II previously and it is a serious scope for serious shooters, be they tactical or competition.

AMMUNITION

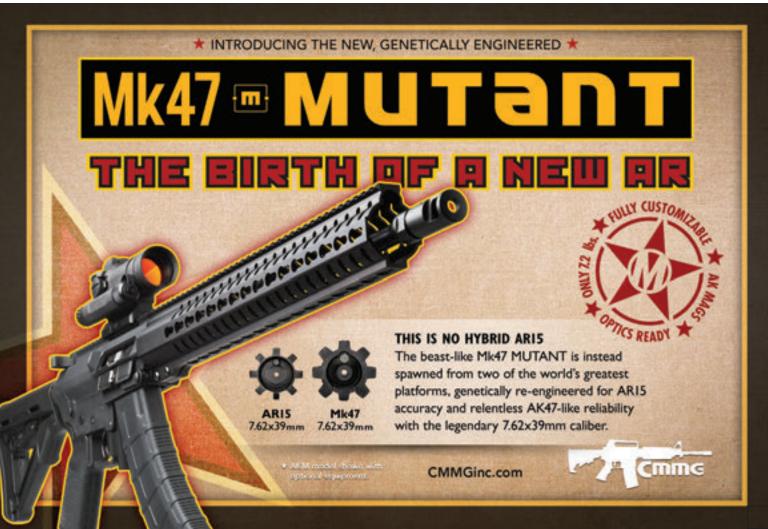
Just as the .338 Lapua was designed as a sniper cartridge, the 6.5 Creedmoor was developed from the ground up to be a precision cartridge. We used the superb Hornady 140-grain A-MAX°. This load has an excellent ballistic coefficient of .585 and left the muzzle at 2,690 feet-per-second (fps) at FTW as determined by FTW staff. This was my first experience shooting the 6.5 Creedmoor, but it made me a believer. It is a very flat-shooting round.

By way of comparison, at my first

visit to FTW, I was shooting a Ruger SR-762 (.308 Winchester) with Hornady 168-grain A-MAX under similar conditions. According to my data cards, using 400 yards as an example, I had to dial in 24 clicks of elevation for the .308. With the Ruger Precision Rifle and 6.5 Creedmoor, I only had to dial in 18 clicks.

TRAINING DAY 1

We began by confirming 100-yard zeros at the home range, and I began to appreciate the really great trigger on the Ruger Precision Rifle. The class was then split into two groups to allow a better instructor/student ratio and give each group more meaningful trigger time.



RUGER PRECISION RIFLE

My group set out with Doug Prichard. We once again confirmed our zeros at 100 yards and proceeded to engage targets at 200, 250, 300, 350, 400, 500, 600, and 700 yards. Since each rifle is as individual as the person behind it, Doug would call out corrections for wind and elevation as needed. Except for making wind corrections, my data card was basically right on. To get the most from the experience, I both dialed in clicks for elevation and used the holdover info on my data card.

After lunch, my group left with Larry Summerfield. When we arrived at our assigned range, we shot the smallest group possible at 100 yards. My group was .70 inch, but others—including Joe Thielen from Hornady—were able to fire sub half-minute groups.

We then had a friendly competition shooting at 200, 250, 300, 400, 500, 600, and 700 yards. Shooting a small plate was worth ten points and a large plate seven points. If a second shot were needed and a hit scored, it was worth five points regardless of size. To keep things on the up and up, the shooter had to call which plate he was shooing



Ruger Precision Rifle is loaded with advanced features, including shroud that covers rear of bolt and contains a disassembly tool and Allen wrench to adjust Ruger Marksman trigger. This same Allen wrench fits most zero return screws on scopes.



Ruger is known for thinking outside the box, as exemplified by the patent-pending Universal Magazine Latch mechanism that lets the Precision Rifle accept M110, SR25, DPMS, Magpul and Accuracy International magazines. Ten-round magazines shown here are Accuracy International (left) and Magpul.

» SPECIFICATIONS

RUGER PRECISION RIFLE	
MANUFACTURER	Sturm, Ruger & Co
MODEL	Ruger Precision Rifle
CALIBERS	6.5 Creedmoor, .243, .308
CAPACITY	10 + 1
FEED DEVICE	SR25, DPMS, Magpul, and AICS magazines (supplied with two 10-round Magpul PMAGs)
WEIGHT	10.6 pounds (6.5 Creedmoor)
BARREL	Cold hammer forged 4140 Chrome/Moly
BARREL LENGTH	24 inches (6.5 Creedmoor)
TWIST RATE	1:8 (6.5 Creedmoor)
OVERALL LENGTH	30.6 inches (folded minimum extension)
HEIGHT	7.3 inches (grip bottom to Picatinny rail top)
WIDTH	3.3 inches
LENGTH OF PULL	Adjustable 12 to 15.5 inches
BOLT HANDLE	Removable oversized (.900 inch)
TRIGGER	Externally adjustable from 2.25 to 5.0 pounds
SUGGESTED RETAIL	\$1,399



at, lest he miss the intended plate and hit the other.

One shooter in my group cleaned the course, shooting only small plates for all 70 possible points. I did not feel that confident at 600 and 700 and shot the large plates at those distances, for 64 points without a miss.

TRAINING DAY 2

In the morning, the entire class assembled at Crusader Range, which has an array of targets from roughly 200 to 600

yards in approximately a 160-degree arc, forcing the shooter to shift position not only laterally, but for extreme downhill shots as well. To make things even more interesting, a canyon runs through the center of this range, and winds can be somewhat unpredictable.

After each shooter had fired on each target, it was time to speed things up and add a bit of stress by firing on two targets. We were told which targets to fire on, and as soon as the first shot broke, Tim Fallon would start counting

At FTW Ranch, author steadies for 600-yard cross-canyon shot with Ruger Precision Rifle.

down from ten. It was up to the shooter if he would dial in the correct range or use hold over/under. This was not only a lot of fun but had practical applications as well.

Up next was the Nubian Range, which has steel plates from 600 to around 2,000 yards. The wind can be a real challenge here as well. The farthest distance I managed to hit at was 1,200 yards, but it took me five shots with my spotter calling wind and elevation corrections.

TRAINING DAY 3

The class split into four groups of two to three students each, and an instructor was assigned to drive them around

>> Continued on page 88



5MAI.

SWEEPSTAKES

WIN THIS!

Some say the shotgun is dead as a law enforcement or personal protection firearm, but in reality the shotgun remains probably the most versatile weapon system available. For personal and home protection, its stopping power is legendary, and in the law enforcement role, it can use breaching rounds, chemical rounds, less-lethal, and many more.

MOSSIBLICA SSHOTGUN

The grand prize in this month's sweepstakes is the combat-proven Mossberg 590 shotgun (Model 60663). This rugged 12-gauge shotgun features a 20-inch cylinder-bore barrel that is capable of firing 2¾- or 3-inch shells. The 590 has a corrosion-resistant Parkerized finish with a total capacity of nine rounds. It features dual extractors, positive steel-to-steel lock-up, twin action bars, an anti-jam elevator for smooth operation, and adjustable ghost ring sights. One of the most renowned features of Mossberg shotguns is the top-mounted safety on the top of the receiver. It is vastly more ergonomic than safeties on most shotguns, provides for ambidextrous operation, and can be operated even when the shooter is wearing tactical gloves.

590

MAGPUL FURNITURE

Overall length and fit can make a shotgun uncomfortable to fire, so we're including a Magpul SGA stock. This is an ambidextrous, user-configurable buttstock designed to add much-needed adjustability to shotguns. The SGA features a spacer system for length of pull adjustment, improved grip ergonomics, and recoil-reducing buttpad, and brings Magpul design and engineering to another classic American firearm.

Also from Magpul is the M-LOK[™] Forend, a drop-in replacement for the Mossberg 590/590A1 shotgun that features an extended length and front/rear hand stops for improved weapon manipulation. It can take M-LOK accessories such as a sling mount and rails for mounting lights.



HORNADY PREMIUM AMMO

The 12-gauge shotgun has a well-deserved reputation for stopping fights, especially when combined with the right ammunition. This sweepstakes includes 200 rounds of some of the best self-defense shotgun shells available.

The winner receives 100 rounds of Hornady Critical Defense 12-gauge buckshot. Loaded with eight 00 pellets with a muzzle velocity of 1,600 feet-per-second (fps), the Versatite[™] wad technology delivers consistent performance and tight patterns every single time. Critical Defense rounds are specially loaded to ensure proper functioning in semi-auto and pump shotguns.

If the shooter does his part, the shotgun is capable of reaching out to 100 or more yards, so we're including 100 rounds of Hornady American Whitetail® slugs. Designed for smoothbore barrels, this round features a one-ounce Foster-style slug with a tough lead-alloy core loaded to 1,600 fps.





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STOPBLAMING HTRIGERI

Negligent Discharges

BY PATRICK A. ROGERS

ometimes, it is necessary to sit back and take a long, slow look at the world. And rant.

Let's qualify some issues. Firearms, of and by themselves, are harmless. They require human interaction in order to function. In order for a human to *properly* discharge a firearm, it must be loaded with a cartridge. The human must then perform two functions. He must align the sights onto a target (remember, the operative word is *properly*). And then the biggie: he must control the trigger straight to the rear, without disturbing the lay of the sights.

Simple, right?

But what happens when someone improperly discharges a firearm? This is commonly referred to by the unwashed as an "accidental discharge." I beg to differ. I understand there may be a time when the stars align, tea leaves are scattered to an east wind, and circumstances may conspire to cause a mechanical failure with a resultant discharge.

However, that should be considered an anomaly, not a regular occurrence. When a firearm is improperly discharged, it is almost always the result of negligence.

THE AUTOMOBILE ANALOGY

An analogy would be incidents involving automobiles. Motor vehicles crash into each other—or pedestrians—as if they were moths drawn to a flame. They do it with such regularity that it becomes commonplace, and unless there is a death or serious physical injury, they are often not even investigated. And they are commonly called "accidents," as if the cause were in fact accidental when they are almost always the result of operator negligence.

Motor vehicles do not crash into each other for no reason. A motor vehicle is an inanimate object. It has no will of its own, and can move only with human interaction. If operated properly, it will get from Point A to Point B without damage

or injury—providing that the person operating said motor vehicle acts with due diligence. If one or more operators does something stupid, inappropriate or criminal, damage and injury are possible.

The negligence may be due to inattention, overrunning your headlights, or flat incompetence. Inattention can be distractions such as cell phones or texting, or drowsiness from lack of sleep or fatigue. Overrunning your headlights is a term that covers your overestimation of your ability to handle the vehicle. This is common with younger drivers.

Incompetence has many causes and includes inexperienced drivers. In many cases, it is criminal—excessive speed or impaired driving while using drugs and/or alcohol. Criminal negligence is defined as any type of conduct that "grossly deviates" from normal, reasonable standards of an ordinary person. It generally involves an indifference or disregard for human life or people's safety.

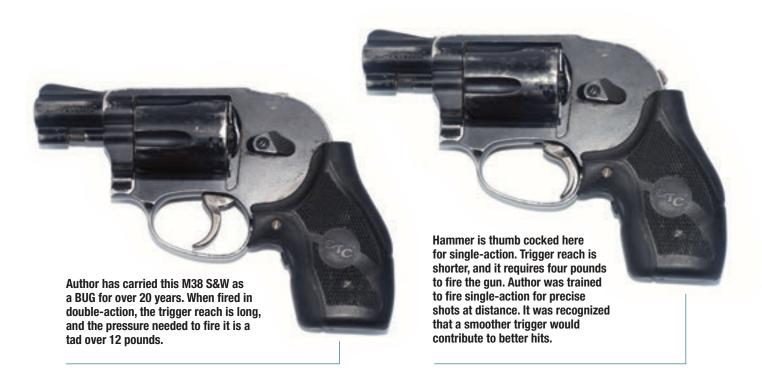
LET'S GET BACK TO FIREARMS

We said earlier that to properly discharge a firearm was to align the sights on a target and control the trigger without disturbing the lay of the sights. But how about if we do it improperly? How does that occur? Maybe we should first take a long, hard look at why we have the gun in the first place.

No matter if you are a cop, a member of the military, a citizen who carries for self-defense, a competitive shooter or a hunter, you are using the weapon to launch a projectile from *here* to strike something over *there*.

It may be nothing more than winning a competition or getting food, or it may be using Deadly Physical Force (DPF) legally against another. Understand that there are differences. If you miss a piece of paper, it may mean nothing more than a lacerated ego. But what if you are lawfully using the weapon against another, and you miss?

The projectile you fired and did not strike your opponent





STOPBLAMING #TRIGGER

has to go someplace, and that may be into the body of someone uninvolved. Or that miss gives your opponent the opportunity to place a projectile or three into your body. Neither of these is a good thing.

We should be performing every task with maximum efficiency. To be sloppy or inefficient in any pursuit is stupid. You may get away with it when playing horseshoes or tossing hand grenades, but aspiring to mediocrity is a surefire way to ensure defeat.

How do we maximize efficiency? Pretty simple, actually. The first step is proper training. Not just the qualification course, but true training. This is where most fail, be they police, military, or average earth people. As the late Jeff Cooper said, merely possessing a violin does not make one a musician. This seems to be forgotten by most, who believe having a certain occupation, being a writer or blogger, or being able to properly identify a firearm two times out of three makes them knowledgeable in all aspects of gunfighting.

The second is to understand that the mission drives the gear train. After you determine your mission, you need to find the best equipment available that will lead to mission success. Then seek out the best training. The handgun itself needs to be serviceable—that is, it must be reliable. It must also be ergonomic—it must fit the hand for the majority of users. The sights need to be useful and the trigger manageable. The more manageable the trigger, the more likely a competent shooter will be able to reliably strike the target.

Shooting pieces of paper on a square range does not equal engaging another human being who is trying to kill you.

Long triggers are more difficult to use because they may require changing the way you hold the gun, and need more pressure to fire the weapon. Shorter triggers permit a grip that is acceptable for more people, and permit a competent shooter to more likely strike his target, which is the purpose of the gun in the first place. If the gun is unmanageable, the sights poor or the trigger hard to control, you will have great difficulty using it.

HANDGUN ACTION TYPES

There are two types of handguns in use—the revolver and the semiautomatic pistol. Though revolvers are now an anomaly as a police service gun, they are still in use as back-up guns. They may be double-action-only (DAO) or double-action/ single-action (DA/SA).

Semiauto handguns have several action types. They may be single-action, as exemplified by the M1911A1, or they may be single action/double action, such as the Beretta M9 and SIG 226. This was very common for police work. Some agencies (NYPD, for example) had double-action-only guns.



Striker-fired are the most common police guns today, with the majority from Glock and Smith & Wesson.

A few words about trigger weight. Clearly the force necessary to bring the trigger to the rear has to be manageable. If it is not, the projectile discharged from the weapon will likely miss the intended target. Consider that a pistol may weigh about 2.5 pounds. The trigger may need between four and 14 pounds of pressure to fire the gun. See the problem?

But it's not just about weight. The mechanical aspects of the trigger are also in play. The length of the trigger press, as well as how "clean" the trigger is (think smoothly here), also have a lot to do with it. As an example, the Model 10 S&W Service Revolver I carried for most of my time in NYPD has a DA trigger pull of 12 pounds. It is clean and very manageable. The Model 38 S&W I carry as a back-up gun also has a 12-pound DA trigger pull, but is less clean and more difficult to manage—no doubt because of the coil spring used in that type of gun.

The revolver could be fired double-action—one long, hard trigger press that cocks the hammer, rotates the cylinder, and drops the hammer as the trigger press is completed. If fired single-action, the shooter manually cocks the hammer. This also rotates the cylinder. The trigger reach is shorter and the pressure required to release the trigger is less. Revolvers do not commonly have a mechanical safety.

A single-action semiauto handgun starts with the hammer cocked and manual safety engaged. The trigger is short, and the amount of pressure required to fire the weapon is generally between 4.5 and eight pounds. It is arguably the best trigger available.

The SA/DA semi-auto is an interesting design in that it requires a long, slow and heavy trigger press for the first shot. Like a DA revolver, the trigger press also cocks the hammer for the first shot. For the second and succeeding shots, the hammer remains cocked and the trigger press is shorter and lighter. This means that one grip and trigger press are required for the first shot, and a second one for succeeding shots. While it is difficult for many to manage, it can be learned. The DA semi-auto is a consistent long and heavy trigger pull for each shot. While consistent, it consistently sucks.



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TRIGGER PULL WEIGHTS

The most common semi-auto handguns in use by police in the United States are striker-fired. Below are the weights of trigger pull from guns in my armory. All values are approximate.

BCM 1911: 4 pounds, 5 ounces G19: 5 pounds, 9 ounces G19 NYPD: 12 pounds S&W M&P 9: 4 pounds

S&W M38: DA 12 pounds, 2 ounces; SA 3 pounds, 8 ounces

S&W M10: DA 12 pounds; SA 4 pounds, 1 ounce Much has been made of increasing the weight necessary to function the Glock trigger. Back in the day, when dinosaurs ruled the earth, a State Police Organization wanted heavier triggers to prevent what they called accidental discharges. A while later, a County PD wanted to make it even heavier and drove the weight up to 12 pounds. A short time later, the largest PD in the country adopted that heavy trigger for the Glocks and DAO semi-auto pistols. The net result was a trigger that is difficult to manage,

But wait, if only the Glock trigger were longer, we wouldn't have negligent discharges!

defeating the purpose of the gun.

Nonsense! At EAG Tactical, our revolvers have long triggers and heavy pulls, and yet people ND those guns like it was expected of them. It is not about the distance the trigger has to be pulled, and it is not about the weight. I have been doing this since 1963 and have seen a fair number of negligent discharges. Not surprisingly, most of them have been with DA/SA revolvers and DA/SA pistols.

FOUR SAFETY RULES

To help folks better understand—and to ensure they are proficient gun handlers—there are four safety rules to help them along.

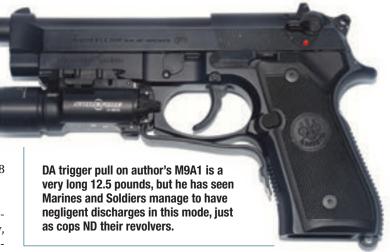
- 1. All guns are always loaded.
- 2. Don't let the muzzle cover anything you are not willing to destroy.
- Trigger finger remains straight and outside the trigger guard until your sights are on target and you are ready to shoot.
- 4. Be sure of your target. Consider the background. Consider what is between you and the target.

Straightforward, and these rules have been around for many years. If you follow all four, you will not have a negligent discharge, and you'll keep yourself and others out of trouble.

WHERE ARE WE GOING WITH THIS?

Carrying a loaded firearm brings with it legal, moral and ethical responsibilities. To ignore any of those three can lead to disaster. If you are a private citizen who possesses or carries a firearm, those responsibilities rest on *you*.

If you are employed by someone who requires you to carry a firearm, they also have the responsibility to ensure



Below: SA trigger pull is a short and very manageable four pounds.





Two very competent Gaithersburg, Maryland cops, Willy Delgado and John Leache, understand the consequences of poor training and sloppy gun handling.

you have received sufficient training to be able to safely carry the gun and use it properly within the constraints of the law. Sadly, most organizations pay lip service to this and spend their resources on ensuring that people successfully pass a qualification course instead of learning how to *fight* with a gun.

To compound this tomfoolery, some agencies discourage their people from seeking outside training, stating that "we teach them everything they need to know." In the context of self-defense—by individuals or those tasked with enforcing the law—generally one is authorized to use DPF when someone is using or attempting to use DPF or force equating to Serious Physical Injury (SPI) against you or a third person. That force needs to be appropriately applied.

In 1976, the New Jersey State Police adopted the HK P7, a squeeze cocker. This required you to squeeze the front strap when you gripped the pistol. After all, you will do this naturally.... Once you squeezed it to the rear—about 10 to 11 pounds worth—the gun was cocked. All that was required was to press the 4.5-pound trigger to the rear. It sounded viable, and it really was a beautiful gun, but the agency had a rash of NDs.

It seems that when people are startled, they clench their fist and all of the fingers. And if the trigger finger happens to be resting on the trigger, an ND will occur. The sympathetic squeeze response has been known for a long time. It wasn't that the gun was bad, it was that people were not trained as well as they should have been.

Guns are not unsafe. Guns are not dangerous. People who are in possession of a gun determine how and why it is used. And if those people are poorly trained, bad things will happen.

I'll add a salient point. Shooting pieces of paper on a square range does not equal engaging another human being who is trying to kill you. The basics are the same, but the application of those basics against someone who is hell bent on hurting or killing you adds a dimension that few have experienced.

The key is, always has been, and always will be training. ①

Pat Rogers is a retired Chief Warrant Officer of Marines and a retired NYPD Sergeant. Pat is the owner of E.A.G. Inc., which provides services to governmental organizations and private citizens. He can be reached at info@eagtactical.com.









Replacing the Direct Impingement System





unny how new words for old technology appear when new technology is introduced. Maybe I'm a little slow, but who'd ever heard of direct gas impingement 15 years ago? I didn't know the system had a name until the gas piston in AR rifles started appearing. At least we now have something to

call the old cycling system of the AR. Although I never thought there was anything wrong with the direct impingement system of the AR rifles, the gas piston does have some beneficial features.

Even if we didn't know what it was called, we did know that the gas impingement system leaked a little gas from the barrel though a port that traveled down a tube to a part called the bolt carrier key. This key had a tubular appearance, and the gas pushed the carrier back to cycle the action. It was really the pressure of the expanding gas in the barrel that drove the action.

Either way, some of the fouling in the expanding gas was deposited on the bolt and carrier and in the upper receiver. The heat of the gas would also dry the lubricant out after a while.

Many autoloaders use barrel pressure to work the action of the gun, one of the more notable being the M1 Garand. The gas was taken from near the muzzle of the weapon and there were heavy pistons and parts to take up some of the force and keep the fouling

out of the action.

The M1A is similar in design, and AK-style rifles also use barrel gas. They just don't bring the gas all the way back to the bolt. So in bringing the AR up to specs with this old technology, we started producing guns with piston systems instead of direct impingement.

In the piston system, a piston near the gas port in the barrel takes the pressure of the expanding gas and sends it to the bolt carrier via a steel rod, which pushes it back, cycling the action. The carrier key is designed a little differently, in that it has a flat surface for the rod to push against.

The gas and fouling are captured in the piston area near the front of the rifle just back from the vent. The gas block has a knob on the front that facilitates easy removal of the piston and rod out the front for cleaning.

GAS PISTON CONVERSION KITS

Now the problem is that I have an old direct impingement style rifle and my buddy has a piston rifle, and I can't live without one. This problem is com-



pounded by the fact that the economy sucks and I have no extra money to buy another rifle. Never fear, Brownells is here, with three brands of gas piston conversion kits.

They carry Osprey Defense, CMMG, and Adams Arms conversion kits, and the prices are less than another rifle and even less than a piston upper. The beauty of this is it can be installed by just about anyone in an hour or so.

I decided to give the Adams Arms System a try. They make the system for carbine, mid-range, and rifle-length gas ports and also supply a set of replacement military-style handguards that facilitate the piston system. They also make four-rail handguards to go with the system if you need the accessory space. These systems can be added to your rifle build project or just used as a replacement for the gas tube in your rifle.

I was replacing a barrel on an upper with a carbine barrel and wanted to run the piston system in the gun. It was a personal defense carbine, and I only wanted a rail for my light and one on the bottom of the front end for my sling to attach to.

I went with the Magpul MOE handguard because it was lightweight plastic and I could put a rail right where I needed it and not have to grip rails where they were not needed. This handguard is not a free floater, but for a CQB carbine it was much lighter and cheaper than an aluminum free floater. It pops right back in just like the origi-



Piston removed from the gas block. This makes for easy maintenance. Gas block has a rail on top for a sight tower if you want back-up iron sights for your optic.

nal plastic grips, but rail sections can be attached to it.

The installation was very easy thanks to instructions on a CD for an installation guide. They were easy to follow and the system is simple in design. The gas block that comes with the system is a top-rail gas block.

If you are replacing an A2 sight tower from your old gun and need to have the front sight, I suggest ordering a clamp on the front sight when you order the system. I put a set of Daniel Defense front and rear sights on the carbine I

built to back up the Aimpoint red dot sight I planned to mount on the carbine.

INSTALLATION

After unloading the rifle and separating the upper from the lower, the first parts to come off are the military-style hand-guards. They should knock a few bucks off the cost of the carbine and just leave these off, as I don't think anybody uses them anymore. A handguard tool makes this job much easier. The flash hider should come off next and it might be on very tight. Clamp the barrel in a vise with a set of barrel jaws near the flash hider and take it off with a wrench.

The gas block comes off next and, if it has an A2 sight tower gas block, the pins holding it on will have to be driven out. These pins are sometimes hard to get out. They are also tapered, so make sure you remove them from the small end (left to right). Once they are out, the gas block twists off and comes off the front of the barrel. The gas tube comes out with the sight tower. You do not need these for the install, so set them aside.

Unless you are going to change the handguard to a free-floating type, you do not need to take off the barrel. There is a bushing that needs to be installed in the tunnel through the upper where the gas tube passed through. This bushing keeps the rod from wearing on the upper tunnel and wobbling. The kit comes with a tool for driving in this bushing and helps keep it straight when putting



Front: Adams Arms bolt carrier and bolt. Rear: direct impingement bolt carrier. After 100 rounds, Adams Arms carrier is still as clean as when author put it in.

it in. This is the hardest part of the install and it is very easy. Just make sure it goes in straight.

Next, put the upper in an Upper Receiver Action Block and clamp it in the vise. This isn't a must, but it's easier to work on the upper while it's clamped in the vise, and this keeps the vise from crushing the receiver.

The gas piston gas block slides in place over where the old sight block was. It is held in place with screws on the bottom. Torque them to the recommended specifications.

The rod, piston, and lock knob all go in front of the gas block and are held in place with the knob. A small spring on the rod rests against the barrel nut at the tunnel where the rod passes through the bushing. Don't forget to put the flash hider back on. Once the flash hider is reinstalled, the bolt carrier needs to be changed.

The kit supplies a bolt carrier that is modified with the carrier key for the piston rod. I took the bolt out of my carrier and put it in the piston carrier. Once the bolt is in place, install the bolt carrier and charging handle and put the upper and lower back together. Now your buddies will have to have what you have.

FUNCTION CHECK

I took the gun out and fired about 100 rounds though it to check function and reliability. It worked flawlessly. I can't say I noticed the claims of less recoil and more accuracy, but I will say the bolt carrier region of the rifle was clean and without fouling.

I like to run my guns a little wet, especially in competition, and the lube was still as I'd left it when I put the gun together—wet and clean. The heat of shooting hadn't dried out the lube.

Like I said, this was a defensive carbine, but I like to shoot competitions with my defensive tools. With ammo so expensive (if you can get it), it makes sense to use in competition and training the same rifle that protects the home.

ACCESSORIES

The only accessories I like on my defensive gun are a light and an optic, so I added a Streamlight TLR light and an Aimpoint. I like the pressure switch attachment on the TLR, so I can put the switch right behind the light on





the handguard. The switching system on the TLR is user friendly, but if I go to weak-shoulder shooting—because sometimes in a gunfight you have to—I use the support-hand fingers instead of the thumb to activate the light. It is quicker to just squeeze than try to activate the light with fingers in an awkward position. The TLR puts out 600 lumens, which can illuminate a target 100 yards downrange. It has "knock you over" brightness in a room doing CQB.

The Aimpoint I carry doesn't have any magnification and, for the rifle's purpose, I don't believe it needs any. Out to 300 yards on a man-sized target, center-mass hits are not difficult, and that's as far as I envision using it. Up close and personal, the Aimpoint gives my old eyes much quicker target acquisition with both eyes open. Aimpoint was a quality red dot 25 years ago on our CAR-15s and still makes about the best quality red dot there is.

I also have a set of irons on the carbine for sighting. I believe unless the rifle is fitted with a scope, it should have backup sights. They can be employed quickly if the red dot goes down.

Another reason is a bit more dismal. If I have to operate the rifle with my weak arm because of injury to my strong side, I don't have to try to turn on the sight and set the brightness for the occasion. I just use the irons, because I can see them right through the Aimpoint.

The same goes for the Streamlight. My first rechargeable flashlight was a Streamlight. It seemed as big and heavy as my PR-24 baton and was a formi-



Adams Arms gas piston bolt carrier and system in the AR.

dable club. Now they're one-eighth the size, ten times as bright, and still made with the same high quality I've seen in their products over the years.

Yes, other products on the market are equal in grade to these, but naturally I'm recommending brands I have used for years and have come to trust. As for the gas piston system, I think it is an improvement over direct impingement. For a little money, your rifle can be converted and shoot cleaner and cooler.

Dave Morelli is retired from the Las Vegas Metropolitan Police Department. His duties there included being a Patrol and Field Training Officer as well as a member of the LVMPD SWAT team both as an operator and sniper.

SOURCES

AIMPOINT INC.

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(877) 461-2572 www.adamsarms.net

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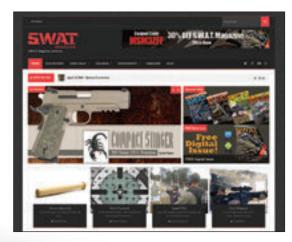
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German MP40

BY WILL DABBS, M.D.
PHOTOS BY SARAH DABBS

ieutenant Waverly Wray was an officer in D Company of the 505th Parachute Infantry Regiment in June 1944. He dropped into Normandy on D-Day with the 82nd Airborne Division. A former Mississippi state revenue agent whose combat exploits were the stuff of legend, Lt. Wray grew up right down the road from where I currently live. His story typifies the American warrior ethos.

The day after the D-Day invasion, Lt. Wray surprised a group of German officers at an impromptu tactical conference. After Wray called on the Germans to surrender, one enemy soldier armed with an MP40 submachine gun sprayed a burst of 9mm rounds in Wray's direction. Wray responded by methodically killing with his M1 rifle every German officer in attendance.

One of the German 9mm slugs punched through Wray's steel helmet and



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The original Schmeisser-designed MP18 fed from the side

via a 32-round Luger snail drum and was actually the first practical manportable pistol-caliber submachine gun used in combat. The Italian Villar Perosa saw service sooner, but the MP18 actually better defined the genre.

A pistol-caliber automatic weapon was the perfect tool for combat in the wretched conditions that defined the WWI-era trenches. The submachine gun's portability and close-range fire-power gave its user a pronounced tactical edge in combat. However, the MP18 was cut from big pieces of ordnance steel and built more like a watch than a combat weapon.

The next generation of the submachine gun was subsequently defined not so much on the battlefield as in the factory and on the drafting table.

The MP18 became the esoterically similar MP28, which evolved into the simplified MP38. The MP38 sported such novel features as an under-folding buttstock and telescoping recoil spring assembly, but the receiver was still cut from a big piece of tubular steel. The trigger housing was an aluminum casting, and synthetic Bakelite replaced any grips that might have traditionally been cut from walnut.

The subsequent MP40 employed a more easily produced stamped sheet metal receiver and became an integral part of the iconic image of the WWII-



Above: MP40's hefty nine-pound weight, combined with its diminutive 9mm cartridge and sedate rate of fire, make for a controllable platform.



German MP40 is simple to maintain in the field. It breaks down into major subcomponents easily and without tools.

era German soldier. The Germans produced around a million MP40s before the war ended.

DETAILS

The MP40 is familiar to anyone who has seen an Indiana Jones film. The gun is heavy—around nine pounds unloaded—and feeds from a double-stack 32-round magazine that tapers to a single-stack presentation. This magazine design was shared by both the British Sten and American M3 Grease Gun and subsequently required a dedicated magazine loader.



The barrel is threaded, though there were no general-issue muzzle attachments beyond a seldom-used blank adaptor to take advantage of this feature. The notched bar underneath the barrel was designed to rest on the edge of an armored vehicle and helped keep the muzzle outside the halftrack in action.

This may seem a bit superfluous, but I once saw a young American Infantryman fire his M203 into a defensive berm two feet from his head when he rested the barrel of his rifle on the parapet without clearing his underbarrel grenade launcher. The liberal coating of marking powder the young man received from the training round he fired into the side of his fighting position proclaimed his ineptitude to all in attendance.

The front sight of the MP40 is fully

German MP40 (middle), Italian Beretta 38/42 (top), and Soviet PPSh (bottom) demonstrate various approaches to submachine gun design exhibited by some of major combatants during WWII.



Front sight on MP40 is protected by a heavy hood.



Standard ammunition load for German soldiers issued the MP40 was seven 32-round magazines. Accessory pouch carried requisite magazine loader.



Primary safety on MP40 is bolt retention slot that locks bolt open to the rear.

hooded and the rear sight is flip adjustable for 100- and 200-meter ranges. The underfolding stock incorporates a pivoting buttplate and served as the obvious inspiration for the subsequent version used on folding-stock Kalashnikov rifles. The rear sling attachment point is ambidextrous, and the front loop can be configured on either side.

The MP40's unique telescoping recoil spring is what makes the gun so remarkably smooth in action. The spring assembly incorporates a series of pressed steel cups that telescope into themselves as the gun cycles. Not even the esteemed MP5 is smoother.

The trigger/buttstock/fire control group on the MP40 is a large pressed steel assembly that locks into the receiver with a twist. A safety notch secures the bolt to the rear and most, but not all, versions also incorporated a bolt handle that can be pressed in to lock the action in position when the bolt is closed.

The gun fires from the open bolt using the classic advanced primer ignition system typically found on subguns of that era. Parts are usually finished in a rich blue, and just about every single widget on the gun has its own matching serial number.

German soldiers, Fallschirmjäger,

and grenadiers who were issued the MP40 typically received a pair of threecell magazine pouches as well. One of the sets included an ancillary pouch for a magazine loader. The issue sling is a fairly thin leather affair, slide adjustable via a locking buckle.

There was even a rare variant that incorporated a cumbersome side-by-side dual-magazine arrangement allowing 64 rounds as a counter to the prodigious 71-round drum magazine of the Soviet PPSh submachine gun.

A similar weapon to the MP40, incorporating a wooden stock and the fire-control parts from the earlier MP28, was also produced in limited quantities as the MP41.

LET'S RETIRE TO THE RANGE

The MP40 is indeed heavy, and lugging the gun around for long periods can get tedious. Loading those magazines is a chore, but the issued loader works well in practice. But once you light the gun up, the appeal becomes apparent.

The MP40 fires full-auto only, but its rate of fire is remarkably sedate. To those of us who cut our professional teeth on M16s, AKs, and MP5s, all of which cycle between 600 and 800 rounds per minute, the 500 rpm of the MP40 is comparatively comatose. Two- and three-round

bursts are painless, and full magazine dumps molest the point of aim to an inconsequential degree.

With the stock extended and proper technique, the MP40 will keep an entire magazine in a pie plate at reasonable subgun ranges. After a little practice, the MP40 maneuvers nicely from the hip as well. Hip shooting is an underappreciated art these days, but a 101st Airborne Company Commander who fought all the way across Europe in WWII once opined that his troopers who were not adept at hip shooting did not last long in combat. Who am I to question a warrior of his pedigree?

When configured on a sling, the MP40 will fill a room with a single long burst fired from the hip. In the days before embedded reporters and ubiquitous camera phones, collateral damage was not quite as well documented as it is today. We now demand greater precision from our tactical tools.

Even at nearly 75 years old, the MP40 used for this article was monotonously reliable. Magazines needed to be culled a bit to find the ones whose springs were still up to the task, but the old girl just would not slow down. Cleaning and maintaining the gun in the field are not chores. The MP40 strips without tools and employs that legendary Teutonic

standard of workmanship throughout.

The battlefield effectiveness of the MP40 was universally respected and the guns were used in action by all combatants whenever available. Members of the British 6th Airborne during Operation Market Garden were known to discard their own weapons in favor of the iconic German submachine gun whenever possible. These Paras could feed their captured guns via the same 9mm ammunition used in their Stens.

After a few days in action, MP40s were sprinkled liberally throughout the British ranks, apparently with the tacit blessing of local commanders.

MUSINGS

It has been said that if we took every cent spent on national defense in America from the end of the Cold War up until the fall of the Berlin Wall, we could raze and rebuild every manmade structure in the U.S. It is a shame that the most innovative products a nation typically produces are implements of

death and destruction, but I fear that is our nature.

In the case of the German MP40 submachine gun, this gleaming gem of industrial mayhem defines the sweet spot between tactical utility and ease of manufacture. During WWII, body armor was impractical, so the diminutive 9mm round was more than adequate for close-range engagements. Of all the remarkable contrivances devised to throw Georg Luger's classic Parabellum projectiles, nothing of its era equals the MP40 for elegance and controllability.

The MP40 ranked right alongside the Luger pistol as the alpha trophy for American troops liberating Europe from beneath the boot of Nazi tyranny. MP40s are treasured additions to any advanced gun collection today. A decent transferable example costs as much as a car, and parts get harder to find every year. But for the gun nerd fortunate enough to avail himself of an afternoon on the range with an MP40 and a proper supply of 9mm ammunition, it becomes readily

apparent what all the fuss is about.

From German Panzer Grenadiers to British Paras to American Dogfaces and silver-screen heroes like Indiana Jones, the MP40 is the archetypal German military firearm.
(a)

Special thanks to www.worldwarsupply.com for the German Fallschirmjäger gear used in this article.

Will Dabbs grew up in the Mississippi Delta and has a degree in Mechanical Engineering from the University of Mississippi. He is Airborne qualified and accumulated 1,100 hours flying UH-1H, OH-58A/C, CH-47D, and AH-1S helicopters. After eight years on active duty, Major Dabbs left the Army for medical school. He currently works in his own medical clinic and maintains a licensed 07/02 firearms manufacturing business building sound suppressors. He has written commercially on the subjects of firearms, medicine, and survival for more than 20 years.



In action, German MP40 is eminently controllable. Gun's imposing weight, forward center of gravity, and light recoiling cartridge all conspire to defeat muzzle rise during long bursts.

BER-BUDGET BOLLS STATES

Century International Arms C15 M4





early 20 years' experience as a gun writer has given me the opportunity to handle and evaluate an above-average number of firearms. Many of these weapons have been Century International Arms offerings.

Century International Arms is a polarizing entity within the gun industry among consumers. While often appreciated for being the only access point for many in terms of certain weapons, especially AK or other foreign types, Century is lambasted at times for its quality control.

All I can report is that I have had no reliability or functionality issues with the over one dozen Century rifles and handguns I have evaluated to date. Some will scoff at this and claim receipt of privileged specimens. This is not the case, as several have been purchased off the shelf from my local dealer, Stonewall Arms.





Above: Working around range vehicles showed why lightweight M4-type AR is such an effective combination.

Left: C15 M4 arrives with a detachable carry handle that can be left in place for iron sights or detached to allow access to flattop Picatinny rail for mounting of optics.

AR BONANZA

The latest Century offering I handled will surprise many as being an AR variant. While the AK is gaining in popularity in the U.S., the AR is still king in terms of numbers sold, backed up with a cottage industry of suppliers making accessories and refinements for it. The AR is rivaling the other American icon—the 1911—in terms of available aftermarket parts and accessories, not to mention the number of manufacturers and versions available.

ARs can be had in everything from piston-driven varieties to multiple calibers, pistol configurations, flattops, and various barrel lengths. The inherent modularity of the AR with its upper and lower receivers is its greatest attribute for adapting to individual preference, whether it is for competition, target shooting, law enforcement, or personal defense.

This same adaptability can also lead individuals astray as to what is necessary versus desired in setting up a defensive rifle. Full disclosure: I have ARs with quad forends festooned with lights, lasers, vertical grips, and even night-vision devices. These were set up for specific roles I had in mind. As I have continued down the path of learning and adapting for defensive purposes, it has grown clearer that all these items are not necessary and could even be detrimental to efficient use for most private citizens.

A lightweight, fast-handling rifle is a premium when having to react to a threat. The military had this figured out with the early Colt CAR-15 Commando (XM-177) rifle often photographed in the hands of MACV-SOG and other elite units during the Vietnam War.

CENTURY C15 M4

The currently fielded M4 AR evolved out of the CAR-15 XM-177, modified with longer barrel and other design tweaks. The 14.5-inch barreled M4 is often mimicked in the civilian realm

BEER-BUDGET BLASTER

with its carbine-length direct gas system and only needing to lengthen the barrel to 16 inches to comply with BATF regulations. The semi-auto-only component of civilian M4s is not that much, if any, of a hindrance to effectiveness.

The Century C15 M4 has a modified military profile 16-inch, non-chromelined barrel, with a .223 Wylde chamber, 1:9 twist, and birdcage flash hider. M4 feed ramps are present. They extend from the barrel extension into the upper receiver and help alleviate feeding

problems that may occur as a result of the increased pressure of the shortened carbine gas system of the M4.

A Tapco six-position buttstock comes with the Century C15 M4, as does an A2 pistol grip. The trigger is a standard milspec type with six-pound pull. The C15 M4 carbine weighs 6.8 pounds and measures 31 to 35 inches. Century makes note that Moore's Machine Company is the manufacturer they are using with this build. The rifle comes with a lifetime warranty.



Century International Arms is more closely associated with AK offerings than ARs such as the recently introduced C15 M4 AR.

CHAMBERING AND AMMUNITION

Century's decision to go with a .223 Wylde chambering with the C15 M4 is interesting, and a quick word about it is in order. The .223 Wylde was designed as a match chambering for semiautomatic rifles. It offers increased accuracy while accommodating both the 5.56mm and .223 Remington cartridges with equal aplomb.

As most know, the 5.56mm is not synonymous with the .223 Rem chambering. Generally, it is advised as acceptable to fire .223 Rem in a 5.56mm but not the other way around. The .223 Wylde was meant to give a slightly tighter body spec than 5.56mm but a bit looser than .223 Rem, while retaining a longer leade/throat. In effect, the .223 Wylde is a hybrid splitting the difference between the 5.56mm and .223 Rem, while extending benefits in terms of accuracy and reliability.

Ammunition tested with the Century C15 M4 was a combination of Black Hills Ammunition loads, Federal Premium, multiple Hornady TAP loads, and Winchester 55-grain FMJ. Readers deserve to see what baseline accuracy was with the C15 M4, thus the decision to mount a Leupold Mark 4 3.5-10X scope before reattaching the carry handle for the remainder of the T&E.

The C15 M4 kept all loads tested at 2.5 inches at 100 yards, with premium loads hovering around one-inch groups. This accuracy level justifies permanently mounting a magnified optic such as a Trijicon ACOG or Accupoint 1-4X scope on the flattop upper if a user desires. Of course, red dot optics like the Trijicon SRS or Reflex are viable as well.

Accuracy test protocol consisted of three five-shot groups with each ammunition type. Group sizes were averaged. Velocity figures ranged from 2,700 feet-per-second (fps) to 3,000 fps over an RCBS chronograph. Accuracy with the C15 M4 was more than acceptable, with the open sights producing two- to four-inch groups at 100 yards with the ammunition tested.

Frankly, it was refreshing to revisit iron sights while conducting drills at Echo Valley Training Center (EVTC) moving and firing behind simulated cover and vehicles. EVTC's extensive supply of steel targets provided instant feedback whether within bermed training bays, 360 degree, Jungle Walk, or multi-stepped ranges. The C15 M4's

A2 sight arrangement is conducive to wringing better accuracy out of the C15 M4 rifle compared to the cruder AK notch and post sights.

The C15 M4 favored being run well-lubricated, which I determined after reliability hiccups experienced in the first couple of magazines fired were solved by a liberal dose of lubricant around the bolt. Besides those early issues, firing the C15 M4 as it emerged from the box, no malfunctions were encountered during the rest of the evaluation, which encompassed 500 rounds.

ACCESSORIES GALORE

I am a self-confessed full-time member of the gun culture, always considering another weapon or accessory. Not all weapons need rails and an array of accessories to be considered viable. While reliability should never be compromised in terms of cost/performance ratio, other items considered a must for some may not be high priority for others. KISS (Keep It Simple, Stupid) methodology can pay dividends in terms of



budget and allowing for concentration on other priorities such as training.

A huge benefit of the C15 M4 is the multitude of AR magazines available for it from various manufacturers. I have come to trust Brownells for my metal AR magazines and Magpul for polymer variants. The Magpul 40-round

Above: Carrier key was properly staked.

Below: Century International Arms C15 M4 was tested with numerous ammunition types and other ancillary gear.



BEER-BUDGET BLASTER



PMAG is steadily growing as a favorite among higher-capacity AR magazine variants due to its track record of performance involving multiple weapon reviews, including the Century C15 M4.

Along these same lines, nearly every tactical webbing gear manufacturer

in the U.S. offers products to carry AR magazines, ranging from chest rigs to vests, thigh sub-loads, and belt pouches. My go-to brands are U.S. PALM, High Speed Gear, Velocity Systems/Mayflower, and BlackHawk.

A simple offering from BlackHawk

is their bandoleer-style pouch. It appeals to many with its ability to accommodate two pistol magazines in conjunction with four AR magazines. It can be grabbed in a hurry and slung over your shoulder while you also grab the Century C15 M4. Four spare maga-



Leupold Mark 4 3.5-10X scope was mounted on C15 M4 for bench accuracy testing in conjunction with Champion tripod front rest and rear sandbags.



C15 M4 maintained 2.5 inches or better accuracy.



Standard A2 flash hider was replaced with Valmet-pattern VAL-76 three-prong flash hider.

zines plus one in the C15 are plenty to solve most issues that would call for the C15 M4 in the first place.

TRAINING SCENARIOS

I decided to concentrate on using the C15 M4 in training scenarios involving team tactics and patrolling to contact through EVTC's 360 and Jungle Walk ranges. The Century C15 M4 excelled in firepower and combat accuracy. Firing from unorthodox positions while working around range vehicles showed why the lightweight M4-type AR is such an effective combination.

As a side note, a portion of the evaluation with the C15 M4 took place at dusk, in order to evaluate a recently received Valmet-pattern VAL-76 three-prong flash hider from One Source Tactical.

The Finnish version of the AK has always been well thought of, with Finnish practicality shining through in various tweaks made, including the flash hider. I took note of the VAL-76 because of the recent resurgence of

three-prong flash hiders. Further proof that the more things change, the more they stay the same.

Flash suppression is achieved with the VAL-76 by a coned interior profile with flared muzzle talons. Finish is a non-reflective black oxide. Heat-treated Ordnance Steel is used in the manufacture of this unit. The VAL-76 fits muzzles with standard ½x28 threads and supplied with a standard crush washer for proper fitting. Proof of the VAL-76's effectiveness was borne out by the lack of blast signature both to the naked eye and in photographs.

CONCLUSIONS

The Century C15 M4 performs as a solid representative of the AR family. Anyone who chooses to take advantage of the Century C15 M4 should take heart that millions of M16/AR-15s have been produced. The basic design is successful and comes through in the Century offering.

What sets the C15 M4 apart from

many others is its \$599 price point, making this performance more widely available to consumers. There will be doubters that an AR so priced is viable compared to rifles costing two to three times more. Each will have to make their own decision. Worst case, try the C15 M4 as an understudy until confidence is gained with the system.

It is no secret that Eugene Stoner's AR platform is the best-selling rifle in the U.S., with many manufacturers offering their versions in recent years. While imitation is the sincerest form of flattery, often the simplest and closest to the original idea are the best. The AR's adaptability is also its most abused quality. Century International Arms is seeking to counterbalance this trend toward over-accessorized ARs with the C15 M4. (1)

SOURCES

CENTURY INTERNATIONAL ARMS

(800) 527-1252 www.centuryarms.com

BLACKHAWK! PRODUCTS GROUP

(757) 436-3101 www.blackhawk.com

BLACK HILLS AMMUNITION

(605) 348-5150 www.black-hills.com

BROWNELLS INC.

(800) 741-0015 www.brownells.com

ECHO VALLEY TRAINING CENTER

(540) 450-7998 www.echovalleytrainingcenter.com

FEDERAL PREMIUM AMMUNITION

(800) 379-1732 www.federalpremium.com

HORNADY MFG. CO.

(800) 338-3220 www.hornady.com

LEUPOLD & STEVENS INC.

(800) LEUPOLD www.leupold.com

MAGPUL INDUSTRIES CORP.

(877) 462-4785 www.magpul.com

ONE SOURCE TACTICAL

(928) 776-4492 www.onesourcetactical.com

STONEWALL ARMS

(540) 535-2190 www.stonewallarms.com

WINCHESTER AMMUNITION

(615) 258-3340 www.winchester.com



SureFire Ryder Sound Suppressor

BY EUGENE NIELSEN

uilding upon the success of its award-winning SF Ryder™ 22-A sound suppressor, Sure-Fire® has come out with a battle-ready version of the Ryder sound suppressor for 9mm pistols, submachine guns, and carbines.

The new SF Ryder 9Ti ("Ti" being the periodic table symbol for titanium) features an ultra-light titanium tube, front plate, and rear plate that help minimize the overall weight without any sacrifice in strength.

The Ryder 9Ti is designed for both recreational shooting and tactical applications. It is built to the same standards as Sure-Fire's battle-proven SOCOM Fast-Attach® sound suppressors. *S.W.A.T.* was the very first to get an actual "hands on" with the SF Ryder 9Ti new sound suppressor.

LET'S GET TO THE RANGE

I met with SureFire Public Relations Specialist Thomas Carlson and Western Regional Sales Manager Tom Kane, along with

Salient Arms
International G17
Tier 1 with Trijicon
RMR and SureFire
X300 Ultra (shown)
was employed for
testing, along with
a SIG P226 Combat.
Pistols functioned
flawlessly with SF
Ryder 9Ti suppressor.

weapons expert Daniel Graham, at the C2 Tactical Range for some range time with the SF Ryder 9Ti.

In the interest of full disclosure, at the time of our testing, the SF Ryder 9Ti had not yet entered production, so the sound suppressor we tested was the final pre-production prototype. The production Ryder 9Ti will be identical in all respects.

Located right off the I-10 freeway in Tempe, C2 Tactical was voted Best Indoor Range in Arizona. It has 23 airconditioned shooting lanes, a new state-of-the-art simulator, full retail store—including NFA and Class III items—gunsmith services, and much more. It also offers numerous training courses. C2 Tactical is an authorized SureFire sound suppressor dealer.

Thomas Carlson also brought along a Daniel Defense M4 Carbine equipped with a SureFire SOCOM556RC Fast-Attach sound suppressor for us to play with at the range. More toys always equal more fun!

As an aside, although not the subject of this article, the SOCOM556-RC is a very impressive sound suppressor to be sure. It is no wonder that U.S. Special Operations Command (USSOCOM) adopted the SOCOM556-RC after the most extensive and rigorous sound suppressor testing ever conducted. It left all competitors in the dust. It also received the USSOCOM official safety verification in support of fielding.

BUT FIRST, HOW DOES IT WORK?

The SF Ryder 9Ti employs proprietary pig-nose baffles like those in the SF Ryder .22 sound suppressor upon which it is based. The baffles in the SF Ryder 9Ti are made of U.S. mil-

certified heat-treated stainless steel bar stock. It is durable, corrosion resistant, and handles heat well.

The ingenious pig-nose design provides superior sound attenuation and reduces muzzle blast by precisely directing gasses from fired rounds. The baffles also make cleaning the sound suppressor a simple process. Built-in spacers help reduce carbon buildup between the baffles and the sound suppressor tube.

As a sound suppressor accumulates fouling during firing, its effectiveness deteriorates. Maintenance requirements differ depending on the sound suppressor. The SF Ryder 9Ti is exceptionally easy to maintain.

Every baffle is indexed and individually numbered for foolproof disassembly and reassembly. An assembly/disassembly tool that makes it easy is included with the suppressor.





Suppressing a weapon can significantly increase backpressure, too much of which will increase the cyclic rate, cause weapon malfunctions and increased fouling, reduce the service life of the weapon, and spit gasses back into the face of the operator.

Sound suppressors such as the SF Ryder 9Ti, which are designed to control the gasses rather than simply trap them, can eliminate the backpressure created by traditional sound suppressors to a great degree—up to a 95% reduction is claimed. These suppressors with improved gas flow dynamics can also largely eliminate the first round pop and flash common with traditional designs, where the first round is often louder than subsequent rounds and there may be a slight flash.

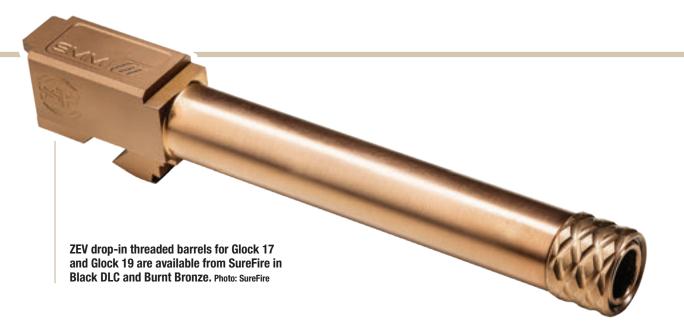
RYDER 9Ti SPECS

The SF Ryder 9Ti is exceptionally lightweight, weighing in at only 9.5 ounces. The use of high-grade titanium for the tube keeps weight to a minimum and provides increased strength. Titanium is often used where precision is important. Weight is further reduced through an outer tube design that features rounded edges and fluting on the tube and the front and rear plates. This clever fluted design also makes it easier to get an accurate sight picture with the sound suppressor attached.

The semiautomatic functioning of short-recoil operated pistols (typically Browning-type tilting barrel unlocking systems) may be impaired by the weight of the sound suppressor on the barrel. This is not an issue with the SF Ryder 9Ti, which also employs a recoil booster in addition to its lighter weight. A recoil booster uncouples the weight of the sound suppressor from the barrel, allowing the pistol to function properly by boosting the recoil energy of the barrel.



Daniel Graham with Daniel Defense M4 Carbine equipped with SureFire SOCOM556-RC Fast-Attach sound suppressor at C2 Tactical Range. SF Ryder 9Ti is built to the same standards as battle-proven SOCOM556-RC.



The functioning of the pistols that we employed for our testing, a Salient Arms International G17 Tier 1 and a SIG P226 Combat, was flawless with the Ryder 9Ti attached. Several hundred rounds were fired during our time at the range.

The tube on the SF Ryder 9Ti is only 1.25 inches in diameter, much less than most competitors. This is a big plus as it eliminates the need for outrageously high suppressor sights that make finding holsters a problem. The length of the 9Ti is 7.6 inches. It is a thread-on sound suppressor that securely attaches via single-point cut threads, and is available in either ½X28 or M13.5X1 thread sizes. To attach the sound suppressor, screw it on to a compatibly threaded 9mm barrel until hand tight.

You need look no further than SureFire for threaded barrels for your Glock. ZEV Technologies is manufacturing match-grade drop-in threaded chromium stainless steel (416R) barrels for the G17 and G19 exclusively for SureFire. ZEV barrels feature extremely tight tolerances, making them among the most precise in the industry.

SOUND SUPPRESSION

Sound data averages 131 db from the Ryder 9Ti when subsonic ammo is employed. This is outstanding performance, especially when one considers its compact size.

Three possible sources of sound from the discharge of a firearm need

to be considered when "silencing" it: the weapon's report, e.g. muzzle blast; the "crack" caused by a supersonic bullet passing the sound barrier; and the sound from cycling the firearm's action.

The muzzle blast of a firearm is the result of high-pressure gasses suddenly escaping into the atmosphere when the bullet exits the barrel. The muzzle blast is the most significant source of sound that's generated by a firearm. Muzzle sound suppressors

are more versatile than integral sound suppressors, in that they can easily be removed when sound suppression is not necessary. If subsonic ammunition is employed, muzzle sound suppressors are often every bit as quiet as integral suppressors.

Because they do not reduce the velocity of a bullet, higher terminal velocities are possible for applications in which a sonic crack is not an important tactical consideration.

COSMETICS

The SF Ryder 9Ti features a tough, attractive Cerakote[™] finish. Cerakote is a high-temperature ceramic coating that has been proven to outperform competitive gun coatings in both laboratory settings and in the real world.

The SF Ryder 9Ti is available in three colors—Black, Dark Earth, and Wolf Gray—making it ideal for most any application, whether tactical or recreational. It is available for purchase through authorized SureFire sound suppressor dealers. MSRP is \$799. A three-lug adaptor for the H&K MP5 and a special mounting plate for 9mm carbines are expected to be available shortly. <a>(<a>O

Eugene Nielsen's background includes protective intelligence/investigations and threat management, as well as red teaming/security consulting. He is a Licensed Private Investigator in both California and Arizona. He has written almost 1,000 articles.



(805) 486-5800

www.zevtechnologies.com



Beretta M92FS Compact

all have our favorite firearms, but when training individuals I reserve comment on the gear students show up with. Unless an individual has selected an inappropriate or unsafe handgun—and I have seen a cracked frame with a screw driven into it—I do the best I can to point out the pistol's good points. If the weapon is an institu-

While front strap of Beretta Compact is shorter than that of service pistol, well-designed checkering makes for excellent adhesion.

to undermine anyone's confidence in the issue handgun.

I have experienced poor choices in agency issue but focused on the strong points of the handgun and my own skill. During the past few years, I have had the honor of training a number of military personnel. My evaluation of the Beretta 92 pistol is based largely upon these experiences.

tional issue, I teach these men and women how best to use it. There is no need

Overall student performance with the Beretta 92 has been excellent by any standard. Many students purchase Beretta 92 9mm handguns for personal use, among them both of my sons and a daughter-in-law. Over time I have gained respect for the Beretta 92, largely because I cannot recall a malfunction during class.

Those using the Beretta 92 are not always soldiers. One memorable student was a determined senior lady who showed up with a range bag filled with Beretta magazines and a full-size Beretta 92 pistol.

BY ROBERT CAMPBELL

BERETTA M92FS

The Beretta M9 is a proven handgun in police and military circles and by any standard suitable for personal defense. The 9mm cartridge is widely available, affordable, and highly developed. The Beretta M92FS is a short recoil operated self-loader with a double-action/single-action trigger. The Beretta differs from almost every other handgun in use in that it doesn't use locking lugs or angled camming surfaces with the locked breech action.

The Beretta features a locking wedge first used in the Mauser M96 handgun over 100 years ago. The system has stood the test of time, although it makes for a handgun a bit wider than some. The Beretta 92 is in many ways a highly developed Walther P38.

The Beretta uses a single recoil spring

rather than the dual recoil spring of the Walther, and the Beretta incorporates a high-capacity magazine into the design. In common with the Walther P38, the M9's double-action first shot trigger is operated by transferring energy to the hammer from the trigger by means of an exposed drawbar on the side of the frame. The trigger both cocks and drops the hammer.

After the first shot is fired, the slide recoils and cocks the hammer for subsequent single-action fire. A slide-mounted decocker serves to lower the hammer from the single-action mode. This decocker also serves as a manual safety. There is a positive firing pin block. When the chamber is loaded, the extractor protrudes, acting as a loaded chamber indicator. The slide is steel and the frame is aluminum.

The Beretta field strips by rotating a lever on the left side of the frame. The pistol is easy to maintain and requires little maintenance other than cleaning and lubrication. The open top slide may lighten the pistol, and Beretta claims the pistol is less likely to tie up due to this design. The pistol's nearly straight-line feed from the magazine to the chamber seems to promote feed reliability more so than any other feature.

Tactically there is little that may be done with any other 9mm that cannot be done with the Beretta, given a skilled user.

M92FS COMPACT

The problem is that the pistol is large for concealed carry, and concealed carry is important to prepared Americans. The Beretta M92FS compact pis-





No. of the last of
Recessed crowned barrel
and excellent fitting are
attributes aiding Beretta's
accuracy potential.

» SIZE COMPARISON					
	BERETTA 92FS	BERETTA 92FS COMPACT			
HEIGHT	4.9 inches	4.25 inches			
LENGTH	8.5 inches	7.75 inches			
BARREL LENGTH	5.4 inches	5.25 inches			
MAGAZINE CAPACITY	15 rounds	13 rounds			
SIGHT RADIUS	6.1 inches	5.75 inches			
WEIGHT (UNLOADED)	34 ounces	31.5 ounce s			

tol addresses this concern. The accompanying table shows the differences in height, weight and length between the Beretta 92FS and the Beretta 92FS Compact, which is significantly shorter and lighter.

Often a compact handgun has advantages over the full-size version. The Glock 19 handles well compared to the original Glock 17, and the SIG P228 compares well to the SIG P226. The differences are in handling, heft and balance. I cannot fire these compact pistols as well on a combat course or in absolute bench-rest accuracy testing, but the trade-off in a pistol that is more easily concealed and clears leather quickly is an attractive one.

The compact Beretta pistol tested in this report is the 92FS compact, a design that features the milspec 1913 Picatinny rail. This pistol is

Slide lock, takedown lever, magazine release and safety, and decocker lever are all well placed for positive manipulation.

the Inox version with stainless steel slide and barrel, and a three-dot sight treatment outlined in red, which contrasts well with the stainless sights.

I have examined a number of Beretta compact handguns in the past and have extensive experience with the standard Beretta 92 Compact. The newest 92FS version features a treatment in grip stippling and checkering that I find superior to previous applications.

The feel of this handgun is excellent. While the grip is wide, it fits most hands well. The geometry is such that the curve of the grip seems to fit better than the full-size version. The largest hands may suffer the small finger dangling, but can simply curl it under the grip. When firing the pistol, I was surprised by the excellent purchase given with this abbreviated grip.

Drawing primarily from a fabric/ steel clip Falco brand IWB holster, the

>> Continued on page 88



Viridian C5 light is compact and proved to be a good match for the Beretta.

» ACCURACY RESU	JETS
LOAD	GROUP (inches)
Black Hills 115-gr. FMJ (reman.)	2.8
Black Hills 124-gr. JHP	2.0
Black Hills 124-gr. JHP +P	2.2
Fiocchi 115-gr. FMJ	2.5
Fiocchi 147-gr. JHP/Extrema	2.1
Slow fire from bench at 25 yards. Average of two five-shot groups.	

SURVIVAL'S JESJE GA-

most successful survival strategies are usually the ones that focus on the basics—food, water, first aid, medical,

Must-Have Basics

BY RICHARD DUARTE

situation, we can store many supplies for use in a variety of different situations. For longer-term situations, the focus shifts to

sanitation/hygiene, self-defense, security, and of course, knowing when to stay put and when to get out. These are all crucial for staying alive, especially during a disaster aftermath, when you'll most likely come face-to-face with the maximum chaos and turmoil.

But what about a longer-term crisis situation? Imagine a scenario that extends for weeks, or worse yet, months? Even if you have food, water and the other basics secured, for the long term you must attend to many other aspects of daily life.

While few of us can ever hope to have a perfect plan, or to stockpile all the possible supplies we may need for every multi-purpose items and supplies that afford the most flexibility, especially during times of increased scarcity, stress and uncertainty.



The Big Seven consist of a variety of familiar household products that many people already have buried somewhere in their kitchen cabinets or pantry. They are all very easy to obtain and store, and are relatively inexpensive. Here are the seven most indispensable multi-purpose super-items and some of the many uses for these supplies.

BAKING SODA

It's almost impossible to talk about multi-purpose household products without starting with the granddaddy of them all—baking soda. Many of us are familiar with baking soda in the kitchen and maybe in the refrigerator as a deodorizing agent. Not so many know the hundreds of other possible uses for this miracle product. Baking soda can potentially stand in for, or replace, dozens of other products. Baking soda is cheap, stores well, and will last for years. Here are just a few of its many uses.

- To clean and deodorize just about anything. Baking soda is a healthier, natural (non-toxic) cleaner and deodorizer that can stand in for many commercial chemical-based products. Knowing this, you may not want to wait for a disaster before you begin using baking soda. Mix ½ cup vinegar and ¼ cup baking soda with ½ gallon of water to make a natural all-purpose household cleaner.
- Clean pots and pans. Water in short supply? Wipe down the items you want to clean, apply a tablespoon of baking soda with a teaspoon of white vinegar, rub the dirty surface with the mixture, rinse with a small amount of water, and repeat.
- Hand cleanser: Make a paste by mixing baking soda with a small amount of water, rub into hands, and rinse. Also works as a face wash. (Avoid direct contact with eyes.)
- Deodorant: Mix a teaspoon of baking soda with a bit of water and rub it under your arms.
- Foot soak: Get rid of foot odor and fungus by soaking feet for 30 minutes in a solution of warm water with half a cup of baking soda. If water is in short supply, make a solution with water and baking soda, spray it on your feet, leave it on for 15 to 20 minutes, wipe off the excess, and repeat.
- Sunburn: Apply a compress with baking soda and water for immediate relief.

- Hair care: Use one cup of water and one tablespoon of baking soda to wash hair, rinse, and dry.
- Soothes bug bites: Mix two tablespoons of baking soda with one tablespoon of warm water, apply to affected area with clean hands, leave on for 30 minutes, rinse, and repeat.
- Toothpaste: Mix baking soda with coconut oil or hydrogen peroxide to help keep teeth clean, fresh, and white. The whitening part may not be a big deal during a disaster, but keeping teeth clean and healthy certainly is, especially since you may not have access to a dentist.
- Mouthwash: Dissolve one or two teaspoons of baking soda in a glass of water to make a soothing and refreshing mouth rinse. Also effective for treatment of mouth ulcers, sores, and bad breath.
- Upset stomach and acid indigestion: Take ¼ teaspoon in a glass of water for relief.
- To keep drains flowing: Put one to two tablespoons of baking soda directly into the drain, add ¼ cup of water followed by a cup of white vinegar. Let sit for a few hours and flush with hot water.
- Fire extinguisher: Throwing baking soda on flames produces carbon dioxide and starves the fire of oxygen. Not my first choice to fight a fire, but good in a pinch.



WHITE VINEGAR

With so many uses, white vinegar (as well as apple cider vinegar) deserves a special place in your survival pantry. These natural products are cheap, store well, and are extremely versatile.

- As a cleaning agent and deodorizer, especially when combined with baking soda.
- As an air freshener and to kill germs.
- Soothe skin and relieve the itching and burning associated with bug bites and sunburn.
- Keep away fruit flies, disinfect wood cutting boards and counter tops.
- Tenderize meat, clean and preserve produce, and freshen wilted vegetables.
- Soothe a sore throat, relieve an upset stomach, relieve aching muscles, and help maintain blood sugar levels (a teaspoon).
- Clean, deodorize and disinfect dentures and other oral appliances.
- Add apple cider vinegar to meals to aid in digestion and avoid acid reflux, or for flavor, use as a lemon substitute.



HOUSEHOLD BLEACH



Common household bleach is a must-have item even during *normal* times. During a disaster, bleach is elevated in importance by a factor of ten or more. But caution: bleach is a poison that can cause serious injury or death if used incorrectly. Read all directions and follow manufacturer's instructions.

- Disinfect water (two drops of bleach per quart of water).
- Sanitize eating and serving plates, utensils, cups, and pots.
- Disinfect cutting boards and countertops.
- Wash suspect fruits and vegetables in a water and bleach solution (one gallon of water with one teaspoon of bleach) for five minutes before cooking or consuming.
- Kill germs and airborne viruses by spraying bleach solution in baths, kitchens, and sick rooms. Also makes a very effective hand sanitizer or disinfectant.

ALCOHOL



Both the drinking kind and the rubbing kind of alcohol are extremely useful and versatile products. Technically these are two different products, but we'll cheat a little. They store well, are inexpensive, and easy to obtain.

- Rubbing alcohol 70%, aka Isopropyl Alcohol. This has a wide range of uses. Just don't drink it—it's a poison. Use it as a hand sanitizer and odor remover, underarm deodorant, effective cleaner for minor cuts and scrapes, to relieve insect stings and bites, help treat toenail fungus and athlete's foot, kill bacteria that causes foot odor, relieve sore achy muscles, as a highly flammable lighter fluid to start a fire, to treat head lice, help remove stubborn earwax, treat cold sores, treat dust mites and bed bugs, deodorize shoes and boots, and remove ticks.
- Grain alcohol (151 proof). The *drinking kind* can help you in a multitude of situations—from medical to medicinal and everything in between. Use it as a topical antiseptic, pain reliever for sore muscles, sore throat treatment, mouthwash, fuel source, fire starter, light source, or to sterilize medical instruments or relieve toothaches.



In the bowels of your medicine cabinet probably lurks a brown plastic bottle of hydrogen peroxide. This amazing product has so many practical uses that it's almost magical. It's also extremely inexpensive and easy to store. Hydrogen peroxide comes in strengths ranging from 3% to 9%. Check the strength before using.

- Remove painful ear wax: A few drops of 3% hydrogen peroxide can soften ear wax to permit easy removal.
- Fruit and vegetable wash: Add three cups of 3% hydrogen peroxide to a bucket of water, let produce sit for five minutes, drain, rinse, and dry.
- Household cleaner: Mix equal parts 3% hydrogen peroxide and water for an effective household cleaner.
- Mouthwash: Swish a tablespoon for quick relief from mouth ulcers, toothaches, and sore throats.





Honey has been used for thousands of years and has an almost unlimited shelf life. We all know honey can be used as a tasty sweetener, but many people are surprised to learn of its many unexpected uses. Storing honey is a no-brainer. Caution: Honey may contain dormant spores of a bacterium called *Clostridium Botulinum* and can be dangerous, sometimes fatal, to infants. Children under one year of age should never be given honey in any form.



- Heal wounds, cuts and burns. Honey works as a natural antiseptic and anti-inflammatory. Simply apply it to the affected area.
- Soothe sore throats and suppress coughs. Combine with lemon juice and drink. Or swallow plain honey slowly and let it work its charm.
- Boost energy levels. Get a quick energy boost by adding a tablespoon of honey to your favorite beverage. It also helps boost immunity and fight sickness.
- As a natural sleep aid. Take it before bedtime to help facilitate restful sleep.
- One teaspoon per day helps reduce and relieve acid reflux.
- Equal parts honey, vinegar and water helps remove parasites.
- Locally harvested honey is thought to reduce certain allergies.
- Calms anxiety and promotes relaxation, which are especially useful during a survival situation.
- Aids digestion. Mix equal parts apple cider vinegar and honey, and dilute with some water.
- Face and hair wash. Provides natural antibacterial and healing properties to clean and clarify the skin and balance pH on skin and scalp.

COCONUT OIL

Pure, unrefined, cold pressed extra-virgin coconut oil is one of the most versatile yet underestimated survival basics. It has literally hundreds of uses.

- Great for cooking or as a replacement for vegetable oil in any recipe. Can also be added to food for an energy boost.
- For health and beauty. Use it to alleviate dry or chapped lips and skin, as a natural sunscreen, hair conditioner, deodorant, diaper cream, shave cream, or as a toothpaste when mixed with baking soda.
- Wound care. Antibacterial and antifungal properties make coconut oil an excellent salve for minor scrapes and abrasions. Mix with honey and put it directly on the wound. Helps heal bruises and repair tissue damage.
- Lubricate just about anything, including tools and machinery, and help prevent rust.



START STORING

This list is certainly not complete. There are many more products that could be on it, and many more uses for the listed products, but it's a great place to start. More importantly, this list should make you consider what supplies you store and which ones you should be adding to your survival pantry.

Richard Duarte is an urban survival consultant, writer, and firearms enthusiast. He's the author of Surviving Doomsday: A Guide for Surviving an Urban Disaster, and the Quick-Start Guide for urban preparedness. For the latest news and updates, connect with Richard on www.quickstartsurvival.com.

Long Range? No Problem!

FTW's 12,000 acres. Another student and I rode with Larry Summerfield. The "drive-around" found us shooting at steel plates from ten different locations ranging from 300 to 875 yards.

With a light wind accompanied by rain, riding around in the elevated rear seat of an uncovered Jeep was, uh, interesting. Larry could tell us the ranges to the target, but it was up to the shooter to call his own wind.

We were allowed only two shots at each target. If we hit with the first, it was worth two points. If we had to take a second shot, it was worth one point. With overcast skies, this was the only time I utilized the illuminated reticle on the Burris XTR II. I ended up with a respectable—but not great—score of 15.

After lunch, we had a sneak peak at two new Ruger rifles that at the time had not yet been introduced to the public: a Mini-14 chambered for .300 Blackout and the new takedown SR-556 in 5.56 and .300 Blackout.

Darren Jones from SilencerCo had brought out several suppressors, and I shot the two rifles with and without a can. We plan to have feature articles on these two rifles in the near future.

SUMMARY

The Ruger Precision Rifle will be hard to beat at almost any price. With a suggested retail of \$1,399 and an actual retail that is likely much less, it is within almost everyone's budget. And if you want to learn how to employ it at long range, I strongly recommend the facility and instructors at FTW.
©



Full-Featured Compact Continued from page 83

pistol proved fast from concealed carry. The grip is sufficient in size for a good grip on the draw. The pistol comes on target quickly. The red three-dot sights are particularly well received. They give an excellent sight picture and are large enough for rapid acquisition.

As for quickly moving the safety to the firing position, keep the thumb in a strong straight forward position and strike the safety as you go into the thumbs forward firing grip. With practice, you will become proficient with this technique.

RANGE EVALUATION

Initial firing drills were undertaken with Black Hills Ammunition 115-grain FMJ remanufactured loads. These "blue box" loads are not only a good resource for affordable practice, but made to the same exacting standards as all Black Hills loads.

In double-action mode, the Beretta delivered X-ring hits on demand to ten yards. Concentration and coordination are demanded when firing a double-action first-shot handgun. The Beretta's trigger is long but smooth and can be mastered with practice. There is some stacking at the end of travel, SOP for the double-action first-shot handgun. Estimated double-action trigger press is 12 pounds.

The single-action press is crisp and tight, with no creep or discernible backlash. Single-action trigger compression is four pounds even—an excellent factory trigger. Control was good in single-action mode.

The Beretta demonstrates little muzzle flip with most 9mm Luger loadings. Moving to service-grade loads, the pistol proved reliable with Black Hills 124-grain JHP and JHP +P, Fiocchi 115-grain FMJ practice load, and Fiocchi 147-grain Extrema. A quantity of steel-cased ammunition and lead bullet handloads were also fired. Recoil was not a factor, and the pistol never failed to feed, chamber, fire or eject. The pistol is pleasant to shoot and was very controllable with every load tested.

After a couple of range sessions, the Beretta 92FS Compact had 400 rounds of ammunition fired without any complications. The evaluation ended with a good impression of the handgun.

I know individuals who never fire personal defense guns for groups.

Groups do not save lives. Firing at small targets at known and unknown ranges is a greater indicator of practical accuracy. Just the same, the Beretta was fired for absolute accuracy.

This compact handgun is more accurate than many full-size service pistols. The nicely crowned muzzle and overall good fit are part of the equation; the rest is the good sights and trigger.

My only complaint is that the magazines were stiff and difficult to load, but the feed lips were not sharp and the magazines always functioned.

SUMMARY

Comparing it to others in the same size and weight class, the Beretta 92FS Compact exhibits several advantages. The slide lock is capable of rapid manipulation, but not likely to be inadvertently pressed, locking the gun to the rear during a firing string, and neither is it in a position for the thumb to ride the slide lock and cause the slide to fail to lock open on the last shot. The slide is easily racked—there is plenty of leverage due to the handgun's geometry. The safety is positive in operation.

While the true safety is between the ears of the user, the safety features—manual safety, double-action first-shot trigger, and positive firing-pin block—are appreciated.

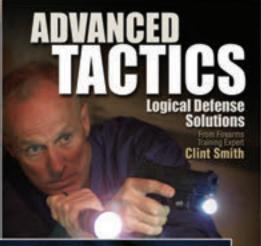
The original intent of the test was to evaluate the 92FS Compact as a choice for those who favor the Beretta 92 but wish to own a more compact weapon. The 92FS Compact may stand on its own merits in comparison to any compact 9mm handgun. <a> ©

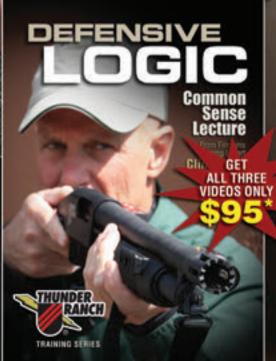
Bob Campbell is a writer in the firearms, personal defense and outdoors fields with several thousand published articles, columns and reviews and ten books. Bob holds a degree in Criminal Justice and has more than thirty years police and security experience. He has trained hundreds of shooters including police and military.



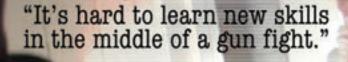
"The best example of good training is never having to use it.

~Clint Smith





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Hutton's Edge Tactical Knife and Fighting System

There is no denying that blades in capable and determined hands can be devastating and turn a larger and more belligerent opponent into hamburger.

Knife fighting is not for the squeamish, and most Westerners would prefer to shoot someone rather than stick them, or be shot rather than sliced and diced while watching it as it's happening. I believe that knives, the "weapons of passion," can be more intimidating than a gun.

HUTTON'S EDGE TACTICAL KNIFE

This is no ordinary 8.1-ounce fighting knife. Although 30 years in development, its blade shape reminds me of the Filipino Kris' wavy, snake-like double-edged blade.

The HETK's combined weight with custom Kydex sheath is 12.9 ounces of fist fury. Its four-inch wave-like blade is 0.194 inch thick and made



Hutton's Edge Tactical Knife with Kydex sheath. Knife is carried upside down and is quite secure. Knife's features include wavy blade for enhanced cutting, linen Micarta grip, and aft "Thumper" window-breaking stud.



Fixed-blade version of HETK is designed to be worn upside down behind pistol. Draw is straight down.

of newly patented S30-V Crucible steel with Black-T coating. Its Linen Micarta finger-grooved grip is 0.721 inch thick. Overall length reaches 9 1/8 inches, and its shank is completed with a rounded butt that's holed for a lanyard and tipped with "The Thumper," a variable-diameter window-shattering emergency extraction stud.

But its primary purpose is personal



Rear attacker can be countered with blade.

protection, with an emphasis on defense that can quickly transition to offense via Hutton's system. The Commercial Police HETK is carried inverted on the belt encased in a custom Kydex molded sheath. Each knife is slightly different, hence each one gets a custom sheath. The Tek-Lok retainer snaps on and off the belt. Retention is quite good, yet the knife deploys quickly.

There are four versions of the fixed blade, including a handmade Damascus Steel Limited Edition for \$1,200 to \$1,700, and four folding-knife variations. Suggested retail for the HETK varies from \$575 to \$650, depending on the model. Prices include the Tek-Lok Kydex sheath.

Training and certification for the fixed blade are mandatory for military members and law enforcement professionals. Civilians are strongly encouraged to take advantage of the training, because as D.P. Hutton, inventor of the HETK, advises, "The knife is no good

without the instruction."

Training is not mandatory for the folder, but recommended because of the extra steps involved in deployment. All these knives are "warranted for life and guaranteed forever."

Hutton confided that he has been thinking of designing a more effective knife since age 16. He began training at age 13 and has matured into a hard-core martial artist. He defeated an ROK Marine in an exhibition match on Okinawa while in the Corps. Hutton is a former Marine, veteran police officer, criminologist, and security advisor who holds several U.S. patents.

He stated that the HETK is a defensive instrument because it and his technique target the opponent's appendages to render them inoperable. With appropriate force generated by a two-handed grip, the knife can slice "straight through bone."

In addition to police acquisition, DEA agents in one Western field office use them for backup weapons but also consider the HETK a close quarters option in crowded venues where gunfire is likely to cause collateral casualties.

KISS SYSTEM

Most martial artists spend decades—even lifetimes—engaged in complicated disciplines involving weaponless and weapons defense, but Hutton wisely adopted KISS, the most reliable standard for training and operational success.

Trainers usually opt for simple but effective techniques that will remain with the officer and do not require frequent training to retain. Hutton's are so simple it took me 20 minutes to acquire the basic concepts.

Hutton's police version is usually worn on the same side that the officer carries his pistol, and placed immediately behind it. It is designed for onehanded pull-down extraction because the officer's belt order is crowded with myriad weapons and gizmos that are designed to be lifted up to deploy. But if the officer is bear hugged by a strong perpetrator, his arms are pinned to his sides and he cannot break contact, he will not be able to draw his sidearm or pocket folder. If armed with an HETK, he could extract it and stab rearward, puncturing the leg and groin of his assailant to force his release.

SLASH OVER THRUST

The HETK is more of a slashing tool,



Folder retains all features of fixed blade in a slightly smaller package.

and the first purpose of the system is to stop the fight rather than attempt to kill the opponent.

Multiple slashes produce more tissue damage and precipitate grave psychological trauma, because they can be seen and felt by the threat while they are occurring. Tremendous amounts of blood are evident, and the recipient has no idea how badly he is hurt. In one practitioner's opinion, the stab is the "least effective way to disable."

With the knife, you block impact weapon or knife attacks, followed by tendon-disabling slashes to the inside wrists and forearms. If the attacker needs to be further disabled, a "push grip" is assumed. The support hand is brought over the top of the dominant hand and slid behind it to brace it for a two-handed forward punch to his throat or neck.

Once the hands of the attacker are disabled, his center mass is the next target, should it be necessary. The wave-shaped blade with its thickness cleaves more tissue than a straight blade and inflicts a wider wound incision.

Defensively, the knife, in a reversedominant handgrip, is brought up in a two-handed grip that is identical to your two-handed thumbs-forward handgun grip. The blade is forward to the opponent and braced against the side of the wrist and forearm. It is held at throat level just under the chin and, in your fighting stance, you wait for the assailant to come to you.

The reverse grip is anathema to many martial artists because it gives up reach. This is true and, if the attacker deploys a gun and escape is impossible, HETK wielders are taught to rush the gunman with a push grip, get inside and attack. The HETK is by no means limited to

slashing and can be used conventionally, point forward. The reverse grip has proven better for retention.

One other advantage of the system is you don't have to be physically fit to employ it. Training blades are available, and Hutton is working on concealed-carry versions.

CONCLUSIONS

Many American males carry a clipmounted folding knife but possess only intuitive skills on how to employ it for self-defense. The HETK is no ordinary knife, and when legitimately introduced into a self-defense event, its lethal profile may stop fights before they progress very far. The blade, defensive stance and grip also project skill and confidence that will give pause to aggressors who still have their wits about them.

Bob Pilgrim holds an MS degree, was a Marine Infantry officer during the Vietnam conflict, and retired from the FBI as a special agent, where he was the field SWAT program manager. His Special Operations and Research Unit created and trained the FBI's Hostage Rescue Team. After retirement, he was an adjunct instructor at the Smith & Wesson and SIG Sauer Academies and a subject matter expert for the USDOS's Anti Terrorism Assistance Program.



LaserLyte Trigger Tyme **Compact Pro Kit**

aserLyte® has introduced a new laser training kit—the LaserLyte Trigger Tyme™ Compact Pro Kit (LT-TTC). It allows for safe, realistic training virtually anywhere or just plain plinking for fun.

As we all know, shooting is a perishable skill. While laser training does not replace the need for live-fire training, it is a valuable adjunct to it that allows you to train more often, and it's a great tool that is applicable to range training exercises.

The Trigger Tyme Compact Pro Kit includes the LaserLyte Trigger Tyme Compact Pistol and LT-PRO universal pistol laser trainer. The kit contains everything you need to start laser training. It provides you with the convenience of an all-in-one system at a savings of \$30 if purchased separately.

Designed to be used in conjunction with the LT-PRO laser, the Laser-Lyte Trigger Tyme Compact Pistol is a generic blue gun that approximates the size of many popular compact pistols and is weighted and balanced to give it a realistic feel. It definitely does not

plastic, the Compact Pistol is well made

and exhibits excellent workmanship. The barrel is thick copper tubing. The pistol weighs 10.5 ounces. It measures six inches long and 4.75 inches high. The compact size not only makes this training pistol a great tool for adults practicing concealed carry techniques and tactics, but it's also ideal for youths or adults with smaller hands.

The Compact Pistol has an approximate 5.5-pound trigger pull with a realistic take-up and break action that simulates the long trigger pull many compact DAO pistols have. The trigger is auto-resetting for prolonged laser training without having to re-cock the trigger after each shot—a big plus. The trigger pull is consistent and has the feel of an actual trigger, allowing for effective trigger control practice.

The sights are made of black ABS plastic. They are quite good and provide an excellent sight picture. The only change I made was to add a white dot to the front sight.

Safety is always a concern. The Compact Pistol is completely safe. It is non-firing. It cannot accept or fire live ammunition, nor can it be mistaken for a real firearm.

To use the Trigger Tyme Compact Pistol, simply insert the LaserLyte LT-PRO in the muzzle. When the trigger on the training pistol is pulled, the soundactuated LT-PRO activates a brilliant red laser dot for 100 milliseconds that simulates bullet impact on the target. The laser is easily adjusted if necessary.





LaserLyte LT-PRO in Kahr K9 Elite. LT-PRO fits in all pistols .380 ACP to .45 ACP with a minimum two-inch barrel.

The dot on the test unit was spot-on out of the box. The LT-PRO laser is powered by three 377 button cell batteries (included). A set of batteries is rated for 3,000 shots. The 377 batteries are common watch batteries and widely available. No tools are necessary to replace the batteries.

The LT-PRO can also be used with all pistols .380 ACP to .45 ACP with a minimum two-inch barrel and will

activate when the hammer or striker is fired. The fitting almost flush to the muzzle design allows standard holsters to be used, making the LT-PRO ideal for practicing drawstrokes.

Although it can be used with standard targets and even scenario-based force-on-force training, the Trigger Tyme Compact Pistol with LT-PRO is designed for use in conjunction with LaserLyte electronic targets—the

Reaction Tyme

LaserLyte Reaction Tyme Laser Trainer Targets are compatible with all LaserLyte laser trainers and feature interactive dual modes for reaction and training.

Photo: LaserLyte

Trainer Target Laser (TLB-1), Reaction Tyme[™] Target (TLB-RT), or Laser Plinking Cans (TLB-BWC), each of which is sold separately.

LaserLyte provided *S.W.A.T.* with a Reaction Tyme Target for this review. We previously covered the Trainer Target (*LaserLyte Laser Training Target*, July 2011 *S.W.A.T.*). LaserLyte targets are compatible with all LaserLyte laser trainers

The Reaction Tyme Laser Training targets come in a set of two targets that feature dual modes for reaction and training. Each target is a compact standalone system that works independently of the others, allowing for multiple training scenarios. The targets are also quite compact, each measuring only 3.74 inches high by 3.00 inches wide and 1.30 inches in length. They're ideal for on-the-go training.

To set up a Reaction Tyme Target, simply turn on a switch. No computer or projector is needed. In Reaction Tyme Mode, the training LEDs turn on and single beep in random three- to seven-second intervals, remaining on for three seconds. A hit on the target during the timed on period results in two beeps and two LED flashes in each corner. A set of three AAA batteries (included) provides up to 6,000 shots.

To sum it up, the LaserLyte Trigger Tyme Compact Pro Kit (LT-TTC) and Reaction Tyme Laser Trainer Targets (TLB-RT) are great training tools to help novice and pro alike perfect their shooting skills in the comfort of their own home or office. They're very affordable, too. Suggested retail price for the Trigger Tyme Compact Pro Kit is only \$142.95, and the two-target Reaction Tyme Laser Training Targets are \$175.95. They come with a three-year limited warranty.

③

Eugene Nielsen's background includes protective intelligence/investigations and threat management, as well as red teaming/security consulting. He is a Licensed Private Investigator in both California and Arizona. He has written almost 1,000 articles.



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Springfield Armory Threaded Barrel XD(M)

Springfield Armory® has introduced a Lipsey's exclusive XD(M)® 4.5" Threaded Barrel Pistol in both .45 ACP and 9mm options.

The XD(M)® 4.5" Threaded Barrel .45 ACP model is only available in a Black finish, while the XD(M)® 4.5" Threaded Barrel 9mm model is only available in a Flat Dark Earth finish. Licensed FFL holders can place orders for both pistols at www.lipseys.com.



Point Blank Body-Worn Camera

Point Blank Enterprises, a worldwide leader in the production of soft body armor and related protective solutions, has launched its first body-worn camera—the Intelligence Retrievable Incident System (IRIS), designed to meet the growing demand for law enforcement agencies to provide a visual and audio record of officers' interactions with the public.

The IRIS is a Gen II camera with multiple cuttingedge capabilities that provide much-needed flexibility and can easily integrate with an officer's protective vest, helmet, uniform, etc. Among IRIS's primary

components are push to talk for two-way radio speaker, HD camera for still photos, audio-only recording, photo sensor for infrared light, true viewing angle, two-way radio speaker plug, and HDMI and USB output.

This camera is an important tool that can be integrated into a jurisdiction's comprehensive problem-solving and community-engagement plans.

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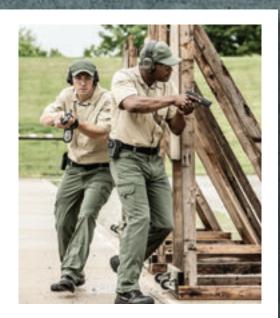


Propper Ultra-Light Clothing

As a proven player in the tactical industry and a major uniform supplier to the Department of Defense, Propper knows tactical clothing and gear. Propper's latest ultra-light Summerweight uniform is its lightest yet, making it ideal for hot days. The durable stretch fabric wicks moisture away from the body, keeping the wearer cool and comfortable without restricting mobility. The uniform is UPF 50, so it blocks 98% of the ultraviolet radiation hitting the garment, which makes it ideal for all-day sun protection.

The Summerweight set consists of tactical pants, shirts (long and short sleeve) and shorts available in Black, Khaki, Olive and LAPD Navy color options. Rapid-access lay-flat cargo pockets on the upper thigh offer quick access to tools and supplies. The mesh-backed vent on the back of the short- and long-sleeve shirts allows for breathability on hot days. The shorts have a total of ten pockets for gear storage and mesh lining for comfort.

PROPPER (636) 685-1000 www.propper.com



Trijicon AccuPower LED Riflescope

The AccuPower series is designed for versatility, with variable power offerings of 1-4X24, 2.5-10X56, 3-9X40 and 4-16X50. Integrating aircraft-grade aluminum housing, quality glass lenses, and application-specific illuminated reticles, the AccuPower riflescope offers the durability and dependability expected from Trijicon.

The AccuPower line features anti-reflective multi-coated lenses that provide superior clarity and light-gathering capabilities. Adjustable reticle brightness settings are intuitive and easy to set, with 11 brightness adjustments—all powered by a long-lasting CR2032 battery.

The AccuPower series incorporates a hybrid black chrome/etch. Four reticle choices are available: an intuitive MOA reticle, MIL-square reticle, Duplex crosshair, and the popular competition segmented circle crosshair with BDC capabilities. All reticles are located in the second focal plane, meaning the reticle size and appearance remain constant as magnification increases. This provides a more exact aiming point at higher magnifications and is faster to use in low-light situations. Suggested retail prices are from \$699 to \$999 depending on the model.



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Emerson/Grossman Sheepdog Knife

Emerson Knives announces the release of an important knife collaboration between Lt. Col. David Grossman and Emerson Knives, Inc. The Sheepdog is the official knife of Sheepdog Knife and Gun and Lt. Col. Grossman—a living legend in the tactical world.

Ernest Emerson states, "Mr. Grossman spec'ed the knife requirements and I took it from there. It is a knife designed specifically as a tactical tool/weapon for military and law enforcement applications."



The Sheepdog knife is the first Emerson to feature a flipper and a pivot-bearing system, for silky smooth opening. It also has the Emerson wave opening feature and standard thumb button, making it a knife that can be deployed immediately in the most hostile or high-stress environments. The knife is 8.4 inches overall and comes in two distinct styles—the iconic American Bowie and a brutish spear point style blade.

EMERSON KNIVES (310) 539-5633 www.emersonknives.com

SHEEPDOG KNIFE AND GUN www.sheepdogknifeandgun.com

Black Hills .338 Lapua 250-Grain Nosler Accubond

The .338 Lapua is the King Kong of long-range precision rifles, but until now has been handicapped by a lack of premium performance ammunition specifically designed for big-game hunting. Black Hills Ammunition has introduced a load utilizing the 250-grain Nosler AccuBond™ bullet. This load was designed to fit and function even in rifles with a max load length of 3.6 inches, to ensure proper fit in all rifle magazines.

The 250-grain bullet was chosen for optimum accuracy performance in all standard rifling twists. With a velocity of 2,850 fps, muzzle energy of over 4,500 ft lbs, and the attention to detail you have come to expect from Black Hills, a true big-game load is now available for your .338 Lapua.

BLACK HILLS AMMUNITION (605) 348-5150 www.black-hills.com



The Wrong Car

Arriving at her home on Detroit's west side in the pre-dawn darkness of a warm June morning, a young woman noticed a man approaching her car. He produced a firearm and ordered her out of her car. Instead of complying, his 26-year-old intended victim produced her own handgun and opened fire.

The two exchanged a fusillade of shots that resulted in the would-be carjacker fleeing on foot, leaving bloody evidence that at least one of the victim's shots had found its mark. After police launched a search, the teenage assailant was discovered at a local hospital, where he had checked in for treatment of a gunshot wound. Speaking to reporters, the victim's sister expressed gratitude that the woman had a carry permit, noting "it could have gone a different way" if she had not.

SOURCE: WJBK-TV, Detroit, Michigan, 6/8/15



Good Samaritan

In Orem, Utah, the quiet of a late-springtime Saturday morning was pierced by screams as a man fleeing police attempted to carjack a Mercedes in a grocery store parking lot. The attacker, who had already abandoned one stolen vehicle during the pursuit, was now trying to acquire another by forcing its driver out and onto the asphalt.

A nearby Good Samaritan heard the victim's cries for help and approached with his gun drawn, ordering the carjacker out of the victim's car. Instead of complying, the criminal lunged for the citizen's pistol, at which point the CCW holder feared for his safety and fired once. The suspect, who had several felony warrants out for him, died at the hospital from his single gunshot wound.

SOURCE: Ogden Standard-Examiner, 5/4/15

Two Against One

It was 2100 hours outside of Top's BBQ in south Memphis when two armed assailants forced a man from his 2009 Nissan Maxima. In the face of their guns, the victim drew his own, and both sides started shooting. Hit by his attackers, the wounded victim watched his car speed off.

But it didn't get far, as the victim's shots had proven fatal for one of his attackers. The car was found and police arrested the other carjacker. The victim was treated for a gunshot wound to the face and is expected to recover.

SOURCE: WREG-TV, Memphis, Tennessee, 5/11/15

Not Going to Take It Anymore

A Detroit woman, known by her neighbors as "Ms. Dee," was awakened by the sound of breaking glass at 0200 hours one June morning. Armed robbers had smashed her bedroom window and were climbing through—a classic home invasion robbery. Ms. Dee, who had woken to find an armed man pointing a gun at her face and telling her to stay silent as several of his accomplices entered her home, wasn't going to put up with this.

"I was able to get to my gun. They didn't know I had it. By that time, it was just gunfire," she told reporters. In the chaotic exchange that followed, Ms. Dee was hit in the leg, but her attackers fled. She believes she hit at least one, and police are on the lookout for the home invaders.

SOURCE: WDIV-TV, Detroit, Michigan, 6/9/15

Everyone spends a lot of time in their vehicles, which increases the odds of being attacked while in one. Do you have the means to protect yourself?

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CMMG	www.cmmginc.com	47
CrossBreed Holsters	www.crossbreedholsters.com	17
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Luth AR	www.luth-ar.com	57
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Shoot Straight Online	www.shoot-straight.com	28
Sturm, Ruger & Co	www.ruger.com/2million	Cover 3
Sun Optics USA	www.sunopticsusa.com	49
SureFire	www.surefire.com/x300ultra	26
SWFA	www.swfa.com	39
Tactical Night Vision Company	www.tnvc.com	11
TEA Headsets	www.teaheadsets.com	19
TOPS Knives	www.topsknives.com	32
Trijicon, Inc	www.trijicon.com	7
Troy Industries	www.worldoftroy.com	34
Wilson Combat	www.wilsoncombat.com	23





NOVEMBER ISSUE ON SALE OCTOBER 6th

Fighting Mindset

SHE seemed like your average rational person—but then she had to open her fool mouth.

Cruising the local swap meet, I was engaged in the inevitable masochistic pursuit of hoping to stumble upon a \$10 Webley Fosberry or similar never-going-to-happen bargain. Encountering a pair of pit bulls, I stopped to trade some doggie-talk, ear scratching, and face licking. As I turned away to continue my fruitless search, from behind me I heard The Comment: "Pit bulls shouldn't be allowed at swap meets."

Being the proud owner of a carefully cultivated intemperate disposition, I was hard-pressed not to about-face and respond to Larva Lucy with the perfect "Bite me" ad lib. Or maybe I should have whispered "bite her" to my newfound canine buddies. In any event, I chose to ignore the comment and continued on down the aisle, only to happen upon a Remington 11 receiver—in good condition, complete with all internal parts and magazine tube. All for the princely sum of \$25.

Since I now had a complete set of spare parts for my treasured A5 Brownings and Model 11 Remingtons, my capricious nature had reverted to the zenith of Mood Swing Mountain, and I'd almost forgotten about the human larva I'd encountered earlier—almost.

But once I'd returned to my kennel, I began the admittedly rare-for-me process of thinking—specifically about the canine incident. And as is so often the case, I attempted to analyze Madam Butterfly's mindset relative to fighting strategy.

What, you may well ask, do a moron's opinions have to do with battle mindset? Probably nothing—or maybe everything. Obviously the woman in question is of the type who will happily stand in a cloud of diesel bus smoke and then finger-pinch her nostrils when she sees somebody light up a cigarette 50 yards away. And she would love to see the death penalty abolished—until it's *her* daughter who is raped. And of course she wants to see pit bulls become extinct.

Since these are acquired opinions and not innate phobias like a fear of spiders or heights, it's obvious that these opinions have been accumulated over a period of years via media indoctrination and acceptance thereof. (To illustrate this point, witness the dearth of ocean-going swimmers the summer the movie *Jaws* was released.)

So how does this relate to fighting—or more specifically, being a mental victim before the physical encounter actually commences? If your mindset is of the self-indoctrinated type, which says that if you see a pit bull he will bite you, the pit bull will, indeed, probably bite you. Not because he's inherently a "vicious" dog, but because he's confused. And like a confused human, a puzzled canine's confusion leads to trepidation. Once any animal—be it two-legged or four—feels uncertainty and apprehension, it reacts in one of two ways: it runs or it attacks.

And pit bulls don't run. But neither do Chihuahuas or Dachshunds, and a dime gets you a dollar that more people have been bitten by Wiener dogs than pit bulls. Yes, people have been killed by dog attacks. But by a long chalk, many more have died from skydiving, bungee jumping, and eating sushi.

Put yourself in the dog's Hush Puppies for a moment. You

don't watch *Animal Planet* or the 11 O'Clock News, so you don't understand that you're supposedly violent.

Now you're approached by two different humans at a swap meet. One walks up to you, offers the back of his hand, and spends five minutes discussing Kibbles 'n' Bits® recipes. The other circles you with reticence, staring nervously into your eyes. Which one do you think would raise your hackles?

You smell the fear on her, you don't know why she's soiling her foundation garments, and so you experience a reciprocal feeling of trepidation. So you bare your teeth. Nice going, lady—you've just morphed a mild-mannered pooch into a so-called vicious dog.

Yes, dope dealers train pit bulls to be attack dogs. But you can also train a monkey to ride a bicycle. That doesn't automatically mean all simians are inherently Olympic cyclists.

Finally, it's down to the crux of this article. Not all fights are won by fists, bullets, or blades alone. Prior concepts—and misconceptions—can win or lose a battle before it starts.

Case in point: A female acquaintance was being stalked by an irate ex-beau. Naturally he chose to ignore a restraining order, so in order to deal with any potential violence, she chose to partake in some defensive pistol training. (And, I might add, has become extremely proficient in this field.) When I suggested she might also want to take some intermediate force classes—since the law draws a very narrow line on the use of deadly force—her initial response was that the cretin in question "is a lot bigger physically than I am."

My first thought was, "And he's going to shrink sometime?" If he's physically big, he's physically big, and that's all there is to it. Now you have a rabid dog, and a rabid Pekingese will take you out as quickly as a rabid pit bull. If you're out-gunned, that doesn't mean you're out of ammo. You just slow down, shoot more carefully, and pray a lot. You can't win them all and there are no guarantees. But you don't have to hand over your head on a plate either. The paradoxical result of the above situation was that the jerk laid off after an even larger acquaintance stepped in and had a gentle discussion with him. We are, apparently, creatures of habit—and creatures of self-induced thought processes.

Usually if people want something eradicated, it's because they feel they do not have control over that entity. But if you're faced with a home invasion, calling your Congressman to pass yet another counter-criminal law isn't going to solve your immediate problem. Either you stand up and fight or you're going to get mauled. In case you hadn't noticed, murder and rape are illegal—but that hasn't stopped murderers and rapists.

If you believe everything you see on TV, shame on you. Get some backbone and fight if you're confronted with a deadly force situation—irrespective of the odds against you—because nobody's going to be around to help until after the fact. And don't blame one breed of dog for your own stupidity and lack of intestinal fortitude.

In a fight, as in life in general, you can't fear the pit bull—you have to be the pit bull. ©

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