• UPGRADES FOR ENHANCED ACCURACY









COVER STORY

30 Tactical Battle

The military versions have squared off in many conflicts around the world. In this tactical test, retired Special Forces personnel tested the civilian versions against each other. Find out if the AK or AR prevailed.

By Steven Barlow



FEATURES

10 Gloried Histories

In this special section, we delve into the rich histories of the AK-47 and AR-15.

12 From Russia With Love

This journey through the AK-47's rich history reveals which German rifle inspired this class of rifle ... and much more.

By Leroy Thompson

22 From Rocky Start To Rock Star

We don't need to tell you how popular the AR-15 has become, but you may not know the full story of its journey, including what administration set it on its course to stardom.

By Chuck Taylor

46 The Debate Rages On

To help you decide what is right for you, we have got the pros and cons of the direct-impingement system and the newer, piston-driven AR models.

By Richard Crays

48 The Next Best Battle Rifle

To achieve firearm supremacy, both Russian and U.S. military officials are assessing the AK-12 and M4.

By Richard Crays

52 Metamorphosis

Maximize your AK or ARs functionality—or just personalize it to your needs—with our accessory guide.

By John N. Raguso

Table of Contents

60 Russian Designed, American Made

We took IO's Sporter out for a test ride and discovered that it is one durable and reliable AK-47.

By Steven Paul Barlow

66 In Focus

To maximize your AR or AK's performance, we have sure-fire ways for you to dress it up. By John Raguso

76 Alternative Adrenaline

If you want to shoot your new AR all day long without spending a fortune, we have a can't-miss plan: rimfire ARs.

By KM Lee

84 Feeding Frenzy

With ammo demand exceeding supply, you need to implement Plan B, and that's why we have provided the complete resource guide.

By Jim Dickson

98 One Bad Buck

If you're in the market for a versatile, accurate and affordable AR, the Stag 3T-M is the place to look.

By Brad Fitzpatrick

106 TLC For The AK & AR-15

These nine easy maintenance tips will prolong your firearm's life.

By Abe Elias

112 ARs Of A Higher Caliber

If you're one who thinks bigger is better, you'll be happy to know that a wide variety of high-caliber options beckon you. By KMLee

120 Semi-Autos Got Game

You want to put your AK or AR to work for hunting. Is this the right call? If so, do you know what modifications are necessary? We do.

By Jim Dickson

128 A Soldier's Story

This firsthand account takes you directly into a Taliban ambush. Come along for an adrenaline-filled ride in this firsthand account of bravery and heroism in the face of enemy fire.

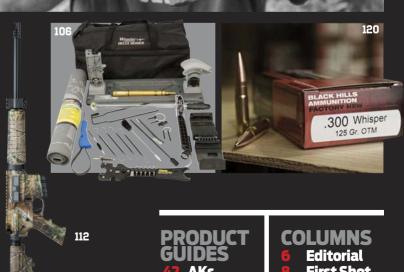
By Scott Berkey with Abe Elias











Closing

OFTEN IMITATED, NEVER! DUPLICATED

CROSSBREED®HOLSTERS











SHOOTERS PACK

BEDSIDE BACKUP



LIFETIME WARRANTY! • TRY-IT-FREE GUARANTEE! 888.732.5011 • WWW.CROSSBREEDHOLSTERS.COM

COPYRIGHT 2014 CROSSBREED® HOLSTERS. PATENTS: US 8,672,201 B2 AND US 8,479,331 B2
HANDCRAFTED IN THE U.S.A.

Teaching Old Dogs New Tricks

GUESS YOU CAN TEACH
OLD DOGS NEW TRICKS.

The AK-47 and M-16/AR-15 have been around for a long time. Whenever there is talk about switching to something newer and better, along comes an AK-74 here or an M-4 there, and the old platforms keep trotting happily along. There are upgrades, but as of yet, no replacements.

Civilian shooters in the U.S. are buying semi-auto versions of these rifles in some cases as fast as they can make them. A staggering number of manufacturers are introducing new rifles and a bewildering assortment of innovative accessories every day. There are no signs of a slow economy in this marketplace.

This dog has learned some new tricks,

History Lesson

While working on this project, I found I was getting some overdue instruction. Leroy Thompson and Chuck Taylor, two guys who know their guns, straightened me out on a few things I thought I knew on the history of these guns.

Although I had fired both AKs and ARs before, I had never seen them handled as brilliantly as a maestro handles his baton in the way the four expert shooters did during their tactical shoot featured here. Turn to the cover story for the full report.

As for the AK, my views were never all positive. It has been, after all, the chosen weapon of most of our country's enemy combatants during my lifetime. I liked the 7.62x39 as an intermediate cartridge. I liked that the AKs were more affordable than some other guns, and of course, it had a superb reputation for reliability. But

the quality of the guns was usually not what I demanded. Then I fired I.O. Inc.'s Sporter, made here in the U.S., and found the trigger, accuracy and overall workmanship much better than I had anticipated. I discovered that you could modernize the AK with an ever-increasing number of handguards, rails, stocks and sights available for it.

On the other hand, as popular as it is now, "AR" might as well stand for "American Rifle." Being more of a big bullet proponent, I had a lukewarm attitude toward the AR and its 5.56x45 varmint cartridge.

Sure there were AR-10s in .308, but their large size took away much of the handiness that is the AR-15's strong suit. Now there are guns of moderate size and weight chambered for more cartridges than ever before. If you can't find one to pique your interest, you had better check your pulse.

With an AR, you don't have to be a gunsmith to customize your gun or even build one from scratch. The AR is the Jeep Wrangler of the gun world. There are nearly unlimited aftermarket parts and accessories for it.

Express Yourself

In this country, we take pride in our individuality. We like to stand out in a crowd, be little different.

Why not learn a few new tricks yourself and configure your rifle, whether it's an AK or an AR, to express that individuality? Hopefully in this publication, we've given you some ideas on how to do just that. AK/AR

Steven Paul Barlow, Editor



AK vs. AR Fall/Winter 2014

EDITORIAL

Editorial Director: Jennifer Degtjarewsky Executive Editor: Doug Jeffrey Editor: Steve Barlow Senior Creative Director: Eric Knagg Managing Editor: Kari Windes

CONTRIBUTORS

Abe Elias, Brad Fitzpatrick, Leroy Thompson, John Raguso, Chuck Taylor, Richard Crays, KM Lee, Jim Dickson, Suzanne Moss Mullen, Stephanie Barlow

ADVERTISING

Gabe Frimmel - Ad Sales Director (714) 200-1930 - GFrimmel@Beckett.com Casey Clifford - Senior Account Executive (717) 896-8956 Mark Pack - Senior Account Executive (714) 200-1939 Gennifer Merriday - Ad Traffic Coordinator

DIRECT MARKETING GROUP

 John Bartulin
 (866) 866-5146 ext. 2746

 Paul Caca
 (866) 866-5146 ext. 4961

 Ryan Lauro
 (866) 866-5146 ext. 2756

 Mary Ann Jaca
 (866) 866-5146 ext. 2716

OPERATIONS

Gus Alonzo: Newsstand Sales &
Marketing Manager
Celia Merriday: Newsstand Analyst
Amit Sharma: Business Analytics Manager
Mohit Patel: Newsstand & Production Analyst
Alberto Chavez: Senior Logistics & Facilities
Manager
John Cabral: Creative Graphic Designer

EDITORIAL, PRODUCTION & SALES OFFICE

22840 Savi Ranch Parkway, #200 Yorba Linda, CA 92887 Ph: (800) 332-3330 Fax: (800) 249-7761 www.facebook.com/worldoffirepower www.facebook.com/eembybeckett

AK vs. AR © 2014 by Beckett Media, LLC. All rights reserved. Reproduction of any material from this issue in whole or in part is strictly prohibited.

CUSTOMER SERVICE

BECKETT MEDIA, LLC 4635 McEwen Road Dallas, TX 75244

SINGLE COPY SALES (800) 764-6278 (239) 653-0225 Foreign Inquiries subscriptions@beckett.com customerservice@beckett.com

BACK ISSUES www.engagedmediamags.com

BOOKS, MERCHANDISE, REPRINTS (239) 280-2380

DEALER SALES (239) 280-2380

NEW PRODUCTS OR TO CONTRIBUTE A STORY OR PHOTO djeffrey@beckett.com

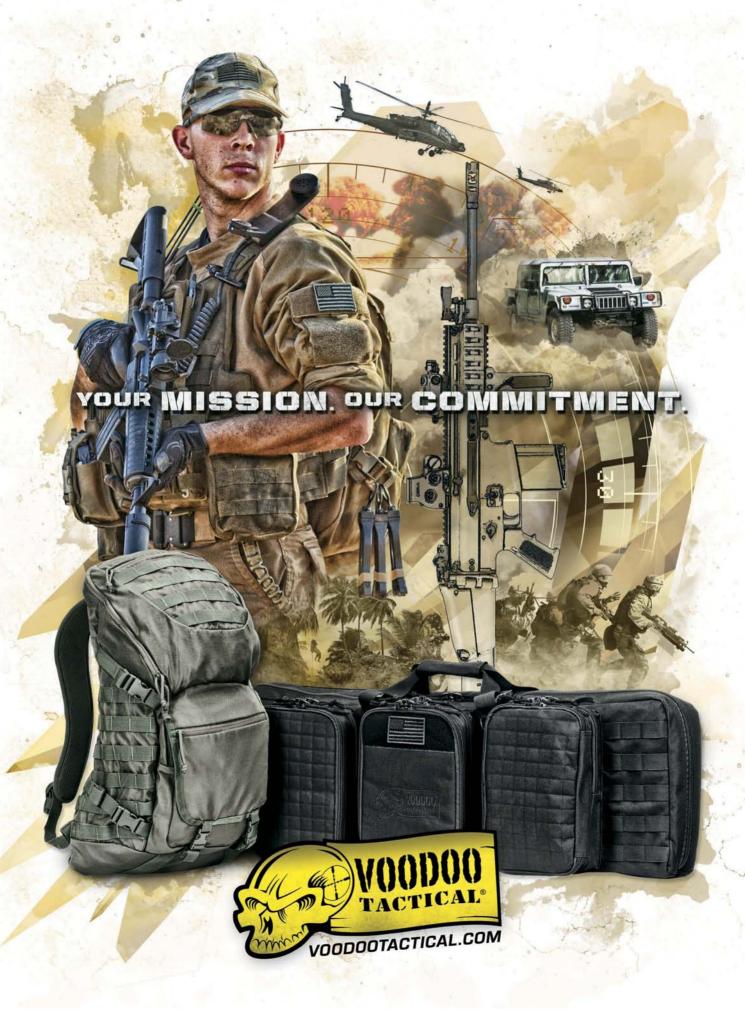


BECKETT MEDIA, LLC

Nick Singh: Executive Director

Jennifer Degtjarewsky: Group Editorial & Business
Unit Director

This magazine is purchased by the buyer with the understanding that information presented is from various sources from which there can be no warranty or responsibility by Beckett Media, LLC as to the legality, completeness or technical accuracy.



The Ne t Level

RAISE YOUR GAME WITH THESE **ESSENTIAL ITEMS** FOR THE **RANGE**

QUIPPING
YOURSELF
FOR SHOOTING IS NOT
ALL ABOUT

THE GUNS AND AMMO. There are other things you'll want to pick up as well, either because you need them, they will raise your game or simply because they're cool to have. We've chosen some good ones for you to consider.



1. Inteliscope

Product: Inteliscope Pro
PRICE: \$129

WEB: InteliScopes.com

As if you needed one more reason to carry your smartphone along, now there's the Inteliscope Pro. It enables you to mount your phone to your rifle. The Inteliscope App (down-loadable in iOS or Android) turns your smartphone into a scope with your choice of reticles. You can record your hunts and ops or stream live video to your command post.

It is constructed of aluminum with a rubberized finish and can be mounted to any Picatinny

rail. The app, which works with virtually any smartphone, provides an excellent view and, in conjunction with weather and rangefinder apps, brings critical information to your attention, such as wind speed and distance to your target. It's been tested to stand up against the recoil of a 5.56, .308 and a shotgun.



2. Bobster

PRODUCT: AMBUSH II
PRICE: \$49.98

/EB: Bobster.com

When at the range, you'll want the best shooting glasses for your safety. The Bobster Ambush II meets and exceeds ANSI Z87 standards, while also being high-impact resistant. The black, nylon frame wraps around the face to provide extra protection while still allowing for easy removal.

If you wish to convert to a goggle, the Ambush II features removable temples. The lenses are shatter-resistant, have an anti-fog coating and provide complete UVA/UVB protection.



3. Haley Strategic PRODUCT: Incog Discreet Rifle Bag

PRICE: \$170

WEB: HaleyStrategic.com

The Incog Rifle Bag allows you to travel with your rifle without drawing everyone's attention that you're carrying a firearm. But it's just as much at home at the range as it is as a discreet carry bag.

Its interior features a main compartment for your rifle, as well as multiple storage units for your essential gear. Made of 1,000D Cordura, the exterior appears to be an ordinary duffle bag, yet it allows you to travel in 100 percent style.

5. Bti Brands

PRODUCT: Caldwell Brass Catcher

PRICE: \$39.99
WEB: BtiBrands.com

Shooting at the range doesn't have to leave you with a sore back from bending over to pick up empty shell casings. The Caldwell Brass Catcher saves you major cleanup time and energy.

Unlike other brass catchers, it securely attaches to a Picatinny rail by a two-piece aluminum clamp, which is fully adjustable to fit multiple rifles with varying optics. The heat-resistant mesh features a zipper at the bottom to easily remove the collected brass.

4. Next Level Training

PRODUCT: SIRT-AR Laser Bolt

PRICE: \$199

/EB: NextLevelTraining.com

The SIRT-AR Laser Bolt is a device that allows you to perform advanced dry-fire training safely in any environment, saving you time and money.

Remove the bolt carrier on your AR-15 and drop this device in its place. It automatically resets your trigger to keep the training going. The green laser is visible to 200 yards with optics. It uses lithium CR123 batteries. If you want to go red, that laser is available for \$139.













FROM RUSSIA WITH LOVE

THROUGHOUT ITS HISTORY, THE AK-47 HAS BEEN BOTH FAVORED AND FEARED AROUND THE WORLD

TEXT AND PHOTOS BY LEROY THOMPSON

F YOU ASK MOST PEOPLE—SHOOTERS
AND NON-SHOOTERS, ALIKE—what an assault rifle looks like, the most common reply will be "An AK-47."

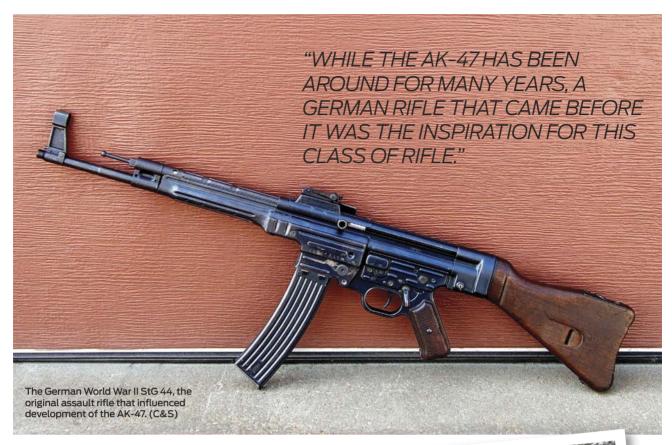
That's really a pretty good choice, as the AK-47 meets the basic criteria usually given for an assault rifle: select fire, intermediate cartridge, pistol grip and detachable magazine.

intermediate cartridge, pistol grip and detachable magazine. Generally, "assault rifles" are also designed for use at intermediate ranges. Those rifles chambered for more powerful cartridges and having longer ranges are usually designated "battle rifles."

While the AK-47 has been around for many years, a German rifle that came before it was the inspiration for this class of rifle.

Sturmgewehr 44 Paves The Wav

Normally, the World War II German Sturmgewehr 44 is considered the first assault rifle. Literally, "Sturmgewehr" translates to "storm rifle," but it is more often translated as "assault rifle."



The Germans produced around a half million StG 44 rifles in World War II, primarily for use on the Eastern Front. As a result, the Soviets were familiar with the rifle, having captured a number of them. During the post-war period, the Soviets developed their own assault rifle—the AK-47—designed to fit the needs of a large conscript army.

Developed by Mikhail Kalashnikov, the "AK" designation means "Automat Kalashnikova." Kalashnikov had worked on a design for an automatic weapon since late in World War II. By 1947, he had developed prototypes of what would become the AK-47, with examples being produced for field trials with the Red Army by 1948. Trials proved successful, and the weapon was adopted in 7.6x39mm caliber in 1949.

AK-47 Production Begins

The best-known Russian manufacturer of the AK-47 is Izhmash (Izhevsk Machine Engineering Plant). Izhmash produced SKS rifles from 1949 to 1954 and still produces the AK-47, and later, the AK-74.

In fact, Izhmash produces around 85 percent



Russian soldier with an AKM; note the distinctive slanted flash hider used on many versions of the AK-47. (Russian Ground Forces)

of all Russian small arms. U.S. shooters may be most familiar with the name Izhmash uses for commercial production of weapons: Baikal.

The next best-known Russian arsenal is Tula, which produced AKMs from 1960 to 1977 and also produced the AKS-74U, the SMG version of the AK-74.

The earliest produced AK-47s featured stamped-sheet steel receivers. These early models also had two wooden or plastic side panels that were secured by a screw and nut. When large-scale production began, they discovered that the thin sheet metal receivers often warped during heat-treating. Production of this first type of AK-47 was phased out in 1951.

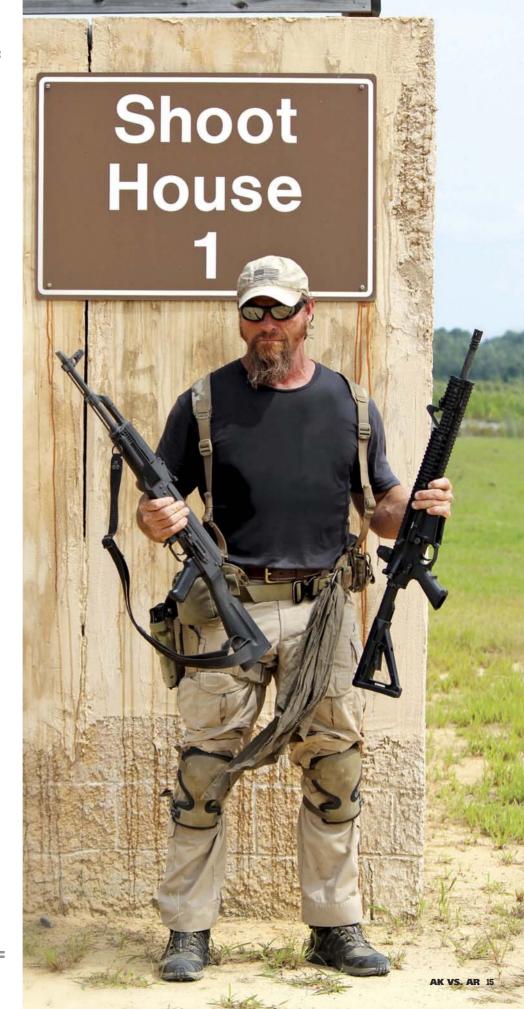
Solid Receivers Introduced

A second type of AK-47 receiver, which was forged and milled from a solid block of steel, was introduced in 1951. Although this receiver eliminated the problems encountered with the stamped receivers, it was more expensive and time-consuming to produce, but some stamped parts were retained.

The two-paneled pistol grip was eliminated and replaced with one made from a single piece of wood attached by a screw that passed vertically through the center of the grip. This is the type of pistol grip with which readers will be most familiar. This second type of AK-47 rifle was produced from 1951 to 1955. These first two types were only produced in Russia. One problem that arose with the second type of AK-47 was the tendency of the buttstock to break.

In 1953, a third type of receiver was produced. It had a top stock tang that was integral to the receiver. The stock also was redesigned so that a step allowed it to fit into a recess in the receiver.

Other changes that occurred during early production included changing the location of the front sling





"NORMALLY, THE WORLD WAR II GERMAN STURMGEWEHR 44 IS CONSIDERED THE FIRST ASSAULT RIFLE."

attachment from the retaining band for the lower hand guard to the gas block. Various steps were also taken to lighten the rifle or to make manufacturing easier. A lighter magazine with thinner steel reinforced by ribs was also adopted.

Along with the standard AK-47, the AKS model with under-folding stock was produced for airborne troops with all three types of receivers. Changes had to be made to the rear of the receiver for the AKS to allow installation of the pivot of the folding stock.

The forged-steel receiver of the third type of AK still had disadvantages, including weight and the need for steel and skilled labor. Russian stamping techniques had improved to the point that by 1959 the modernized version of the AK was introduced as the AKM.

The Updated AKM

Using a stamped receiver with a machined steel trunion block, the AKM was about 2.5 pounds lighter than AK-47s that had forged steel receivers.

AKMs also had sights marked to 1,000 meters instead of 800 meters that was on previous models.

In the period from 1962-1963, a compensator was added to the AKM's barrel, which countered the tendency of the muzzle to climb and move to the right during full-auto fire. This is the simple, slanted compensator that is normally seen on AKMs. It also proved useful when firing prone, as it kept

gases from kicking up dust or debris.

A folding stock version, the AKMS, was designed with a different rear trunion to take the pivot pin and latch. As a result, a fixed stock cannot readily be attached to an AKMS or a folding stock to an AKM.

The World Carries The AK

The AK-47 also became the standard weapon of most Soviet satellite states as well as many Marxist guerillas. Space does not allow a comprehensive discussion of all of the variants, but a few are worthy of special mention.

Most U.S. shooters will be most familiar with the Chinese Type 56. The Type 56, which China first produced, used the third-type milled receiver. The 56-1 version had the under-folding stock.

Later, the Chinese switched to a stamped receiver as with the AKM. There was also a Type 56-2 that had a side-folding stock. Some beautiful Poly Tech semi-auto versions of the 56-2 were imported into the United States.

The Chinese rifles of the AKM type do not have 1,000-meter sights; instead, they have the 800-meter sights. Another version of the Type 56 has an under-folding bayonet similar to that on the SKS.

Bulgaria made a wide array of AK-47 and AK-74 variants, many of which have been imported into the United States, especially as kits assembled on U.S. receivers. Among other interesting





- This is a Chinese sailor with a Chinese-made AK-47; note that Chinese military AKs did not have a flash hider. (US DOD)
- A Romanian mountain troop carrying the Hungarian PM63 version of the AK; note the foregrip. (Romanian Land Forces)
- A member of the Polish Airborne armed with the Beryl, the currentissue Polish AKbased weapon. (Wojska L. Dowe)







Bulgarian variations is the AR-SF short-barreled AKSU-type weapon.

As with other former Soviet satellites that are now part of NATO, Bulgaria has manufactured AK-74-type rifles in 5.56x45mm NATO caliber.

Sometimes listed as an AK-47, the Czech Vz58, which is actually a completely different design, resembles an AK. As is typical of Czech designs, this is an excellent rifle.

East Germany (GDR) produced a copy of the AK-47 and designated it the MPi-K. Although GDR AKs originally had milled receivers, in 1967, production of AKM-type versions with stamped receivers began. Because of a lot of U.S.-built "kit" rifles have been built using its stock, the DDR MPi-KMS-72 rifle is familiar to many. Some say the side-folding wire "crutch" stock is uncomfortable, but a lot of people think it looks "tactical."

East Germany also produced a 5.45x39mm MPi-AK74N, which is its version of the Russian AK-74. These used the same folding wire stock as used on the 7.62x39mm rifles. One of the more useful GDR rifles was the KK-MP1-69 .22-caliber training rifle.

Because some beautifully made semi-auto Hungarian AKs were imported pre-ban, these are the favorite AKs for many. FEG produced AK-47s and initially used the milled receiver, but in 1963 FEG began producing a copy of the AKM using stamped receivers as the ASK-63. There was also an underfolding version of this rifle.

Unique to Hungary was the AMD-65, a version with a side-folding stock and shorter barrel for air-

borne troops. Some of these were later acquired for the Afghan police, who were not especially enamored with them. Hungary did make a 5.45x39mm rifle designated the NGM-81.

Poland made its milled version of the AKM as the PMK and the PMKS. Later, the PMKM and PMKMS stamped receiver versions of the AKM were introduced.

Late in the 1980s, Poland began replacing its MPKM rifles with the Vz88 Tantal, a 5.45x39mm rifle with a side-folding stock similar to that used on East German KMS-22 rifles. Unlike other AK-type rifles, the Vz88 has a three-round burst setting.

When Poland joined NATO, the Vz88 was redesigned to chamber 5.56x45mm NATO, However, in 1996, a new rifle designated the Kbx Vz 96 Beryl based on the Vz88 was designed for the 5.56x45mm NATO. This is the current standard Polish military weapon. A mini-Vz 96 Beryl, which is similar to the AKSU, is also available.

Also popular in the U.S. are kit AKs based on the Romanian PM63 and noteworthy for its vertical foregrip, a feature that does aid in control during full-auto fire. In 1965, a stamped receiver version with a folding stock was adopted as the AIMS/PM65.

The later MD90 version uses a crutch-style, side-folding stock. In 1986, the Romanians adopted the 5.45x39mm cartridge and the AIMS-74 rifle chambering it. The Romanian weapon, on which many-including the author—appreciate the vertical foregrip most, is the MD86. This is the Romanian equivalent of the AKSU with an 11.6-inch barrel.

Because semi-auto versions of the Egyptian Maadi were among the first semi-auto AKs imported into the U.S. and because they were virtually a direct copy of the Soviet AK-47, Egyptian AKs have always been among the favorites. A folding stock version uses a side-folding variant of the East German crutch stock.



The AK's Big Brother The RPK

Along with the AKM, Mikhail Kalashnikov also developed the RPK light machine gun, which was adopted in 1959. Although the RPK uses the same action as the AKM, there are quite a few differences to allow it to perform its fire support role more effec-

It has a heavier, chrome-lined 23.2-inch barrel for greater range and accuracy. Its stock is designed for ease of firing from the prone position, and it has a folding bipod for stability. For more durability in full-auto fire, its receiver uses sheet metal about 50 percent thicker than that used on the AKM

Although the sight of the RPK is similar to that of the AKM, it is adjustable for windage, as well as elevation. Its cyclic rate of fire is about 600 rpm, though its use of a 40-round magazine or a 75-round drum limits the number of rounds fired without a reload. About 50 rounds more can be fired a minute with the RPK than the AKM

The primary disadvantages of the RPK are the lack of a quick-change barrel and that it fires from a closed bolt, which increases its tendency to overheat in continuous fire. The need to change magazines or drums fairly frequently helps a bit, though. A folding stock RPKS version was available for airborne/airmo-

After adoption of the AK-74, the RPK-74 was introduced. The RPK-74 also has a bipod and stock designed for firing prone. The rear sight is adjustable for both windage and elevation.

There is not a drum for the RPK-74. Instead, it uses 45-round magazines or standard AK-74 magazines. Many readers will be familiar with the 45-round magazine, as Osama bin Laden carried one in his AKS-74-U.

The RPK-74's bipod is designed to be high enough to allow magazine change of the 45-rounder by tilting the LMG to the side on the bipod. Early RPK-74 stocks are wood, but later ones are polymer. An RPK-74-M version of this weapon is available with an optics rail and the polyamide side-folding stock, pistol grip and handguards as on the AK74-M.





Thompson shoots a recent version of the AK-74. Note the RPK74 magazine.



Thompson fires the AKS-74U, the short-barrel version of the AK-74. This one has the Russian collimator sight and an RPK74 40-round magazine.

Numerous other countries have made versions of the AK, including Iraq, North Korea and Yugoslavia. Many semi-auto Yugoslavian imports have been sold in the U.S., either complete or in kit form. They seem to be popular, though some generally avoid them, as they do not have chrome-lined barrels. As corrosive 7.62x39mm ammunition dries up, this will be less of an issue.

Note that some countries that produced AK-47s or AK-74s also produced RPKs or RPK74s.

An Overview Of The AK

As this article is intended as a short history and overview of the Kalashnikov series of weapons, we will stop here. Due to a lack of space and because I'm somewhat of a purist, we did not cover the various hybrid AK-style rifles currently available in the United States.

Regardless, the AK's rich history and massive production exemplifies just how popular and reliable the gun has been. **AK/AR**

About the Author: Leroy Thompson has trained military and law enforcement personnel in VIP protection, hostage rescue and counterinsurgency in various parts of the world. He's written more than 50 books on weapons and special ops and approximately 3,000 articles.





Thompson fires the MD86. Its stock is especially uncomfortable in continuous firing and has a tendency to move against the shoulder.



Thompson fires the AMD-65. The fore-grip helps control it in full auto fire.



Smaller Is Bigger The Soviets Adopted The AK-74 With A Smaller Cartridge

To some extent, the adoption of the AK-74 was the Russian answer to the U.S. M16 and its 5.56x45mm NATO cartridge. M16s captured by the North Vietnamese were sent to the Soviet Union for evaluation. By 1964, work had begun on a smaller caliber version of the AK47

A rifle firing a smaller cartridge would have several advantages. It would be easier to control during full-auto fire, and it would enable the individual soldier to carry more ammo. Additionally, a smaller caliber weapon would be lighter. Thirty-round polymer magazines that could be rapidly loaded from 15-round stripper clips also would help to reduce weight.

These advantages appealed to a Soviet Army that put great stress on airborne and motorized infantry units, both of which were designed for the rapid seizure of objectives during the advance

The cartridge chosen was the 5.45x39mm round, which offered higher velocity and a bullet that was expected to tumble in tissue, causing more damage.

Mikhail Kalashnikov also designed the AK-74. As its designation indicates, it was adopted in 1974, though it didn't really begin reaching troops until 1976, and then only in limited numbers. Larger scale issuance, initially to airborne troops, took place by 1978. The AK-74 first saw action in Afghanistan in 1979.

Among the most noticeable features of the AK-74 is its distinctive muzzle brake. Because the Russians continued to use corrosive ammunition, the bores of the AK-74s were chromed, as were those its predecessors. So were the muzzle brakes.

The basic AK-47 receiver was retained with some slight changes. The AK-74 originally used AKM-type wooden furniture.



This is a Soviet sailor armed with the AK-74; the photo offers a good view of the muzzle brake. (Russian Naval Forces)

By the 1980s, the rifles featured plum-colored polymer furniture. which, in turn, was replaced by black furniture when the AK-74M was introduced in 1991. The AK-74's grooved buttstock, another of its notable features, was added to lower weight.

As with the AK-47, a folding stock version of the AK-74 was introduced for airborne troops. Designated the AKS-74, this rifle had stock that folded to the left rather than an under folder as on the AK-47.

The AK-74M has what appears to be a standard rifle stock, but the stock is designed to fold to the left. This offers a stock for airborne or other troops as comfortable for shooting as a fixed stock, yet foldable for carry-in vehicles or during airborne or airmobile insertions. Another version of the AK-74 is the AK7-4N, which incorporates a side rail for mounting optics.

Another version of the AKS-74 is the AKS-74-U, the shortbarreled folding stock version of the weapon designed for use by use by helicopter or armored crews. It became popular with Russian special ops troops as well. Although this version is often called the "Krinkov" in the U.S., I never heard any Russian special units armed with this weapon refer to it by this name. They usually called it the "sutchka" (little b***h).

One of the most noticeable characteristics of the AKS-74-U is its bulbous expansion chamber at the front of the barrel, which is designed to increase gas pressure for reliable operation.

The conical muzzle brake in front of this chamber is slotted on each side so that it may be used as a wire cutter by placing the slots over the wire and firing a round. Obviously, this is not a method that would be used when infiltrating a compound.

There is a Spetsnaz (special forces) version of the AKS-74-U that may be fitted with a suppressor. Also, I have seen the Spetsnaz use Russian collimator sights on the AKS-74-U with a side mount.

FROM START TO ROCKY START TO



ROCKSIAR

EW MILITARY RIFLES IN HISTORY have elicited more emotional reactions than the AR-15/M16. First surfacing in the last years of the 1950s Eisenhower Administration, the AR-15 was the brainchild of Eugene Stoner, an engineer at Armalite, then a division of Fairchild Aircraft and later purchased by Colt. It was quickly thrust into the white-hot spotlight of controversy.

THINKSTOCK PHOTO

173rd Airborne troops with their early-model M16s crossing a swollen stream during Vietnam's intense monsoon season. Though some claim that the M16 was susceptible to rain and mud, its enclosed receiver actually made it less prone to problems of that type than its predecessor, the M14.

The subject of intense controversy about its mechanical reliability during the early years of major U.S. troop involvement in the Vietnam War, the M16 has now been in service longer than any rifle in U.S. military history.







Destined For Bigger Things

At the time, President John F. Kennedy's Secretary of Defense, Robert McNamara, was publicly crusading for equipment universality within the U.S. military. The AR-15 was soon to be considered for applications beyond those envisioned by its creator.

USAF General Curtis LeMay also wanted a new rifle to replace the venerable .30 caliber M1 and M2 carbines then being used by Strategic Air Command security forces. So USAF interest in the AR-15 as a multi-purpose rifle began to build.

In the U.S. Army and Marine Corps, however, traditionalists were highly offended by the AR-15's unconventional appearance, the lightweight materials such as aluminum and phenolic resins from which it was made, and its diminutive caliber.

They were still smarting from the thrashing they had

received over the 1958 M14 scandal in which they had managed to disqualify the AR-15's parent rifle, the AR-10, by nefarious means. They wanted no part of any new rifle, especially one that they thought looked like something from a Buck Rogers movie.

Nonetheless, McNamara and then-new President Kennedy were interested. Always a fan of special operations, President Kennedy had recently approved the creation of the SEALs from existing Underwater Demolition Teams and had been made an honorary member of U.S. Army Special Forces, which made him receptive to anything those organizations felt was appropriate.

Existing rifles—the M1 Garand (which was still in service)—and its slated replacement, the M14, were large battle rifles. Both the SEALs and Special Forces felt they were less than ideal for their needs.

A demonstration of SEAL capabilities at President

AR Stop Still An As a tw firer myself fact that it will warely conditions, and dust an on more man Mi4 or MI6 or heard—and heard—and heard—and that the profite 225 cartridge will problem the this day. OPERATION AND PREVENTIVE PREVENTIVE

AR Stopping Powe

As a two-tour infantry officer myself, I can attest to the fact that it worked reliably in a wide variety of environmental conditions, including mud, rain, and dust and that it required no more maintenance than the MI4 or MI Garand.

The only complaints I heard—and shared—were directed not at the weapon itself, but at the poor stopping power of the .223 REM/5.56x45mm cartridge with FMJ bullets, a problem that has continued to this day.

MAINTENANCE

By 1967, the myth that it didn't require cleaning was dispelled and reasonable maintenance procedures were instituted. The AR-15/M16 went on to be the most prolific military rifle in the non-communist world.

Kennedy's seaside home in Hyannisport, Mass. included a special showcasing of the AR-15. The president was duly impressed with its capabilities.

Down at Fort Bragg, U.S. Army Special Forces also promoted the rifle for the same reasons. The result was that in 1960 both organizations were allowed to purchase a small quantity of AR-15s (the M16 designator was not assigned until 1963). They battlefield tested them in Vietnam, where U.S. interest was rapidly escalating.

The rifles used in those tests featured a 1:14 rifling twist, which meant that the bullet in flight was barely stabilized. When it struck anything, it instantly destabilized, which meant that it began to tumble end over end, resulting in horrendous wounds, wounds that were totally disproportionate to those typically expected from a 55-grain FMJ .224-

diameter bullet.

Moreover, the compactness and light weight of both the AR-15 and its new Remington-designed cartridge, the .223 REM (5.56x45mm), impressed everyone.

It allowed the individual to carry far more ammunition than possible with the old .30-06 or .308 Win (7.62x51mm NATO). It was also quite controllable in fully automatic fire, which the M14 was not.

Rifle

As shown by this 1968 U.S. Army pamphlet, by 1968, proper maintenance protocols had been established and disseminated throughout the U.S. military. This did much to re-establish troop confidence in the weapon after the controversies of 1966-'67.



Military Adopts The M16

These factors, combined with the USAF's interest in it, led to the AR-15's 1963 adoption as the M16. (The M15 designator had already been assigned to an unsuccessful version of the M14 intended as a squad automatic rifle as part of the cover-up of the M14 scandal.)

Within the U.S. Army and Marine Corps, however, there was considerable consternation over the AR-15/M16. No military organization likes it when pressure from above forces them to do something they disagree with, and their cooperation with designer Eugene Stoner was something less than wholehearted.

M16 Has Shaky Beginning

For example, as the M16 was in its final stages of pre-adoption refining, the Army failed to notify Stoner that they were going to change the propellant powder of the 5.56 cartridge, which resulted in changing the weapon's time/pressure curve and dramatically increased powder fouling.

They also pooh-poohed Stoner's suggestion that since they were obviously going to take the M16 to tropical Vietnam, its chamber and bore should be hard chromed to prevent corrosion.

These snafus were to come to roost sooner than expected, as the United States began to commit large numbers of M16-armed troops to the war in 1965-66. The result was the loss of several hundred American lives due to M16 failures.





The M16A2, shown here with M203 40mm grenade launcher, began to succeed the M16A1 in 1983.

It also gave rise to the belief by many that the Army brass had deliberately sabotaged the M16 to make it fail. No physical proof of such a conspiracy has ever surfaced, but there is no question that the Army wanted to embarrass SECDEF McNamara because he had publicly chastised them unmercifully over their culpability in the 1958 M14 scandal.

By early 1967, M16 failures had reached sufficient proportions that commander General William Westmoreland notified the U.S. Army Ordnance Corps that if they did not immediately correct the M16's problems, he would remove it from service and replace it with the newer Armalite AR-18, which had also been tested and found satisfactory.



The compact XM177E2, also popularly known to troops as the CAR15, was a favorite of U.S. Special Forces and other SpecOps personnel during the Vietnam War and for the following two decades.

"MORE THAN 30 MILLION AR-15/M16S HAVE BEEN PRODUCED. THEY'RE USED BY MORE THAN 80 NATIONS, CONSIDERABLY MORE THAN THE AK." The versatility of the basic AR-15/M16 design has allowed it to be used in a variety of configurations. Here, a U.S. Marine sharpshooter with a scoped, heavy-barreled precision-dedicated M16A3 adjusts the ocular focus on his tele scopic sight.



Problems Corrected

Interestingly enough, after Westmoreland's involvement, the problems were "found" and corrected within 30 days.

The U.S. Army and Marine Corps also simultaneously instituted a program to properly indoctrinate and train their personnel in the correct maintenance procedures for the M16, and from that point on, it suffered no further problems.

Since then, the AR-15/M16 has evolved from its original M16/M16A1 configurations through the "A2" in 1985, to the "A3" (flat-top with removable carrying handle/rear sight assembly) in the 1990s. At present, the M16A3 is slated for replacement within the U.S. Army by the M4.

The M4 is itself a third-generation derivative of the Vietnam-era XM177E2 (CAR15) and subsequent M16A1 "carbine." All have short barrels, a shortened gas system and retractable buttstock, which make them very handy, especially in close quarters.

In Vietnam, the 11½-inch barreled XM177E2 was the preferred weapon of U.S. Army Special Forces, U.S. Navy SEALs and certain other special units

Predictably, its muzzle blast was severe, and the Army decided to install what it called a "sound moderator," which was in actuality a small sound suppressor to reduce the noise to a level comparable to the standard 20-inch barreled M16.

Because the device wasn't serial numbered and merely replaced the standard M16 flash suppressor, many of them were promptly stolen and sent home for use on .22 rifles.

In turn, this prompted complaints from the Bureau of Alcohol, Tobacco and Firearms that the device was, in fact, an illegal silencer. As Vietnam wound down in the early 1970s, Colt and the Army decided to drop the sound-moderator and lengthen the XM177E2's barrel to 16 inches, which made it more functionally reliable and reduced its noise

First appearing in the late 1980s, the M4 is a third-generation derivative of the XM177F2: like its predecessor and because of its compact size and light weight, quickly became popular with the troops. In fact, it became so popular, that it is slated to completely replace its larger parent, the current 16A2/A3 (shown in background).



level as well. Dubbed the M16A1 "carbine," it was produced until replaced by the now-common M4.

Just a few months ago, the U.S. Marine Corps adopted a heavy-barreled version of the M4 as its squad automatic weapon to replace the less-than-optimum belt-fed M249, and thousands of M16A3s have been now built into precision rifle configurations for use as sharpshooter's rifles by designated marksmen in the rifle squads.

At present, though there have been rumors that the AR-15/M16 is to be replaced, no such move has occurred, nor is it contemplated for the near future. The M16A3 and M4 remain the U.S. military's standard service rifles, with the expectation that the lighter, more compact M4 will completely replace the larger M16A3.

AR-15 Originally Touted As A Survival Rifle

Initially, the AR-15 was conceived as a survival rifle for USAF Strategic Air Command B58 Hustler bomber crews, and that was a good choice.

The supersonic B58 Hustler was slated to replace the USAF's aging B52 Strato-fortress. The more advanced B58 was interesting in that it featured a capsule cockpit for its three-man crew, which meant that in the event the crew had to abandon it, the whole cockpit ejected intact.

This made room for a larger, more powerful survival rifle with the capability to be used not only on animals, but as a defensive weapon against enemy troops as well.

The folding-stocked, single-shot 22/410 survival rifles then in use for aircrews were rudimentary at best and were intended solely for food gathering. As such, they had no real defensive capability, which made them a sore subject to the aircrews that might have to use them.



Civilian

In the civilian commercial rifle market, the semi-auto AR-15 in virtually all of its guises has always been a top seller, a situation that shows little indication of changing anytime soon. In fact, with the politically motivated attempts to ban it at the Federal and some State levels, it has become even more popular.

There are more companies manufacturing AR-15s and accessories for them than ever before. With demand running so high, many companies are having difficulty building enough of them.

Quantity Battle: AK vs. AR

There is only one rifle in the world that has been produced in larger quantities than the AR-15/M16: the Russian AK-47. However, more than 30 million AR-15/M16s have been produced, and they're used by more than 80 nations, considerably more than the AK.

Though Eugene Stoner died before his creation reached its full zenith, he would justifiably be proud, because it's a winner. With its superior ergonomics, excellent sights and tremendous tactical flexibil"WITH ITS SUPERIOR
ERGONOMICS, EXCELLENT
SIGHTS AND TREMENDOUS
TACTICAL FLEXIBILITY, IT WITHOUT
QUESTION RANKS WITH THE
GREATEST RIFLES IN HISTORY."

ity, it without question ranks with the greatest rifles in history and Stoner himself with the likes of Colt, Browning and Maxim. AK/AR

About the Author: Chuck Taylor is a decorated Vietnam veteran. He is an expert in SWAT, counter-insurgency and counter-terrorist operations and is a world-renowned firearms tactics instructor. He has authored four books and more than 1,000 magazine articles.





▶ TEXT BY STEVEN PAUL BARLOW N PHOTOS BY SUZANNE MOSS MULLEN









O YOU WANT TO KNOW HOW TO SPARK A LIVELY DEBATE? Just ask a couple of gun guys, "Which is better, the AK-47 or the M16?"

These two military classics and their descendants have squared off in countless conflicts around the world. Over the years there has been an endless discussion over which rifle is more effective, more reliable, more durable.

No matter on which side of the debate you find yourself, there's one thing you have to admit: the

semi-automatic version of the AK-47 and the civilian edition of the M16—the AR-15—are both enjoying unprecedented popularity in this country.

We decided to put a typical example of each gun through a tactical course to see how they would fare. To do so, we headed to The Range Complex in North Carolina, one of the premier firearms training facilities in the country, with four experienced, knowledgeable shooters. Three are former military and one is law enforcement SWAT. All have been competitive shooters and all are currently elite firearms instructors. Here's how it went down.

- 1. Eddie, a combat veteran decorated for valor, produces archery television programs aside from his busy schedule as a firearms instructor.
- 2. Military veteran Greg Wilson is a long-time U.S. Army firearms instructor who now teaches at The Range Complex.





"IT SHOULD BE NOTED THAT BRYAN, AN AR GUY, SCORED BETTER ON FOUR OF THE SIX STAGES WITH THE AK THAN HE DID WITH THE AR."

The Basics Of The Battle

Before you skim to the end to see which gun was the winner, let me save you the trouble. We're not making any final proclamations. That's not what we set out to do. We didn't realistically expect to draw any carved-in-stone conclusions based on such a limited trial.

We knew from the beginning this was not going to be a scientific evaluation. How could it be when we had only four shooters, a few handfuls of ammo and one day to get the job done?

To publish the shooting results in terms of scores wouldn't have much meaning either. It should be noted that Bryan, an AR guy, scored better on four of the six stages with the AK than he did with the AR. But to conclude anything based solely on that would not be valid.

Instead, we approached it this way: Each shooter would shoot each stage of the course twice, once with the AK (an I.O. Inc. Sporter) and once with the AR (a Daniel Defense DDM4V1.) At the end of the day, we'd all discuss our impressions of the guns.

Some of the criteria we'd use in taking a close look at each weapon would be accuracy; reliability; sights; ergonomics; control manipulation; intuitiveness and recoil management.

So, after running around in the hot sun, after firing these guns as quickly and accurately as possible, what did our four experts, Mac, Eddie, Bryan and Greg think of these two platforms?

Accuracy

Each shooter fired 10 rounds from each gun at 100 meters from the prone position using only the iron sights on the guns. This was done primarily for familiarization, because none of the four had ever fired these particular guns.

Because we devised the shooting course to focus more on the handling characteristics of the guns, 100 meters was the longest distance to a target on the day.

"For today's range fire, both platforms are accurate," Mac said.

Eddie agreed. "I'd say they're accurate for the distance we were shooting."

For the record, Bryan achieved the best group of the day by placing in shots into 3 ¼ inches, and he did it with the AK.

The courses of fire selected for our tactical shoot focused on the close-quarters handling characteristics of the guns tested.





Reliability

The shooters said both guns were generally reliable. The AR experienced trouble at one shooting stage, but the problem was traced to bent lips on a particular magazine. The AK doubled once on Greg during the bullseve stage.

"For me, the AK was a little prone to malfunction with a little side torque on the magazine," said Eddie.

Failures to feed occurred for him during the Contact Right vehicle stage as he rested the gun between the windshield and hood of the car.

"It didn't happen with the AR, even though I used the same firing position, low over the vehicle," he said. "You're not getting the same thing with the AR magazines because they seat so much further up in the magazine well."

Sights

Evaluating the sights on the two guns was a bit like comparing apples to oranges.

"I had a tough time picking up the front sight on the AK," said Greg. "The AR wasn't a problem because I was looking through a peep sight. There were a lot of times with the AK's v-notch setup when I was actually looking at one of the wings on the front sight as opposed to the true front sight."

Could it be that the AR's peep sight is more natural to operate than the AK's open sights?

"Could be," said Mac, "but I don't have a million rounds through an AK like I do with an AR."



The Rifles: BACK TO THE BASICS

We wanted the rifles used in our tactical test to be basic models. After all, we were out to evaluate the guns, not a lot of fancy accessories.

For the AK, we chose an I.O. Inc. Sporter AK-47 with a fixed stock in the traditional 7.62x39 chambering. For the AR, we chose a Daniel Defense DDM4VI chambered in the usual 5.56x45.

The optic and foregrip were removed from the AR before the shoot. The AK was tested with the standard notch rear sight, while the AR relied on its aperture sight.



The I.O. Inc. Sporter AK-47 held its own against the newer design of the AR-15.

The Daniel Defense DDM4VI was the AR-15 used in the tactical shoot



Ergonomics

The fit of the AK's fixed stock was obviously a problem for Greg, who is 6 foot, 3 inches.

"The AK had the short forearm that crowds you in instead of being able to get out further on the gun," he said. "The biggest thing for me is that the butt-stock is too short. I had to really creep my head back to stay off the receiver. Even with fixed AR buttstocks, the A2 and the A1, I don't have that issue."

Eddie also mentioned how the short handguard of the AK affected the forward hand positions.

"Because of the exposed gas tube and the amount of heat up there, you're kind of limited in what you can do," he said.

The Range Complex (TRC) is a premier shooting and training facility and sits on nearly 1,000 acres near Fayetteville, N.C.



Control Manipulation

The issue of control was a hot topic.

"The trigger wasn't horrible with the AK," said Greg. "They were comparable. I could shoot both triggers well. The AR's safety, though, was hands-down much more ergonomic, much easier to manipulate in between positions or when doing reloads. The AK, just the way it's set up, is not conducive to really using the safety."



Eddie seemed to think the armies that use an AK find a way around the issue of the safety lever.

"The safety on the AK is designed for a conscript army," he said. "Typically they run with the magazine in the gun with no round in the chamber and the safety off. So when contact is made or when they perceive they're about to make contact, the first thing that happens is that they rack the bolt to put a round in the chamber. The first click is automatic and you don't see them aim too much. I mean most times you don't even see a buttstock on the rifle.

"I think maybe they went to that method because they were having such problems with guys using it, because it's not ergonomic to manipulate the safety under pressure. It's much easier just to grab and pull than it is to manipulate the safety and then get your hand back in there."

As a police officer and SWAT team member, Bryan saw the inability to manipulate the AK's safety as a big concern.

"Liability-wise for me that would make the AK a no-go right out of the gate," he said.

Differences in magazine changes were noticed not just because the shooters had more experience with an AR than an AK.

"I can release the magazine with my strong hand on the AR, and it drops while I'm going for another mag," said Greg. "With the AK, you have to manually remove the (empty) magazine with your support hand, then insert the (full) magazine. It's a two-step process instead of a combined one-step process."

Mac pulled out his fresh AK mag first and then pulled the empty mag out with the back of his hand.

"You always want to be doing a magazine change when you want to rather than when you have to," Mac said. "That being said, you always reach for your food (ammo) first. So I was grabbing, making sure I had food, and then dumping. "

Bryan encountered a problem with the mag release on the AR, which was an extended, ambi release, not a stock release.

"It caused me to lose the mag when I was coming out of the car," he said. "The way I've been taught to manipulate the gun in the car was by the front of the mag well, so it's shorter. When I was coming out, my thumb hit the mag release. I had to reseat the magazine so it wouldn't fall on the ground."

- 1 Bryan Bailey shoots the I.O. Inc. Sporter during the bullseye stage. Using this AK, he turned in the best group of the day (Nine shots into 3 1/4 inches at 100 meters.)
- 2. Greg Wilson shoots over the hood of a car in the Contact Right stage.









The Courses Of Fire Kept The Shooters On The Move

We met with the TRC staff to discuss how we should set up our AK vs. AR tactical course.

It was agreed that to get some impressions of how these guns perform as intended, the stages of fire should feature plenty of movement and in-close, fast shooting.

We wanted the four shooters to exert themselves physically while they raced against the clock and each other to bring the guns to their shoulders and get off shots quickly and accurately.

These are the stages we included in the tactical course:

■ 1. Bullseye

This was the quick warm-up to give the shooters a chance to see where each gun was hitting. Each shooter fired 10 rounds through each of the two guns at 100 yards from the prone position using only iron sights.

2. The Scrambler

For this stage, the shooters loaded three magazines with two, three and four rounds respectively for a total of nine shots to make the required seven hits.

At the fire command they had to turn, run to a barricade and, from a position of cover, engage three metal targets with one round each at 25 yards. Then they would run to a second barricade where they had to make four hits on a single metal target, also at 25 yards.

3. Grid Of Fire

Plastic cones were placed on the range in a grid pattern from 25 to 10 yards. The shooters had to run forward, laterally and backward from cone to cone and fire two rounds from each station with one magazine change for a total of 16 rounds.

■ 4. Set It Off

Here the shooters loaded three magazines of three rounds each for a total of nine rounds. The shooters raced back and forth between two barrels and were required to make one hit on a target 25 yards down range from each barrel before moving to the next for a total of five shots. A five-second bonus was given for each bullet left over.

■ 5. Contact Right

This stage simulated that the vehicle you were in became disabled and you were taking enemy fire from the right side. The shooters loaded three magazines of five rounds each for a total of 15 rounds. On the fire command, the shooters got out of the driver's seat, and fired five rounds from the front of the vehicle, five rounds under the vehicle and five rounds from the rear of the vehicle at targets 25 vards distant.

■ 6. The Shoot House

This stage simulated a hostage rescue scenario. Shooters were allowed two magazines of 10 rounds each. One at a time, the shooters entered the building that contained one hallway and four rooms. They had to engage eight targets with two rounds each without hitting any of the "hostages" partially covering the targets.





Recoil Management (Sight Recovery)

Managing recoil and the ability to regain a sight picture shot to shot wasn't an issue with any of the shooters with either of the guns.

"If you noticed, when we all shoot, we're aggressive in our stances, whether it's at a barrier or standing or even in the prone," Eddie said. "We're on the gun pretty hard; our weight's shifted forward. All that helps with recoil management, which allows us to shoot a little bit faster. It's because of our technique which allows us to recover a lot faster on the gun."

Recoil was mitigated by the proper technique of everybody here, said Greg. "If you take a more amateur shooter, you're going to see more recoil issues with the AK than with the AR."

Final Thoughts

Although we didn't declare an official winner or draw any conclusions from the day's shooting, we received their final thoughts.

"I think you have to consider that both guns are rack-grade guns with rack-grade ammo," said Bryan. "The AK is as good as it's going to get in the form we got today. It was probably at the peak of its performance. The AR has unlimited potential to go beyond that."

Mac said they are both good platforms.

"Both platforms have been proven over time, been proven in combat," said Mac. "They will perform as well as the shooter allows them to perform."



Mac fires under the car during the Contact Right stage. The car was low to the ground and dust kicked up as the shooters fired, adding to the difficulty of this stage.

"THE AR'S SAFETY, THOUGH, WAS HANDS-DOWN MUCH MORE ERGONOMIC, MUCH EASIER TO MANIPULATE IN BETWEEN POSITIONS OR WHEN DOING RELOADS." —GREG

Daniel Defense AR to the test. Eddie maintains an aggressive shooting stance as he fires the AR from the barricade.

The Range Complex

Serious Training For Serious Purposes

Simply put, The Range Complex (TRC) is one of the finest firearms training facilities in the country.

TRC sits on nearly 1,000 acres near Fayetteville, North Carolina, just 18 miles from Fort Bragg and 90 miles from Camp Lejeune. That's important because military units have often conducted training operations at the facility.

The training site was once owned and operated by Tiger-Swan, the world-wide, high-risk security outfit founded by elite military veterans to serve and protect those who must travel to the most dangerous parts of the world.

"TigerSwan divested its interest in the facility to concentrate on its overseas concerns," said David Cook, TRC's general manager.

He said that a group of investors bought the facility and it's been operating as The Range Complex since March, 2014.

The facility offers a prime training ground for elite military and law enforcement units, but it's open to civilians as well. There is open enrollment for many of the rifle and pistol courses offered. That gives civilians the opportunity to train under some of the best instructors our military has produced.

TRC has regular hours for informal target practice as well. Here are some of the things TRC has to offer:

There are two 100-meter x 40-meter flat ranges, surrounded by berms 15-feet high x 31-feet wide (measured at the base) on three sides. They were designed from their inception to comply with Department of Defense safety regulations and Surface Danger Zone (SDZ) standards.

One of those ranges is designated as the Sportsman's Range and features 15 pistol and 10 rifle covered shooting stations with benches and portable target stands.

For longer distance shooting, there is a separate 600-meter range with reactive MOA-sized steel.

TRC has two CQB live-fire shoot houses with ability to conduct a sniper shot prior to breaching. The shoot houses feature catwalks to monitor the action. Cameras can be installed for training purposes as well.

The shoot houses are built with the latest shock-absorbing concrete (SACON) technology, which traps the bullets and prevents ricocheting and fragmenting.

It has buildings for SIMunitions training and two class-rooms that will seat 32 students each.

It provides a weapons cleaning area equipped with a solvent tank and a compressor. There is a weapons and ammunition storage magazine on the premises that meets

Department of Defense standards.

TRC has plenty of elbow room to conduct exercises for land navigation, dog search operations, search and recovery, active shooter and other training.

They even have a pond, 100 x 50 meters and 20 feet deep at the center for dive and zodiac boat operations.

The best part is that you don't have to be a government operator to train there.

"If you're going to make the investment in a firearm, you need to make the investment in the instruction," said Cook, himself a retired sergeant major (22 years with U.S. Army Special Forces, 14 years with 1st SFOD-D.)

"With firearms, where the margin of error is slim and the stakes are high, you need to learn from competent sources," he said. "Wisdom isn't free. Here at TRC we have the expertise and facilities to safely and effectively train a person to any desired skill level."

The Range Complex (TRC)

2850 TigerSwan Drive Autryville, NC 28318 (910) 208-4117 TheRangeComplex.com

Email requests to: Training@TheRangeComplex.com



Meet The SHOOTERS



Mac is all business as he enters the life-fire house. He took each drill as a serious training exercise.



Surprise visitor. Greg enters the shoot house door to rescue the hostages and take out the bad guys in this drill.



Not bothering to knock, Eddie clears this room of the shoot house. PHOTO BY RICHARD SCHUTZ

Meet The Shooter



He is one of those people with an almost explosive intensity about him. When he says something, he means it and he's ready to stand by it. But you quickly understand he can transition from words to action in a heartbeat. With him there's no backing down. You'd never misjudge that. If he's involved, he's in it to win it.

Pat McNamara or Mac as everyone calls him, has 22 years of U.S. Army Special Operations experience, more than half of that with the 1st SFOD-D. He has extensive experience in hostile fire zones in the Middle East and Eastern Europe.

He served on the Army's premier hostage rescue unit as a sergeant major. He also served as his Unit's Marksmanship NCO, he ran regular shooting matches to encourage marksmanship fundamentals and competitiveness.

Now 49 and retired from active duty, he teaches military and police units as well as civilians what he has learned through his hard-fought experiences about marksmanship and combat tactics.

But Mac is not just bravado and brawn. He is thoughtful, analytical in his training approach. Over the years, he has developed a methodology in his training that requires students to read situations and to think on their feet.

He's not one to sit still for long.

"I'm hobby-heavy," he said. "I run 30 to 40 courses a year across the country."

Some of that is through his own company, TMACS, Inc. (Tactics, Marksmanship, Adventure, Concepts, Security.) He also writes a regular physical training column for a weaponry magazine.

 $\label{thm:condition} \emph{His book, "Sentinel-How to be the agent in charge of your own protection detail," was another of his passionate endeavors.$

"It's got everything in it," he said, "from home defense to safe driving to combat strength training to hand-to-hand combat to shooting to safe travel to situational awareness."

He is also the author of T.A.P.S. (Tactical Application of Practical Shooting), volumes 1 and 2.

"It's a nuts and bolts range guide," he said. "I'm working on T.A.P.S. 3 right now."

Meet The Shooter Greg Wilson



He is tall and thin and speaks slowly with a Southern drawl only when he has something of value to say. Then you pay attention because you just might learn something from this modern-day Gary Cooper.

Greg Wilson, 45, is a 22-year U.S. Army veteran and a firearms instructor with vast experience and perspective

"I was an electronics technician, and I worked military intelligence," he said. "I was part of the fielding agent for the Predator (unmanned aerial vehicle.) I worked on the Predator Project before the Air Force even owned it "

In his last 14 years of service, he was a member of the U.S. Army Marksmanship Unit (AMU).

"I was a 3-gun competitor and a pistol competitor in bullseye and USPSA," he said, "and I was the platoon sergeant for the action shooting team and the service pistol team while I was there."

While assigned to AMU, he instructed military personnel and civilians in both tactical and competitive marksmanship.

"I taught for years," he said. "I was the NCO IC for the training section for five to six years."

While deployed to Afghanistan, he developed marksmanship training plans for the Afghan National Army (ANA) and Coalition Forces (CF).

"When I was over there, that was the AMU's mission: to train the Afghan National Army and to train the Coalition Forces on how to train the Afghans."

When he retired from military service, he started working for TigerSwan, the high-risk security firm that previously managed what is now The Range Complex (TRC) firearms training facility in North Carolina.

He is still active in firearms competition, shooting in the metallic division of the Bianchi Cup and in NRA Pistol bullseye matches.

Meet The Shooter





He carefully measures and weighs his words. You will know only what he wants you to know about him. He appears comfortable and relaxed, but it's not because he's a casual and laid-back person. It's because after what he's experienced and lived through, everything else comes comparatively easy, a piece of cake.

Eddie, 45, would rather not give his last name because, you see, there are certain covert things with which he has been and/or perhaps still is a participant. In any case, not wanting that kind of man angry with me, I am respecting his wishes.

Eddie is a 23- year U.S. Army Special Operations veteran, who finished his career as an assault troop sergeant major.

He has extensive combat experience in Central America, the Balkans, and from multiple tours in the Middle East. He is the recipient of two Bronze Stars for valor along with four other valor awards and was presented the Purple Heart.

He has excellent credentials as an instructor because of his extensive operational and leadership experience in conducting and supervising low visibility operations to leading assault troops in numerous combat operations.

He was hired as an independent contractor to teach rifle and pistol courses at The Range Complex in North Carolina, starting back in 2010 when the facility was still part of TigerSwan.

He travels to work with police SWAT teams across the country and sometimes partners with a friend to work with professional sports athletes doing team building, professional development, leadership and psychological work.

He's an avid hunter, but despite all of his time behind firearms, he has hunted exclusively with a bow for the past 19 years. He is a field producer who hunts and films for Elite Archery's television show, Respect the Game, which airs on the Sportsman Channel. On occasion he guides deer hunts in the Midwest.

But he's careful not to let all of these activities interfere with his family ife

"I spent 10 months out of 12 deployed for most of my career, so now I'm reversing that and I'm trying to spend more time with the family," he said. "My wife—she's the glue. She kept things going when I was gone. And now as much as I can help it, I try to reverse things. So if I work a week here, I try to spend two weeks at home."



On the clock. Bryan hustles between barrels with the AK-47 in a shooting stage called "Set It Off."

Meet The Shooter Bryan Bailey

4

His muscular arms are as big as my legs. Yet he will remain calm as long as you remain calm. While you're talking with him, he is cautiously studying you, sizing you up, anticipating your next move with perhaps just a bit of suspicion. That's what cops do.

Bryan Bailey, 40, has served as a police officer for the City of Fayetteville, North Carolina Police Department since 2003.

"I spent four years on patrol and four years as a detective," he said. "I've been assigned to training now for three years."

Aside from being the department's lead firearms instructor, he's also been a member of and an instructor for the department's Emergency Response Team for more than eight years. He's also an instructor at The Range Complex.

His list of training credentials is extensive, and he has been a lifelong competitive shooter.

"I started shooting competitively (3-gun and USPSA) in local matches here when I was a teenager," he said, "which for me was lucky because I shot matches with guys like Kyle Lamb and Larry Vickers. Those guys shot locally here before they made it big. Ken Hackathorn would come down here to shoot matches. Mike Voigt and Bennie Cooley would come and shoot. So I was fortunate that in my formative years I got to shoot with a lot of those guys."



Mac moved with lightning speed, making "kills" on the targets and rescuing the "hostages" as he cleared the live-fire shoot house.



PHOTO COURTESY OF DANIEL DEFENSE

"There were no surprises," said Greg. "Both guns performed well."

Eddie agreed. "The AR has more pros," he said, "but it comes down to the shooter."

Outfitting the AK with an adjustable stock, longer handguard and peep sights might have made this a more balanced contest. Still, the experts agreed that much of it comes down to the importance of training and practice with whichever gun you choose.

"If you do what you've always done, you'll get what you've always got," said Mac.

"Don't expect to rise to greatness as the stress level gets turned

up," said Eddie.

"It's the shooter, not the gun," said Greg. "If you're not a good shooter with an AR, you're not going to be a good shooter with an AK and vice versa." **AK/AR**

About the Author: Steven Paul Barlow, a retired sergeant/station commander and former firearms instructor with the New York State police, is the editor. An avid hunter and firearms enthusiast, he has been writing on outdoor topics for more than 30 years.

KALASHNIKOV

AK RIFLES FROM NEAR AND FAR

PHOTO BY SUZANNE MOSS MULLEN

OU'RE LUCKY, THE SELECTION OF AK **RIFLES** and accessories has never been greater for the American AK enthusiast. From imports to American-made models, the semiauto versions of this tested and true military weapon are becoming easier to purchase in most U.S. states. To get you started in your quest for the best. here are the ultimate foreign and domestic AK-style rifles. They can help you raise your game, but they're also simply cool to have. We've chosen some good ones for you to consider.





Website: ArsenalInc.com Product: SAM7UF MSRP: \$1,299

Arsenal is an American importer and manufacturer of numerous AK semi-autoant models for CA and NJ. Its SAM7UF is 922 compliant. and it has a Bulgarian hot-die hammer-forged receiver and removable muzzle nut with 14x1 LH threads.

The Specs:

Caliber: 7.62x39mm **Barrel Length:** 16.3 inches Overall Length: 35 inches extended, 25 inches folded

Weight: 7.5 pounds **Twist: 1:9.45**

Stock: Reinforcedunder-folding stock

Special Features: 922 compliant, Bulgarian hot-die hammerforged receiver and removable muzzle nut with 14x1 LH threads.

CRAVINGS



2. Atlantic Firearms

Website: AtlanticFirearms.com Product: AA Pol47 MSRP: \$825

The AA Pol47 features a chrome-lined barrel, nickel-plated bolt and carrier, removable slant muzzle brake and a side-mount scope rail. It is made from Polish parts.

The Specs:

Caliber: 7.62x39mm

Barrel Length: 16 inches

Overall Length: 35 inches

Weight: 7 pounds

Twist: 1:10 Stock: Wood, red

3. Century Arms

Website: CenturyArms.com Product: C39 Classic MSRP: \$624.99

Century Arms offers a variety of AK rifles and pistols, semi-auto rifles and pistols, as well as other types of firearms. The C39 is made entirely in the U.S. in Century's Vermont facility. Its receiver is machined from an 11-pound block of 4140 steel. It features a chrome-lined barrel, laminated wood furniture and adjustable rear sight.

The Specs:

Caliber: 7.62 x 39mm

Barrel Length: 16.5 inches

Overall Length: 36 inches

Weight: 8.1 pounds

Twist: 1:10

Stock: Laminated wood



4. Century Arms

Website: CenturyArms.com Product: C39 Tactical MSRP: \$1,090

Century Arms offers a variety of U.S.-made AK rifles, as well as other types of firearms. This model has a gas block/front sight combination, fully adjustable rear sight, detachable forward pistol grip and Picatinny rails molded into handguards. The receiver is machined from a solid block of steel.

The Specs:

Caliber: 7.62 x 39mm

Barrel Length: 16.25 inches

Overall Length: 37.375 inches

Weight: 8.2 pounds

Twist: 1:10

Stock: Black synthetic stock

5. Faxon Firearms

Website: FaxonFirearms.com Product: ARAK-21 MSRP: \$2.024

Faxon Firearms makes complete ARAK-21 rifles, as well as upper and lower receivers, barrels, and parts for the ARAK-21, which is a modular hybrid of the AR and AK rifles. This model has a two-stage trigger; integral full length Picatinny rail; dual forward recoil spring system; folding, non-reciprocating, forward charging handle; long-stroke variable-gas piston system and interchangeable barrels of different calibers.

The Specs:

Caliber: .223/5.56 NATO, 300 BLK **Barrel Length:** 12.5, 16, 20 inches **Overall Length:** 29 to 37 inches collapsed;

32.5 to 40.5 inches extended

Weight: 7.59 to 8.62 pounds empty

Stock: Six-position, collapsible

6. I.O. Inc. (Inter Ordnance)

Website: IOInc.us Product: The Sporter MSRP: \$740

I.O. Inc. offers both AK and AR rifles. Its AK selection includes the Sporter, Sporter Economy, Sporter Wood and new M214 model with rails. It also offers AR-15A1 and CAR-15 models. The Sporter has a tactical pistol grip, tactical sling swivel, adjustable front and rear sights, and CNC-machined scope-mount rail.

The Specs:

Caliber: 7.62x39

Barrel Length: 16.25 inches Overall Length: 36 inches Weight: 7 pounds

Twist: 1:10

Stock: Black polymer

7. James River Armory

Website: JamesRiver Armory.com Product: AK47-JRA Hungarian Underfolder MSRP: \$895

James River Armory manufactures and restores military-style firearms. The Underfolder has a chromelined barrel, G2 fire control, removable muzzle brake and it is assembled from Hungarian parts.

The Specs:

Caliber: 7.62x39mm
Barrel Length: 16 inches
Overall Length: 35 inches;
26 inches folded
Weight: 7 pounds
Twist: 1:10
Stock: Underfolding
stock, blonde wood grip
and forend

8. James River Armory

Website: JamesRiver Armory.com Product: BR 74 MSRP: \$825

The BRT 74 has a chrome-lined barrel, bayonet lug, removable compensator, Bulgarian parts, a receiver by James River Armory and side-mount scope rail.

The Specs:

Caliber: 5.45x39mm

Barrel Length: 16 inches

Overall Length: 37 inches

Weight: 7 pounds

Twist: 1:8
Stock: Wood, red



9. Rock River Arms

Website: RockRiverArms.com Product: RRA LAR-47 Delta Carbine

MSRP: \$1,545

Rock River Arms, well known for its AR rifles, has introduced the RRA LAR-47, an AK/AR hybrid. This features an ERGO SureGrip, two-piece quad rail, RRA two-stage trigger, A2 flash hider, low-profile gas block, A4 upper and lower receiver, a chrome-lined HBAR and ambidextrous magazine release, six-position Delta CAR Stock and Delta pistol grip, and it accepts standard AK-47 magazines.

The Specs:

Caliber: 7.62x39mm

Barrel Length: 16 inches

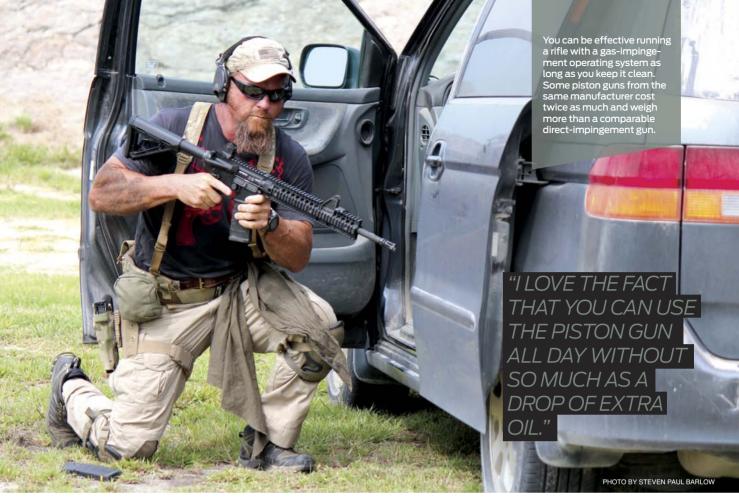
Overall Length: 36.5 inches

Weight: 7.75 pounds

Twist: 1:10

Stock: RRA six-position

Delta CAR stock **AK/AR**





O ME, THE TOPIC OF DIRECT-IMPINGE-MENT VERSUS PISTON-GAS systems sounds like the old 9mm versus .45-caliber argument that I used to have with other cops at IHOP at 2 a.m. over coffee and pancakes.

Then I realized that the gas versus piston issue was just another one of those topics gun guys love to debate. I wondered if maybe what we needed is just a good old-fashioned comparison instead of an argument.

Thus, I decided to assemble a panel of seven serious gun guys to get their opinions. These guys have shot both in the competitive circuit and in combat, and they've shot thousands of rounds through both systems over the last few years. I'm not saying each doesn't have a personal bias, but what I do know is that they all shoot a lot and none of them lies about guns. Fishing? Maybe, but not guns.

We will start with a simplified definition of each system.

1 Gas-Impingement System

When a cartridge is fired, the gas travels down the barrel with the bullet and is vented from the barrel through the front sight block, into the gas tube and back to the rifle's chamber. Through the key located on top of the bolt carrier, the bolt carrier is forced to the rear, thus cycling the rifle.

2 Gas-Piston System

This system channels the returning gas to the chamber where, in a very mechanical fashion, it pushes a piston against the bolt carrier and a spring pushes the bolt carrier group back, picking up and chambering the next round. The spent gas is then vented outside the rifle, which results in a chamber that can go much longer between cleanings.

System Comparison

Following are the panel members and their opinions on both systems:

■ Ed Plantaric, special agent supervisor, CA Department of Justice, range master

Special operations groups are using them |piston guns| and some special law enforcement or military groups might have a need for them. For regular LE guys, the piston is a bit heavier and cleaner. But it is on the operator to keep it clean, so a regular old Colt or Bushmaster (gas impingement) keeps working.

■ John Mason, former LE officer

I love the fact that you can use the piston gun all day without so much as a drop of extra oil. While I have no intention of getting rid of my old DPMS, I find myself shooting the Ruger (SR556E) all the time.

■ Mark Anderson, retired Michigan State police

A piston in the M4 has more parts and if you are working on it [armorer], you need to spend more money to keep the parts bins full. It has springs that need to be changed out and unlike the gas-impingement system, can't really be fixed in the field while hiding in a cave. The upside is the newer piston systems don't beat up the gun as badly as the early ones back in '09 or '10, so I am not doing as much work on them these days. But then, it might be that in '09 a 5.56 round cost 30 cents and it is 70 cents now, if you can find it. Either way, if you take care of your gun, it will take care of you.

■ Pat Sacco, director of training, Veridad Investigations

The standard gas M4, in its most basic configuration with iron sights, is a reliable and serviceable weapon that will take some abuse and keep right on working. Simple is good. If it works, don't mess with it.

■ Jon Ashbrook, retired USMC gunny and freelance trouble-shooter

The drawback on the CommBlock weapon [piston] is the ammunition. That system works great if the ammunition is of good quality. The weapons [piston] are very serviceable. My last carry gun was a Swedish K, so that is what I think about the piston/gas argument.

■ Robert Laing, deputy and lead firearms instructor, Sublette County sheriff's office

My experience between impingement and piston is that they are both good and each one has a need. I run an impingement, as the parts are more readily available. It's a solid, proven battle rifle system.

■ Jon Martin, lieutenant, Department of Corrections

I have shot a lot of direct-impingement gas guns and found the more expensive ones to be the most reliable.

The piston guns tend to be about a half pound heavier. Neither, if cleaned and lubed, malfunction unless they encounter a bad round.

The Choice Is Yours

These experts have a compilation of many years of experience. Now, all you need to do is add your own opinion, flavored heavily by your own experience with each system. Let's keep the debate going. **AK/AR**

About the Author: Richard Crays has 34 years law enforcement experience. Currently, he's the senior instructor for a state law enforcement academy, an IALEFI master instructor trainer and the owner/operator of Rock Solid Shooting and Survival Training, Glenrock, Wyo.



The lighter weight of a comparable rifle with a direct-impingement system can be important when you're on the move.





Piston DrivenRifles Currently Available
With a Piston System

Here are just a few of the AR or AR-like rifles that feature a piston system:

Bushmaster ACRBushMaster.com

Colt 6940P M4 Carbine Colt.com CORE M4 Piston Rifle

Lewis Machine & Tool CQB MRP Defender LewisMachine.net LWRC M6A2

Precision Firearms Hercules V Precision Firearms.com Rock River RRA Carbine
RockRiverArms.com

Ruger SR-556E, SR762 Ruger.com Sig Sauer Sig516 SigSauer.com

Stag Arms Model 8 StagArms.com

NEXT BES BATTLE PROPERTY OF THE STATE OF T

WITH ALL THE TESTING GOING ON, WHAT DOES THE FUTURE HOLD FOR THE M4 AND AK-74?

BY RICHARD CRAYS

W

HAT IS THE FUTURE OF THE M4, THE AK-47 AND AK-74 in military units around the world? Things might be changing. Or not.

Last summer I read an article about choosing between the old warhorse AK-47; the AK-74, currently used by the militaries of more than 30 countries; and the next iteration of the gun, the AK-12. At the time, my response was, "AK-12? No one told me."

If you are into military weapons, you know that the AK (Avtomat Kalshnikova) uses the year it was made as the model number, much like we did with the good old 1911 pistol. Reading about the AK-12 in 2013 left me a bit behind the times.

I was up-to-date on the recent trials that the U.S.

military complex completed on our own battle rifle. Granted, it was the army doing the testing, but I am told there were other branches of the U.S. military on hand and shooting, too. That was done about a year ago, and they came to the same conclusion that most of the battle rifle enthusiasts I know had come to on their own: there's nothing better around than an M4 (or those fancy M4A1's without a three-round burst trigger selection) made by a reputable manufacturer.

So, what I started wondering is, why are the military giants on two continents looking for the next best battle rifle within a year of each other? I had so many questions, but no one in power was willing to talk, so I went to the Internet to reach some of my old friends who are still in the service of people who pay them to carry guns into seedy places.





The AK-12: Many Improvements

Following is what I was told about the Russian AK-12. (Interestingly enough, the two guys I spoke with in Europe kept calling it the AK-200).

The largest private firearms producer in Russia, OJSC Izhmash, went to the Russian military and said it could fix the AK-74M. Apparently, the government there didn't know it was broken, but it agreed to look at the new model.

One trouble with the Russians adopting a new weapon is that they have warehouses full of perfectly serviceable AK-74s in several different calibers. Still, the things the AK-12 did address were, from my humble option, very cool. The gun's improvements included a smaller ejection port (less debris and stuff into the chamber), a new fire control switch with three modes of fire that is set back to within thumb's reach, a hinged top cover with Picatinny rail, a more ergonomic pistol grip, a muzzle brake that attaches to NATO 22mm threading, improved barrel rifling and a charging handle that can be installed to either side.

What remains in question is whether the Russians like the gun and have the money to produce it in quantity. It would seem easy for

M855A1

Ennanced Performance Round (FPR)

Round (EPR)
Why does the U.S. Army want
the next generation of battle ri
fles to shoot this round?

- 1. The tip on this 62-grain round will be bronze for corrosion protection, while the slug is copper instead of lead.
- 2. The penetrator will be a steel arrowhead for enhanced penetration of harder targets and accuracy.
- 3. The new powder, SMP842, is a flash suppressant and contains a decoppering agent, while increasing the velocity of the round.
- 4. All the changes add up to penetration of 3/8-inch mild steel all the way out to 350 meters and greater accuracy to boot. Materials provided under the public release documents showed that at 600 yards, 95 percent of the rounds would impact an 8inch-square farger Nire

Okay, they had me at greater velocity, but all the other benefits warranted testing in my book just to see what the fuss was about.

them to sell the stockpiles of AK-74s and parts to any number of countries at the drop of a 5.45x39mm shell casing.

I did pick up an interesting rumor from an SAS guy on that topic. He says that his information is that some of the Russian Spetznaz (Special Forces) have current/improved versions of the AK-12 in the field now.

At this point, the AK-74M with a smattering of AKS-74s, AK-101s and AK-102s (chambered in 5.56mm x 45mm NATO) floating around, I could find no conclusive evidence of the next best European battle rifle.

U.S. Military Conducts Its Own Weapons Tests

Meanwhile, back home in the good old U.S., we were looking at anything anyone had that was better than the Colt M4, and apparently new ammunition was the evident push behind the search for the next best thing.

Using information from more than a dozen sources, the story seems to be that the M855A1 round, and an army budget of \$300 million to replace existing carbines by 2018, both played a role in the testing.

What the army still has on the table is about \$21 million set aside to buy about 12,000 M4A1's in 2014,



but the army's goal apparently is to have a battle rifle that can fire 3,500-plus rounds of the M855A1 Enhanced Performance Round (EPR) without a stoppage.

I don't know about you, but if I had to shoot 3,500 rounds without cleaning my rifle, I'd say I was in a seriously bad situation without a gun bearer. If I am going to war with 3,500 rounds, I need that guy to carry my magazines.

Those companies that submitted samples for testing included Adcor Defense, Beretta, Colt Defense LLC, FNH-USA, Heckler and Koch, Lewis Machine and Tool, Remington Defense and Troy Defense. None of the test guns passed.

OK, so we were looking for a gun to shoot the M855A1. I got the part about the round: a better bullet that is faster and will punch through light steel armor out to 350 meters. But I would love to hear why the stoppage criteria was changed from 600 rounds (early 1990's Army criteria for stoppages) to 3,500 rounds.

The rifles used by the U.S. military today are direct descendants of the M16 first used by troops in Vietnam.

PHOTO BY LANCE CPL.

On The Horizon

At this point, looking at the facts as they stand, the M4A1 is working just fine. I think that if you were looking for a battle rifle to put in your own closet, there are lots of parts around for both the AK-74 and the M4 or M4A1. So go with what is readily available and warehouse some parts of your own. It doesn't seem like there is anything new in the way of grunt guns out there for 2015. **AK/AR**

About the Author: Richard Crays has 34 years of law enforcement experience.

Currently, he's the senior instructor for a state law enforcement academy, an IALEFI

Master Instructor Trainer and the owner/operator of Rock Solid Shooting and Survival

Training, Glenrock, Wyo.

"SOME OF THE RUSSIAN SPETZNAZ (SPECIAL FORCES) HAVE CURRENT/IMPROVED VERSIONS OF THE AK-12 IN THE FIELD."





TRANSFORM
YOUR RIFLE WITH
THE LATEST
AR AND AK
ACCESSORIES

TEXT AND PHOTOS
BY JOHN N. RAGUSO



OU JUST
TOOK THE
PLUNGE AND
PURCHASED
YOUR FIRST

AR OR AK. Depending on whom you talk to, you've got the "ultimate" (or second best) weapons platform on the planet.

Now it's time to turn that caterpillar into a butterfly by dressing her up to maximize utility and functionality. To get you in the proper shopping mood, we're going to take a closer look at some of the must-have accessories for your AR or AK that will take it to the next level and beyond.

Primary Building Block – Handguard Rail System

Ask anyone who builds ARs, or uses one to defend his life against the bad guys with AKs: What's the single mostimportant accessory feature that morphs it into a proven weapons platform? More often than not, they're going to tell you it's the addition of a handguard quad rail.

The handguard rail, whether it's a drop-in or free-float variety, is the basic building block for everything that comes afterwards. These goodies include vertical or angled foregrips, tactical lights, lasers, I/R laser designators, reflex dot magnifiers, night vision optics, back-up iron sights, etc.

If your weapon doesn't have a railed handguard, you're going to be severely challenged in attempting to add these high-tech toys to the mix.

I get a lot of questions on the differences between a drop-in rail and a free-float rail. It's simple. A drop-in rail works just like the name implies. You use a special handguard tool (yet another must-have AR accessory) to depress the AR's springloaded delta ring and carefully remove the upper and lower thermoset handguards.

Depending on who makes your replacement rail (Midwest Industries, Troy, Blackhawk, BCM, YHM, to name a few), you insert it back into the vacated space, snap the delta ring back over the aft end of the new assembly, screw the upper and lower sections together and it's done. I've installed dozens of drop-in rails and the operation will typically take anywhere from five to 15 minutes, depending on the complexities of the design, how the pieces fit and whether you misplace any hardware during the installation process. Do it on a clean tabletop and you should be good to go.

In contrast, a free-floated railed forend is one where the body of the handguard never touches the weapon's barrel, which literally "floats" freely within its inner confines.

The benefit of this system is that it adds some downrange accuracy potential, because the barrel will vibrate consistently from shot to shot with no outside pressures.

The drop-in rail will compromise accuracy somewhat. The added and inconsistent weight of the accessories you have loaded onto it at the moment, in combination with any pressure on the vertical foregrip or resting the weapon on a stationary support, will all conspire to make the barrel "twang" a different way every time, adversely impacting repeatable accuracy.

Looking at some of the many AR-15s that I have modified, I have had excellent firsthand experience with drop-in rail systems from Midwest Industries, Blackhawk and Yankee Hill Machine.

But not all rails will fit all rifles. You've got to read the fine print. Better yet, visit some of the firearms chat rooms and see what installation or functional issues some of your peer group may have had about one product or an-





If you have a drop-in or free-float rail on your AR or AK, you can add vertical foregrips (left), tactical lights (right) and lasers (not shown) or add them all in one shot with the Crimson Trace MVF-515 integrated vertical foregrip (center).



other before you buy it.

AR uppers can feature a variety of barrel types (lightweight, government profile, medium contour, HBar) and gas tube lengths (M4/carbine, middy and rifle length) and some of these railed handguards are not a universal fit.

One of the problems with low-cost dropin rails is that some of them are a "loose" fit, even when tightened and this movement can be a real pain. The more recognized manufacturers will typically charge \$150 to \$200 for their products, with the length of the rail (carbine, middy, rifle, extended) determining its price tag.

If a free-float tube is what you seek, be advised that it's a lot simpler to order your weapon that way from the factory prior to purchase. If you already have an AR or AK, a drop-in railed handguard is usually the

best solution to convert it after the fact.

For AK fans, the good news is that there are many drop-in rails available that will allow the use of optics. Midwest Industries is one of the leaders in AK aftermarket railed handguards and currently offers a wide variety of products at very affordable prices.

Many rail manufacturers have introduced a next-gen "KeyMod" rail system.



These can feature a total of eight potential rail locations around the handguard, adding new 45-, 135-, 225- and 315-degree positions to the usual format.

A series of repetitive cutouts that resemble "key holes" are engraved into the rail's aluminum surface. These make the rail lighter, as well as offering a variety of user-selectable positions to install the M1913 Picatinny rails based on mission needs.

No matter which format appeals to you more, either the drop-in or free-float railed handguard, my final advice is to just go out and get one.

Lights And Lasers

Two mandatory additions to your AR or AK are a tactical light and a laser.

The light is absolutely critical when you are working in low-illumination scenarios outside or in the dark confines of a building or home. Remember the preferred rules of engagement: acquire the target, identify the target and then eliminate the target if it's a

threat. You definitely do not want to be shooting at something in the dark that you have not identified first and determined if it is a friend or foe.

A tactical light will also provide a secondary "bonus" feature. Depending on your mission, it will allow you to temporarily "blind" or disorient your target and possibly neutralize/detain the threat without ever firing a shot. In these days of hysterical anti-gun legislation, this a desirable option to have at your disposal.

What type of a light is best? It depends on your mission and how often you need to use it. One of my sons is in SpecOps and employs a \$650 SureFire tactical light on his M4, but Uncle Sam is footing that bill.

For my home defense shotguns, I am using Walter Tactical Pro lights that cost only \$20 each at Midway USA. The Fenix ALG-1, Mako and CAA Picatinny rail mounts that I employ on these Walter lights were about the same price.

If these lights will work



when blasting away with a 12-gauge, they should hold up just fine with the lesser recoil of your typical AR-15, AK-47 or AK-74.

I would recommend getting an LED tac light with a minimum of 150 lumens of brightness. LEDs are a next-gen product and last significantly longer than the iridium, halogen or xenon bulb technology of yesteryear.

There are plenty of tactical lights on the market for less than \$100 that will do the job. Visiting Optics Planet, Midway USA, Brownell's or



Natchez Shooters Supplies will keep you busy for hours doing product research and reading customer reviews.

You will need to add a tactical mount for whatever light you purchase. The best are those that keep the light firmly in their grip via an adjustable clamp/pressure screw and feature spring-loaded, push-button Picatinny rail mounts that allow quick light connects/disconnects from your weapon.

I have also used tactical lights from Blackhawk! and Hellfighter that used the old bulb technology, but I have since upgraded to the LEDs for improved target illumination.

Yet another feature that you might desire

with your tactical light is a momentary pressure switch that typically is supplied or offered as an aftermarket upgrade.

This momentary switch allows you to illuminate the tactical light with the press of a fingertip. The device replaces the tail cap/switch assembly of your light with one that includes a 10- to 12-inch long wire and touch pad that is run under your weapon and taped to a vertical foregrip for easy access. The beauty of this system is that you can turn the light on and off without moving your support hand.

Lasers also aid the shooter in reduced lighting conditions. As with tactical lights, the prices of lasers can range widely from \$30 to

Rail Covers and Half Quads

Save Your Hands

Most contemporary railed handguards feature the usual four 0-, 90-, 180- and 270-degree positions for milspec M1913 Picatinny rails; hence, the term "quad" rail.

One of the problems with many railed handguards is that they have a lot of sharp edges like a cheese grater that can slice up your hands and also snag on your gear at the worst possible moments.

or vinyl rail covers to the forend in the unused spots, which can be trimmed down to the right length and snap on and off as required.

Rock River currently offers a "half quad" free-

it goes a long way to making the weapon both comfort able and ergonomic, while still having enough rail positions and length to do the job.

"THE HANDGUARD RAIL, WHETHER IT'S A DROP-IN OR FREE-FLOAT VARIETY. IS THE BASIC BUILDING BLOCK FOR EVERYTHING THAT COMES AFTERWARDS."



nitely less expensive because they are easier to make and take up less physical space. Green lasers are easier to see downrange by the human eye, but they are more complicated and costly to manufacture and take up more physical space on your rail.

Combination lights/lasers are the latest rage. and it's tough to beat the convenience of having everything in one place. The flip side of that is when the unit malfunctions or the battery quits,

There's no redundancy with these combo units. If you have limited rail space on your weapon, they are definitely something to consider. My go-to combo light/laser/grip is the Crimson Trace MVF-515, which is integrated

into a totally cool textured vertical

It features a built-in Picatinny rail mount and both left-hand and right-hand ambidextrous touch pads to activate three different programmable modes for each function (momentary, strobe or constant-on). Plus, there's a master on/off switch that can deactivate either the light or laser independ-

The light features a replaceable 200-lumens LED module, and the 633NM red aiming laser features both windage and elevation adjustments. This vertical grip mount segues perfectly into the next category of AR and AK accessories, specifically grips, bipods and more.

Natchez Shooters Supplies NatchezSS.com

AIM Surplus AIMSurplus.com

Badger Ordinance BadgerOrdnance.com

Bravo Company Machine BravoCompanyUSA.com

Vertical Foregrips, Bipods And More

One way to help control the recoil of your AR or AK and keep it on target during fast fire drills is to employ a vertical foregrip. The majority of our troops are using vertical foregrips on drop-in handguard rails when going into harm's way, and you should too.

Some of these foregrips include pop-out monopods or bi-pod setups to perform multiple missions if you have to take a shot from the prone position. UTG makes one that features a pair of retractable legs and sells for less than \$50.

Magpul manufactures an Angled Foregrip that creates a stabile shooting position and allows the operator to control recoil by placing his hand higher up near the centerline of the bore (\$35 retail).

Magpul also offers an XTM Hand Stop Kit (usually less than \$20), which is not a vertical grip, but serves as a lightweight, low-profile rail-mounted index point for improved weapon control. It also acts as a forward stop that prevents the shooter's hand from reaching the hot front sight assembly or muzzle.

I have been using CAA's SVG (short vertical grip) on a variety of my ARs, and these can be purchased for less than \$20.

Bipods are another popular product for ARs and AKs, and the cost of these will range anywhere from \$25 to \$200 or more, depending on

the materials, quality of construction or features.

If you are employing a bipod or grip on a drop-in rail system, be advised that this new "pressure point" on the rail under the barrel will compromise your repeatable accuracy. This is not an issue with free-floating rails.

Bipods typically come in telescoping form, and the usual lengths are 6 to 9 inches or 9 to 13 inches. For bench shooting, the 6- to 9-inch height works best and provides adequate clearance, depending on the length of the magazine you are using on your weapon.

If you are in the field, the 9 to 13-inch models will usually offer the best functionality. I own a few bipods for my ARs, and they include a 6 to 9-inch Blackhawk! and a pair of Harris 9 to 13-inch lightweight LM models.

Other Options

Other cool toys that will work wonders for improving the functionality and combat effectiveness your ARs and AKs include collapsible stocks, one-point sling mounts, spare magazine carriers and more. Hopefully, I've given you some great ideas on how to upgrade your favorite weapon. AK/AR

About the Author: John Raguso is a veteran shooter who contributes to a number of Engaged Media publications.



This Rock River A4 Middy HBAR Carbine is fully accessorized and features a free-float quad rail, ladder rail covers, a $\frac{1}{2}$ MOA fixed BUIS, stock-mounted spare magazine pouch, Bravo Company M-16 bolt carrier group, Badger Ordnance Tactical Latch, plus a Barska laser and a CAA SVG (short vertical grip) on the lower forward rail section.

Drop-in AR Upgrades

Two of my favorite "affordable" AR-15 hardware upgrades are an improved bolt carrier group (BCG) and a more ergonomic charging handle.

The BCG is a critical piece of kit, because it's the heart and soul of the AR-15's direct gas impingement system. Hot gases enter the BCG's internals via the gas tube and bolt carrier key to cycle the weapon and literally all hell breaks loose inside.

If you're looking for one of the smoothest and slickest BCG finishes on the market, it's hard to beat nickel boron. The NiB Bolt Carrier Group distributed by AIM Surplus is high-pressure tested and magnetic particle inspected (HPT/MPI).

It uses a full-auto M-16 pattern; it has a longer steel tail on the bottom end compared to the semi-auto version for more mass/weight and enhanced reliability.

This was a significant improvement over the phosphate-coated, steel semi-auto BCG that was standard issue on my Rock River ARs. Nickel boron is one the slickest and most durable finishes on the market. It's smoother than hard chrome and easier to clean. It can be run almost lube free for hundreds of rounds, plus it's extremely resistant to chipping, peeling or flaking. It was worth the \$129 investment.

The same can be said for my AR's Badger Ordinance Gen 1 Tactical Latch upgrade on my AR's charging handle, which set me back \$23.

The standard T-shaped charging handle requires the operator to use the index and middle finger of either the strong or weak hand to unlock the latch and cycle the BCG.

In contrast, the extended machined latch on the Badger Ordinance allows the user to unlock and cycle the BCG with either the heel or one finger of either hand, even wearing gloves.

This improves the ergonomic efficiency of bolt cycling and/or chamber checking dramatically. They also offer a Gen 2 product that features a smaller, differently shaped latch for the AR-15/M4 charging handle.

You can purchase either the latch (\$23) or a complete charging handle with the latch already installed (\$49).

Bravo Company Machine also manufactures and distributes a plethora of top shelf tactical latches and bolt carrier groups, and I have used both of these in the past for some of my AR builds and upgrades.

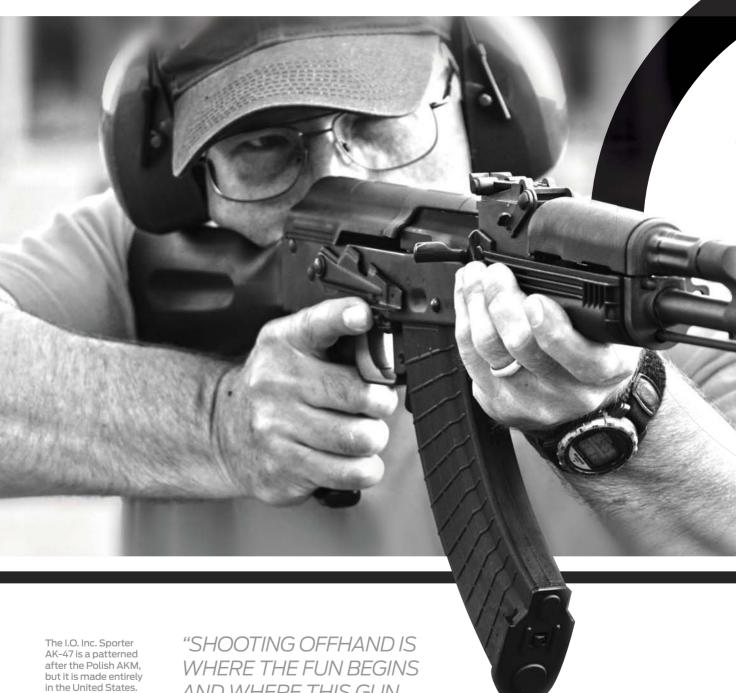


Photo by Suzanne Moss Mullen

AND WHERE THIS GUN REALLY SHINES."

TEXT AND PHOTOS BY STEVEN PAUL BARLOW

F YOU WERE EVALUATING A MACHETE, YOU
WOULDN'T TEST HOW WELL IT WORKED AS A SURGEON'S SCALPEL.
So think of the AK-47 as more of a machete than a scalpel. It's

So think of the AK-47 as more of a machete than a scalpel. It's more at home being used with quick, broad strokes than it is as a precision instrument. When evaluating the Inter Ordnance (I.O.) Inc. Sporter AK-47 recently, I kept in mind the job this rifle was intended to perform. As a military arm, the AK-47 was designed as a fast-handling weapon that could lay down lots of fire in a hurry at close to intermediate ranges.

There's no reason to believe that a semi-automatic civilian version of this classic would suddenly and drastically transform it into something different. You're not going to change what the original established itself as through 65 years of warfare and skirmishes around the world.

To see how it performs, we took it out for a field test. As you're about to see, it's a pretty darn good machete.









- 1. Pushing the button at the back of the receiver enables you to lift off the cover to service the rifle.
- 2. The return spring guide assembly is easily removed to gain access to the few remaining parts inside the AK-47.
- 3. The bolt carrier and bolt are removed as one unit from the AK-47. The gas tube can then be removed to complete the field-stripping process.
- 4. It's easy to get inside the AK-47's receiver for cleaning and maintenance.

The Nuts And Bolts Of An AK

I.O. Inc.'s Sporter, like all traditional AK-47-style rifles in civilian garb, is a semi-automatic, long-stroke, piston-operated rifle chambered in the traditional 7.62x39mm cartridge. Its design is a faithful rendering of the Polish AKM. But that's where the Sporter's similarity with imported AKs ends.

For one thing, the Sporter is manufactured entirely in the U.S., in I.O. Inc.'s Palm Bay, Florida facility. This is not a shoddily made import.

I must admit, my preconceived notion of AK rifles in general was based on the cheaply made imports encountered so often. They look as if they're made by soldering scrap pieces of old rain gutters together with chunks of splintering driftwood attached as stocks. That jaded view of AKs was shattered by the workmanship exhibited in the Sporter. This is a solid, well-made firearm. The black synthetic stock has a substantial feel to it. The metal work and manganese phosphate finish were well executed.

The Sporter features a 16.25-inch barrel with a slantstyle muzzle brake. It has a CNC-machined scope mount rail on the left side of the receiver. Although the sample arrived with a plain polymer handguard, most Sporters are now shipped with a handguard that includes a built-in accessory rail at the bottom for easily mounting lights, lasers, tactical grips and bipods.

The Sporter's sights are of the typical AK variety. The

metal front sight is flanked by protective wings. It is drift adjustable for windage and screws in or out to adjust the elevation.

The rear notch sight has graduated elevation adjustment settings in 100-meter increments from 0 to an optimistic 1,000 meters. Those high settings were for laying down suppressive fire.

The Sporter's controls are of the usual AK variety. The magazine release is in front of the trigger guard, just behind the magazine well. Pushing it forward releases the magazine, which does not drop free.

Locking the bolt open is accomplished from the right side of the firearm by moving the safety up to the "safe" position while holding the bolt handle back. A notch in the safety lever engages the bolt handle with a secure "click."

The safety itself, as with all AKs, is the most inconvenient to manipulate of any semi-auto rifle. You have to move one hand or the other from its secure shooting grip to either engage or disengage the safety.

To be fair, in the type of actions in which the AK has been a participant over its history and the way it was employed, I'm guessing the safety wasn't used very much anyway.

The Sporter's trigger was perhaps the most pleasant surprise of all. I had expected a long, hard gritty trigger pull. This was not the case. The Sporter's trigger, after a





- 5. When shooting I.O. Inc. Sporter AK-47 from the bench, the firearm showed good accuracy and consistent velocities from all ammo tested.
- 6. The initial group fired hit high and left. But it was easy to get the shots in the black as both the front and rear sights are adjustable.

Takedown Of The AK Is Simple

Field-stripping the Sporter shows one of the AK's advantages for the soldier who must maintain his weapon in sometimes harsh conditions. The takedown process is easy and there are no small parts to lose.

First, remove the magazine and check to make sure the rifle's chamber is empty. Depress the button at the rear of the receiver and lift the receiver cover off

Next, push the return spring guide assembly forward until it disengages from the groove in the rear plate of the receiver. Then lift and remove the assembly from the bolt carrier channel.

Remove the bolt carrier and bolt together by pulling them back and lifting. Separate the bolt from the bolt carrier by twisting the bolt until its lug moves from the variable groove of the carrier and then pulling it free.

Last, rotate the gas tube lock lever up and slide out the gas tube from the gas block. When you look down at how few parts there are to this firearm, you begin to understand why it has such a good reputation for reliability and durability.

short amount of travel, broke crisply.

This is the type of rifle you might have to fire during a time of high physical and emotional stress. You want a trigger that's light enough to make accurate shots, but not so light as to heighten the possibility of accidental discharges. The Sporter's trigger achieves the proper balance.

To top if off, I.O. Inc. backs up its workmanship with a limitedlifetime warranty.

The AK's Trial By Fire

I conducted the test in North Carolina where I enlisted the help of friend and longtime shooting companion Richard Schutz, who has a wide range of experience and knowledge with firearms.

To begin our test, we did some of the obligatory work from the bench and easily adjusted the sights to get the rifle shooting in the black. We ran several different loads through the gun to get an idea of its potential accuracy.

We shot the following, readily available loads through the Sporter: Tulammo 122-grain FMJ; Brown Bear 123-grain FMJ; Golden Bear 125-grain SP; Hornady Zombie Max 125-grain Z-Max; and WPA Performance 123-grain FMJ from Wolf.

The ammo tested showed good consistency in velocity. The fastest tested was the Golden Bear, which averaged 2,345 fps. The slowest tested was the Hornady Zombie Max, which averaged 2,312 fps. The other ammo fell somewhere in between.

For accuracy testing, we kept things as bare bones as the rifle itself. We elected to shoot the rifle from a sand bag rest using the standard iron sights only.

Undoubtedly, we could have compiled more impressive results by mounting a magnified optic on the rifle and shooting from a more secure rest. But again, we wanted to test the rifle the way it was originally designed to be used: with iron sights.



The AK-47 contains very few parts, one reason it is such a durable and reliable firearm.



A variety of readily available ammo was fired through the I.O. Inc. Sporter without a single malfunction.

The Specs

The AK Sporter

Manufacturer: 1.0. Inc. (Inter Ordnance) Website: IOInc.us Design and Action: AKM-style, piston-operated, semi-automatic rifle Caliber: 7.62 x 39 Barrel Length: 16.25 inches Overall Length: 36 inches Weight: 7 pounds Barrel Twist: 1:10 Stock: Black polymer Sights: Adjustable front and rear iron sights and CNC machined scope-mount sides and control of the control of

\$740

"THE I.O. INC.

SPORTER

ISAN

EXCELLENT

DEFENSIVE

WEAPON AS

IT COMES

FROM THE

BOX."

PERFORMANCE RESULTS

I.O. Inc. Sporter AK-47

| LOAD | AVG | MUZZLE | VELOCITY | AVG GROUP | BEST GROUP |
|--------------------|-----------|--------|----------|-----------|------------|
| Tulammo | 122-grain | FMJ | 2,339 | 1.78 inch | 1.5 inch |
| Brown Bear | 123-grain | FMJ | 2,314 | 2.45 inch | 2.0 inch |
| Golden Bear | 125-grain | SP | 2,345 | 2.18 inch | 2.0 inch |
| Hornady Zombie Max | 125-grain | Z-Max | 2,312 | 2.0 inch | 1.75 inch |
| WPA Performance | 123-grain | FMJ | 2,326 | 2.42 inch | 1.75 inch |

The velocity was tested with a Chrony F-1 chronograph at 12 feet. Accuracy average was based on three five-shot groups at 50 yards from a sandbag rest using iron sights only.

When initially sighting in the rifle at 25 yards, most of the holes in the targets were touching. When we moved the targets to 50 yards, things opened up a little, but the accuracy was still very good for an iron-sighted AK.

The Tulammo turned in the best group at 1.5 inches and the best average accuracy at 1.78 inches. As you would expect, very good accuracy was achieved with the most expensive ammunition, too. Both the Hornady Zombie Max and WPA Performance ammo turned in five-shot groups at 1¾ inches.

What was more impressive is that there was good consistency across the board with all ammo used. Even the less expensive Brown Bear and Golden Bear ammo turned in 2-inch

groups. We experienced very few fliers and no vertical stringing.

There would be no problem hitting a man-sized target at 200

yards or the vitals of a deer at 125.

Is this gun capable of better accuracy? Of course it is. My friend is obsessive about accuracy. He was impressed enough that he may be buying one of these Sporters. If he does, he'll undoubtedly put a scope on it to see what it can really do. I'll report back to you on that.

When testing an AK or any rifle in this category, you have to get away from the bench to see how the gun really handles. Shooting offhand is where the fun begins and where this gun really shines.

The gun mounted to the shoulder and the sights came into view naturally. Recovering the sight picture shot to shot was easily ac-

complished and was aided by the mild recoil.

Reliability was what you'd expect with an AK. Throughout the testing, there were no stoppages of any kind, regardless of whether we were firing ammo with brass or lacquered steel cases.

Outstanding Choice

The I.O. Inc. Sporter is an excellent defensive weapon as it comes from the box. Durable, reliable and affordable, it would be a perfect addition to any emergency preparedness kit for whatever "what-if" scenarios you can imagine.

Load it with the right ammo, and you have a good hunting rifle for up to deer-sized game, especially in thick terrain where shots aren't too

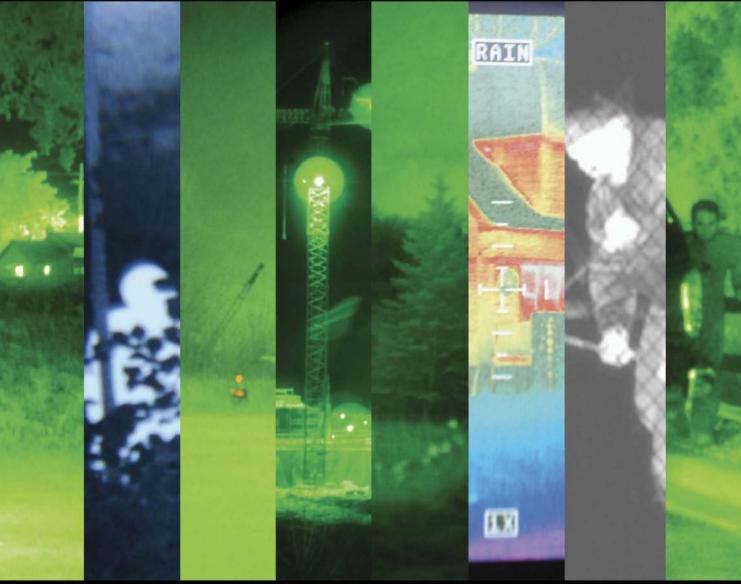
long. Coyotes and other pests around the homestead wouldn't stand a chance.

With the availability now of different handguards, rails and scope mounts made specifically for AKs, you can trick this rifle out the same way you would your favorite AR-15.

However, I'd prefer to keep the gun the way it is: basic, dependable, deadly. ${\bf AK/AR}$

About the Author: Steven Paul Barlow is a retired sergeant/station commander and former firearms instructor with the New York state police. An avid hunter and firearms enthusiast, he has been writing on outdoor topics for more than 30 years.

WHEN TROUBLE HAPPENS AT NIGHT



SEE IN THE DARK

Criminals use the night to their advantage. It masks their movements, cloaks their deeds, and keeps their victims unaware until it is too late. Use the darkness to your advantage with quality night vision equipment from TNVC. We have everything you need to help keep your family and your property secure at night.

NIGHT VISION THERMAL LASERS LIGHTS HELMETS MOUNTS







TOP OPTIONS FOR THE LATEST AR AND AK **SIGHTS AND SCOPES**

BY JOHN N. RAGUSO



R VS. AK. IT'S LIKE ALIENS VS. PREDATORS. There's typically no middle ground. You either love one or you love the other—and despise the opponent.

Regardless of where you stand, let's take an objective view on how to dress up your AR or AK weapon's platform with some of the latest sights and optics. There are many, so let's get started.

Sights: Irons And Backups

The AR was born and bred in the United States and frequently goes by the moniker "America's Rifle." Due to the modularity and flexibility of this weapons system, there are considerably more choices when it comes to shape-shifting your primary iron sights or adding a set of back-up iron sights (BUIS).

Sargeant Chris Raguso sights in a target downrange with his Rock River ATH middy carbine using a Trijicon TA11E 3.5x35 ACOG. This tricked-out AR also includes a half-quad, free-floated handguard, ladder rail covers, spare magazine pouch, a Badger Ordnance Tactical Latch, CAA short vertical grip, plus a Walther 170 lumens LED tactical light with removable CAA rail mount.



The Colt MT6700 Target Match rifle's A3 flattop configuration offers the operator a choice of sighting systems, using either the ½ MOA iron sights in the removable carry handle or his/her choice of optics; in this case, a USMC TA31RCO-A4 4x32 ACOG.

This Colt MT6700 Target Match rifle sports the potent and popular Trijicon 4x32 TA31RCO-A4 ACOG, standard issue for the USMC M-16.





A Midwest Industries fixed rear BUIS in flat earth coloration.

Because the AK series of weapons was designed to put a lot of lead on a man-sized target less than 100m downrange, precision single-shot sighting via its iron sights was probably a distant afterthought. Did you ever wonder why the first detent on the AK's selector is full auto? You get the point.

That fact, combined with the unique ballistic curve of the 7.62x39mm round, combined with the short sight radius (15.25 inches or so) and the distance of the rear notched sight from the shooter's eye makes shooting with irons a challenging experience for AK fans. Hit a man-sized target at 100m, okay. Hit a bull's-eye at the same distance? Maybe not.

But with millions of AKs in the hands of U.S. shooters, a few enterprising companies have reinvented the wheel on the standard iron-sight setup, or at least made it a bit more accurate.

One of these pioneers looking to improve the sight picture for AK aficionados is Tech-Sights. It currently offers an AK100 and AK200 series of sights for a variety of AK-style weapons that lengthen the sight radius considerably.

To accomplish this task, its complete sight kits offer replacement receiver covers that have new adjustable peep sights built right in. Depending on the model, these sights are adjustable for windage or windage and elevation. Prices vary from \$100 to \$135, depending on which version you select.

There's also a Beryl-style replacement sight that replaces the AK's standard leaf sight setup with a rail that repositions a pop-up peep sight at the aft end of the receiver cover. Scanning the net, these go for \$35 to \$70, depending on the manufacturer and the sight rail's construction material.

The AK's front sight is adjustable for both windage and elevation, so the first thing every AK owner should do is to acquire the requisite sight adjusting tool to allow setting the weapon's mechanical zero.

Where this zero should be is another story altogether, but many folks typically set it up for 25 yards. Predictably, some manufacturers also offer a new-and-improved high visibility front sight for the AK, like XS Sights and Meprolight, among others. Some of these feature a glow-in-the-dark dot, for easier front-sight acquisition in low-light situations.

AR aftermarket irons are a totally different story, and we really don't have enough space to cover all of the choices, so I'll try my best to summarize.



The author's go-to Trijicon optics for his various AR platforms include the TA11E-A 3.5x35 ACOG (top), the RX-34 reflex (right) and the RX01NSN reflex (left). All three feature ultra-reliable, no-battery operation with their onboard fiber optic arrays and built-in tritium dots.

Past AR-15 Als (front sight elevation adjustment; wheel adjustment for windage, with twin flip-peeps for elevation) and A2s (front sight elevation adjustment; wheel adjustment for windage, with drum wheel for elevation) have featured the ubiquitous built-in carry handle and front post/rear sight system.

But the past decade has seen a dramatic shift away from that once-popular layout. More often than not, the latest ARs in carbine-, middy- and rifle-length formats incorporate an A3 flat-top rail configuration, which features a removable carry handle with a 0 to 600M twin aperture peep sight that's adjustable for windage and elevation in ½ MOA clicks.

The beauty of this configuration is that your "carry handle" AR turns into an instant flat-top model by loosening two thumb screws.

If you want to go with a reflex sight, magnified ACOG (advanced combat optical gunsight) or classic variable power scope, the changeover takes a matter of seconds. It's like having two guns in one.

There's almost no compelling reason to select a straight carry handle AR upper these days. While some AR-15 A3 models feature the original (F-marked) front sight post, this can occasionally crowd the view of your optics package.

More and more manufacturers are dispensing with the front sight tower, opting for an "optics ready" low-profile gas block, instead. Plus, it's cheaper for them.

The advent of the A3 flat-top, in conjunction with a free-floated rail, has opened up a whole

This shooter's Rock River LAR-8 sports a free-floated half-quad rail, ladder covers and a gas block-mounted Samson folding front sight. A Trijicon RX-34 reflex sight sits on top of the A4 flattop mount, which can also be used for either magnified single-power or variable-power optics.





new world of low-profile iron sight options for AR fans that can be out of the way when optics are engaged one moment, and then flipped up at the touch of a button and locked into place the next, ready for action.

Some of the leaders in the BUIS field are Troy, Magpul, Midwest Industries, Samson, Yankee Hill Machine, Diamondhead and others. I have personally tested out Troy, Magpul, M/I and Samson backup irons.

Additionally, I have a pair of M/I BUIS that are rail-mounted on twin Rock Rivers, MCTAR-FFR and ERS models on one at about \$80 per sight and MCTAR-SPSL and MI-LFFR on the other at \$120 per sight. I also have a Samson flip-up front gas block sight set up on an LAR-8.

These are all machined from 6061-grade aluminum and hard-coat anodized for durability. In contrast, the popular Magpul backup sights are made from a lightweight polymer material. They come in three different colors and go for only \$35 to \$40 each.

Most rear BUIS systems feature dual aperture peep sights

The author sights in a Stag 3G AR-15 outfitted with a set of Midwest Industries BUIS and a Trijicon RMR set on an offset MI rail. that are typically on the same visual plane, with differently sized openings for either combat or target applications. They are adjustable for windage only in $\frac{1}{2}$ MOA increments.

Any elevation adjustments typically are via the front sight, using the usual four-prong AR sight tool to raise or lower your projectile's point of impact. I usually adjust my BUIS setup to zero at 50 yards, which will reacquire your POA/POI somewhere between 185 to 210 yards downrange, depending on your AR's barrel length and the type of 5.56 NATO or .223 REM ammo you are using.

From the muzzle out to 200 yards, the 50-yard zero will usually keep your projectile's travel within a tight, 2.5-inch ballistic curve, which makes sighting your target at any range in between the extremes a simple solution.

Reflex Dots

This is where the sighting game for your AK or AR really gets interesting and expensive. Red-dot reflex sights can be powered by batteries, solar or tritium or a combination of these.

They range in price from \$75 to \$650 or more, depending on the construction, clarity of the glass and mounting system used to attach it to your weapon's rail.

I am spoiled by the quality of Trijicon's lineup of reflex sights and currently own three: a RX01NSN and a pair of RX-34s, all with 4.5 MOA solar/tritium amber dots.



This shot shows four generations of Trilicon optics, starting with the RX01NSN (top left), RX34 (top center). TA11E 3.5x35 ACOG (top right), and the all-new 1-6x24 VCOG (bottom).



This Rock River ATH carbine features an 18-inch stainless steel HBAR with a half-quad free-floated rail system, sporting a set of Midwest Industries BUIS in the ready mode.

Flat-Tops Allow For Variable Power Scopes

As long as you have the horizontal rail space and vertical clearance, flat-top ARs and AKs with Picatinny rails allow the operator to employ classic variable-power scope mounts.

The bases and rings can come in many forms (1-inch, 30mm, medium/high/extra-tall mounts, twin mounts, etc.). The objective is to be able to position the scope where you have both a consistent and comfortable cheek weld and eye relief to make it all work naturally as one cohesive sighting system.

I have used everything from \$150 Nikons to \$1,250 Weavers to add variable-power magnified optics to my ARs, and the list is almost endless, with new scopes coming out literally every week.

If and when I need to turn any of my ARs into sniper weapons due to an alien invasion, my go-to optic for this mission is a Weaver Super Slam Tactical 5-20x50 (\$1,248 MSRP).

It is an outstanding scope that features crystal clear images, excellent light transmission and a first focal plane mil-dot reticle that offers all of the benefits of the milliradian ranging system at any magnification. The only problem with this big girl is her 50mm objective lens, which might not fit all AR and AK platforms.

If I need something smaller and less expensive, my next go-to scope is the Weaver Grand Slam 4-12x42 (\$400 street). It takes up less rail space and puts the scope's sweet spot closer to the bore axis and the stock's comb. It is a total dream to use, with crystal clear glass, a BDC and a second focal plane reticle. Due to their unique mission flexibility, they find their way onto my AR-10 and AR-15s, Mossberg MVP bolt-action hunting rifles and my Mossy 590A1 combat shotguns.

Most reflex sights don't usually offer any magnification, but allow the operator to get instant target acquisition. Eye relief is typically unlimited with reflex/dot sights, contributing significantly to the quick targeting aspect. They excel in CQB situations.

Eotech makes a fast-transition G33 3x magnifier that mounts in front of its holographic sight. Still, if you need to see something 300 yards away, a reflex dot sight is not your best first choice.

Trijicon, Aimpoint, Eotech and Leupold are the big dogs for military-grade hardware, but other manufacturers like Burris, Bushnell, BSA and others make more affordable reflex and holographic sighting systems.

It's been my experience that you get what you pay for in this game, so don't squeeze the nickels together too hard when deciding on a reflex optic. I've used the Aimpoint Comp M4 (\$830-\$850) and Micro T-1 (\$700), both of which offer 2-MOA battery-powered dots.

They are top-quality reflex sights, but my eyes prefer the aforementioned Trijicons, especially the RX-34 series (\$682 with TA51 flattop mount), that features a crystal clear 42mm objective lens, a wide field of view and never needs batteries. It illuminates the 4.5-MOA amber dot via a combination of solar power (from the built-in fiber optic array) and tritium dot.

Trijicon also makes an RMR (Ruggedized Miniature Reflex sight) and a SRS (Sealed Reflex Sight) that I have used on a variety of weapons tests, but some of these are battery powered.

Many reflex sighting systems feature a quickdisconnect mount by way of thumbscrews or a single-locking lever arm. The nice thing about the higher end products is that you can remove and reattach the sight in the same T-marked position on the receiver's rail and not lose your zero.

Some operators make the mistake of getting a sight whose reflex dot is too large, which can cover the target and make precision shots impossible. If you have a choice, try to select a dot that's somewhere in the 2- to 5-MOA range, which usually affords the best combination of dot brightness, clarity and target acquisition.



The Trijicon 1-6x24 VCOG in action, sitting on on top of a NY SAFE Act-compliant (for now) AR-15 clone.

ACOGS

ACOGs like Trijicon's excellent lineup of advanced combat optical gun sights are a step up the evolutionary ladder from reflex sights both in capability and cost.

When trying to acquire a moving target and/or dangerous game, there's nothing like a magnified optic that's always in focus and offers flexible eye relief, especially if that target can shoot back.

According to the folks at Trijicon, "The ACOG (Advanced Combat Optical Gunsight) is a fixed-power, compact riflescope with an illuminated reticle pattern. Every feature of its design was chosen for a single purpose: to provide increased hit potential in all lighting conditions with fast target acquisition."

Other players have joined the fixed magnified combat optic party and include Leupold, Burris and Meopta.

I have field-tested the Burris AR-332. It is a compact (less than 6 inches long), affordable (\$350) scope that offers 3x magnification through its 32mm objective lens with a battery-powered ballistic/CQ (circle/cross) reticle that features BDC stadia lines out to 500 yards when using .223 ammo.

For those on a budget, the Nikon P-223 (\$150) offers 3x fixed magnification through a 32mm lens with a BDC reticle that is designed for use with carbine-length ARs.

If cost is subordinated to quality and durability,

my absolute favorite in this category is the Trijicon TA31RCO 4x32 ACOG (\$1,673) that is standard issue for the USMC and U.S. Army troops. It is offered in A4 (20-inch barrel) and M4 (14.5-inch barrel) models that feature slightly different BDC positions in the dual solar/tritium-powered reticles.

For those operators who are addicted to AA battery use when in the field, Trijicon recently introduced a trio of model TA02 4x32 optics (\$1,502) that feature either a red or green LED with three different reticle patterns (crosshair, chevron or horseshoe).

VCOGS

The latest rage in ACOGs is actually the VCOG, which stands for Variable power Combat Optical Gunsight. Leupold's 1.25-4x20 VX-R Patrol riflescope (\$599) features a 30mm tube, illuminated circle/cross reticle with eight levels of illumination and an auto turn-off/turn on feature if you should forget to click off the power.

The Burris MTAC 1-4x24 (\$599) is another scope of this genre and ships with a Fastfire III red-dot sight on top for instant CQB engagements and a standard Picatinny rail mount. If you don't need the mount or the reflex sight, the basic MTAC is \$399.

Bushnell's AR Optics 1-4x24 is an affordable (\$200) variable-power scope that features a BDC reticle for 5.56mm/.223 ammo, as does Leatherwood's Hi-Lux CMR 1-4x24 (\$340).

Night Vision Scopes

Yet more wrinkles in the AR/AK optics game are night vision sights, which have a wide range in capability and pricing.

These can be as simple as some of the first-generation ATN Aires MK series scopes (350, 390, 410) with street prices in the \$400 to \$500 range. The next-gen ATN Night Arrow CGT 4x and 6x optics are in the \$1,500 to \$1,600 range. Other players in the night vision game are Pulsar, Yukon and Sightmark, among others.

100V at your fingertips...





Home Defender

Home Defender is now available on Apple Newsstand, Google Play and Kindle.

Home Defender is devoted to bringing you the latest news and product reviews to keep you, your family and your home, safe. Plus, easy and proven self-defense methods.

Download the **FREE APP** and get a 1-year subscription (4 issues) for only \$11.99 and save 67% off newsstands! You can also purchase single issues for only \$4.99.









Stepping up a notch in quality in the variable-power combat optics, Weaver's Super Slam 1-5x24 Tactical Rifle Scope (\$725 street) is designed to perform in the harshest tactical environments.

The scope features tactical reset-to-zero turrets, fully multi-coated lenses with an extra hard coating on the exterior lenses and a first focal plane reticle which aids in range estimation.

These features make the Weaver Tactical Rifle Scope an ideal choice for use on your tactical rifle, plus it's covered by a limited-lifetime factory warranty.

Another of these next-gen variable power combat optics is the Vortex Razor HD Gen II 1-6x24, which is designed for short/medium range tactical applications that require speed and precision sight acquisition.

The Gen II's High Density extra-low dispersion lens system offers optically superior resolution, color, light transmission and delivers unparalleled edge-to-edge clarity.

The generous eye relief allows for a heads-up shooting style, increasing situational awareness with dual-eye monitoring and split-second targeting.

Illumination can be activated/deactivated between any of the 11 intensity settings without having to progress through the entire dial. Other convenience features of the Razor HD Gen II include a fast focus eyepiece; large, easy gripping turrets and the assurance of the Vortex VIP Lifetime Unconditional Warranty.

Perhaps the big dog of the variable magnification combat optics world is Trijicon's new 1-6x24 VCOG (\$2,400 street), which illuminates its reticle with a sixposition red LED that presents as clear a sight picture as you can get.

Offered with BDC reticles in three calibers (5.56 NATO, 7.62 NATO, 300 Blackout), for five different projectile types, with three different reticle patterns, you can find one that's just right for your needs.

What's really nice about the VCOG is its silky smooth magnification adjustment, courtesy of an oversized power fin that sits on top of the optic, adjustable diopter eyepiece for totally crystal target focus with an LED that's powered by a single AA battery.

The first focal plane reticle allows range estimation at any distance and like all Trijicons before it, this sight is a first class tool for serious operators who venture into harm's way, backed by a lifetime parts and five-year electronics warranty. **AK/AR**

About the Author: John N. Raguso has been writing about hunting and the shooting sports professionally for more than 30 years.

ontacts

Tech Sights Tech-Sights.com

XS Sights Systems XSSights.com

Meprolight MeproLight.com

Troy Industries TroyInd.com

Magpul Magpul.com

Yankee Hill Machine YHM.net

Diamondhead USADiamondHead-usa.com

EOTech EOTech.com

Bushnell Bushnell.com

BSA Optics BSAOptics.com

Meopta Meopta.com

BurrisBurrisOptics.com

AK fans can upgrade both the quality of their rear sight while also increasing its sight radius with a Tech-Sights AK rear sight kit.



"THE AK SERIES OF WEAPONS WAS DESIGNED TO PUT A LOT OF LEAD ON A MAN-SIZED TARGET LESS THAN 100M DOWNRANGE."

HOME BIFFINDER

Devoted to bringing you the latest news and product reviews to keep you, your family and your home, safe.



- Find Everything you Need to Know about how to protect your family and your home
- Learn simple perimeter defense tips
- Discover the most effective camera security systems
- Get the latest tips on the best guns for home defense
- Plus, learn some of the easiests and proven self-defense methods.

JUST \$ **8**99

ORDER YOUR COPY TODAY

CALL 800-764-6278

OR VISIT US ON-LINE AT WWW.ENGAGEDMEDIAMAGS.COM

Allow 5-7 days for delivery of your issue. Outside US, prepay yearly postage in US funds only.

ALTERNATIVE RIMFIRE ARS ALLOW YOU TO SLASH AMMO COSTS WHILE ENJOYING THE AR EXPERIENCE TEXT BY KM LEE / PHOTOS COURTESY OF THE MANUFACTURERS OU'RE IN THE WOODS WITH SOME FAMILY AND FRIENDS. The new AR, which is so fun and easy on recoil, is a huge hit, and everyone just wants to keep shooting and shooting ... and that's when problems can arise.





Purposes And Options

Before we check out .22 LR options on an AR platform, let's first define some purposes and priorities.

Do you just want a fun, plinking .22 rifle that kind of looks like an AR? Are you performing full-on military/law enforcement/defensive drills with a nearly identical replica AR chambered in .22 LR

or are you landing somewhere between these two ends of the usage spectrum?

You must answer that question as completely as possible before proceeding—the costs vary significantly in the hunt for an AR-style gun chambered in .22 LR, ranging from very affordable to very pricey.

Here we'll start with the full-on AR-15-style rifles, then move away toward other options, including replicas and "black gun" .22 rifles that may not handle much at all like an AR, but still carry a bit of swagger while delivering plenty of fun.

Full AR-Style .22s

Many people, especially those in law enforcement and security professionals,

"THE PURCHASE
PRICE WILL BE HIGH,
BUT THAT CAN BE
RECOUPED QUICKLY
IF ROUTINE USAGE
OF A .22 SAVES
THOUSANDS OF
ROUNDS OF 5.56
AMMUNITION THAT
WOULD OTHERWISE

BE EXPENDED."

need to conduct training sessions often with AR-15 rifles. For these circumstances, plus purists and competition shooters looking to build muscle memory by shooting a full-on AR, such a rifle chambered for .22 LR can save significant amounts of money. The purchase price will be high, but that can be recouped quickly if routine usage of a .22 saves thousands of rounds of 5.56 ammunition that

would otherwise be expended.

DPMS

DPMS offers two such AR rifles in different configurations, both currently priced at \$1,029: the DPMS .22 Bull Barrel and AP4 Carbine.

Both are fully mil-spec dedicated AR-based .22 rifles with functional ejection port door and charging handle and forged 7075-T6 aluminum upper and lower receivers capable of accepting aftermarket stocks, grip, fire control components and other accessories.

This commonality allows agencies to build these .22 LR rifles into training tools that closely mimic duty rifles. They use a 16-inch, chromoly barrel with a .22 LR-appropriate twist rate of 1:16



inches, integral feed ramp and fixed ejector to promote accuracy and reliability.

The Bull Barrel features a flattop configuration without sights, but it does have a Picatinny rail for mounting optics, heavy barrel, fixed A2 stock and carbine-length free-float aluminum handguard.

The AP4 Carbine uses a telescoping AP4 stock, M4 handguard and flash hider on its lightweight barrel. It's a bit lighter and handier to tote about. Together, they offer an excellent avenue to get into a ready-built .22 LR rifle that will feel and handle like an aluminum-receiver AR-15.

AR-15 Uppers In .22 LR

Once again, the modular nature of the AR-15 pays huge dividends.

If you already own one, you can simply purchase a complete upper receiver set up for .22 LR to drop on to your lower receiver. A number of key benefits ensue: you will be using your own lower with the butt-stock and trigger group that you're already familiar with, and you'll be reinforcing

that familiarity with every .22 you send down range while you realize big savings through reduced ammo costs.

Also, because upper receivers are not FFL restricted, you can order one directly from online sources such as Midway USA, Cabela's, etc.

Midway And DPMS

A number of configurations can be purchased from various manufacturers; for example, Midway stocks a DPMS upper for \$419.99. This is the AR-15 A3 upper receiver assembly that is used on its Bull Barrel rifle as described above, which comes as a complete, dedicated rimfire conversion upper in .22 LR that is ready to install on any standard small-pin lower receiver.

CMMG

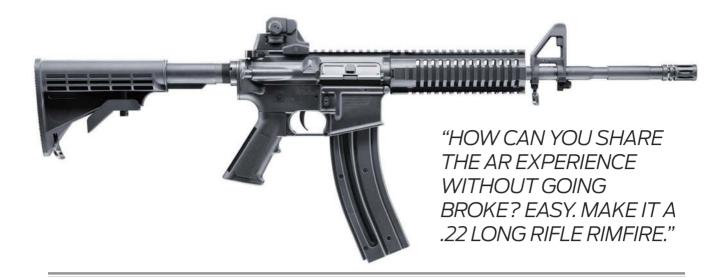
Cabela's offers another similar drop-in AR option for \$499.99, the CMMG 22 LR AR-15 Upper. It uses a forged, flat-top aluminum M4 upper and has been test fired for reliable functioning. Its chromoly vanadium steel barrel has a 1-in-16-inch barrel twist and a flashguard.

The barrel is Weapon Armament Surface Protection (W.A.S.P.) treated for improved wear, abrasion and corrosion resistance. CMMG offers several different configurations of .22 LR uppers to suit specific tastes and requirements.

Look-alike AR-15—Style .22 Rifles

With a dedicated .22 AR-15 rifle or complete .22 LR upper that fits onto the AR-15 you already own, the size, weight, handling qualities and control placement will be exactly correct, which serves especially well for training purposes.

But if you don't already own an AR-15 for mounting an upper, or \$1,000 feels a bit too spendy, there are alternative AR-type .22 rifles on the market. However, be aware that some tradeoffs come with such a choice. First, such rifles tend to make liberal use of polymer construction elements—



that's to say plastic, rather than aluminum, albeit tough plastic. Such designs help keep price down and also reduce weight.

In general, they will not feel as solid and substantial as a true AR-15, but these are not inexpensive .22 rifles, either. Prices cluster around the \$500 level and more, compared to many popular, more conventional semi-auto .22 rifles that can be found for significantly less than \$300.

That inherently lightweight construction can be a plus or minus, depending on your view and usage. For one, these rifles are noticeably lighter than most AR-15s, which will negate some of the validity in training use—if that's your primary objective.

On the other hand, if you're introducing new shooters to the sport, especially younger shooters, then the light weight is a bonus for ease of use and handling. It's the same if you're using it as a walking-around, fun-time plinking rifle; lighter is better over the course of a day in the woods and up and down hills.

Colt M4 Ops

The attention-grabber in this category has to be the Colt M4 Ops, which is touted as "a true-to-the-original replica of the current version of the M16 issued to Special Forces operators in the U.S." It is indeed very similar to Colt ARs; however, be aware that this rifle is only licensed from Colt and not manufactured by Colt. Instead, it is manufactured by Walther, a German gun manufacturer with a longstanding, strong reputation. But it's not Colt-made. If you research this rifle online, you will find it listed on the Walther website, not on the Colt site.

All that notwithstanding, the .22 LR Colt M4 Ops handles much like an AR-15, but it is definitely not exactly like an AR-15. The Colt M4 Ops features upper and lower receivers made of aluminum—although not AR-15 spec—plus a 16.2-inch match-grade barrel with a twist of 1:13.75 inches.

It features four-sided forend rails for convenient attachment of accessories, an adjustable telescoping stock, adjustable trigger and comes with a 30-round magazine in states with no magazine restrictions; 20- and 10-round magazines are also available.

Overall weight without a magazine is 5.9 pounds, while overall length is 31.1 to 34.4 inches. Walther offers a number of accessories for this rifle, but for the most part, the wealth of AR-15 parts on the market will not bolt up to the Colt M4 Ops.



S&W M&P15-22.22 LR

Smith & Wesson offers a full line of AR15-style centerfire rifles it calls the M&P 15, offered in various configurations, chambering and colors. To match up with those rifles, it also offers a line of dedicated .22 LR variants, the M&P15-22 .22 LR.

Built with polymer upper and lower receivers, the M&P15-22 still feels like a solidly impressive piece. Key features include six-position telescoping stock, functioning charging handle, adjustable rear and front sights, two-position receiver-mounted safety with 90-degree rotation, cartridge case deflector, bolt catch, recessed magazine release button, and lightweight, high-strength polymer quad rail handguard.

The M&P15-22 also comes in a shocking array of colors, including tan and black, purple platinum, pink platinum, harvest moon orange, real tree camo, flat dark earth and yes, black.

Alexander Arms Offers AR In .17 HMR

Do you want something with a little more reach than a .22 LR?

Alexander Arms offers a complete rimfire AR15 rifle, but one chambered in .17 HMR rather than .22 LR Built on aluminum upper and lower receivers, the 18-inch fluted barrel is tipped with an A1 flash hider.

The standard handguard is a composite, unvented free-float tube, but a vented handguard capable

of accepting rail sections is an option. Alexander Arms says its .17 HMR rifle is capable of about 1 MOA accuracy, and the flat-shooting rimfire cartridge ranges well to 200 yards or even 300 yards in calm wind conditions. That's a lot longer ranging than the .22 Long Rifle round, which is pretty much done at 100 yards. Although .17 HMR ammo is much more expensive than .22 LR, these days it might be easier to actually find some on store shelves, since the demand for .22 LR is so much greater.



List price ranges from about \$500 to nearly \$800 for tuned-up Performance Center models. Some come with Magpul furniture, Hogue overmolded grip and two-stage match trigger, so there is some interchangeability with AR-15 parts.

Kissin' Cousins To Distant Relatives

As we now stray from a strict connection to the AR-15, we find that a growing number of "black rifle" .22s are filling the market. In general, silhouettes may vaguely follow the AR form, but they will have distinctly different handling and placement of controls.

That may not be preferable if you're looking to duplicate the feel of an AR-15 for training and familiarity, or it may be a complete non-issue if the key purpose is just to have fun while shooting for an afternoon. We can't cover all such rifles due to space constraints, but we can take a look at some of the more notable offerings.





Sig Sauer

Sig Sauer is known and respected the world over as a leading manufacturer of commercial, law enforcement and military firearms. It is justifiably proud of its military-style SIG556 centerfire semi-automatic rifle, so it's no surprise that it developed the lookalike SIG522 Classic in .22 LR as a companion piece for training, as well as casual shooting.

It closely replicates its centerfire rifle in terms of size, controls and appearance; that is to say, it feels distinctly like a SIG556 in the hands rather than an AR-15. It features SIG556 parts, including a folding/locking stock and polymer forend on a durable metal receiver with integral Picatinny rail for the easy addition of optics, sights, lights and lasers.

Additional features on the Classic include an A1-style birdcage flash hider, a rubber buttpad and an ambidextrous magazine release. The 16.6-inch barrel is a full steel item with blued finish, and the weight runs from about 6.4 pounds to a bit more than 7 pounds, depending on configuration. List prices begin at \$587, and other variations are offered.

Heckler & Koch

Heckler & Koch is another well-known firearms manufacturer with some iconic rifle designs. In creating two rimfire variants of its centerfire rifles, it has taken a path similar to Colt. The HK416 rifles chambered in .22 LR are engineered and built in Germany by Carl Walther.

Like the Colt-licensed rifle, these HK replicas are a dedicated .22 LR platform with match-grade precision barrels. They each have metal receivers, as well as H&K geometry, weight and controls. For all, takedown is simple for ease of cleaning.

The .22 LR HK 416 D145RS is loaded with authentic features that keep it close to the HK 416 centerfire rifle in looks and handling. From its appearance, feel and operation, right down to the sling swivel incorporated into the stock, the 416 D145RS is a replication every sense.

It features metal upper and lower receivers, a retractable stock and a machined rail interface system. The 416's pistol grip and buttstock are authentic in that they include storage compartments for small tools or batteries.







The HK 416 D145RS operates on a blowback system, and the dust cover functions and the bolt holds open when the magazine empties. Its sights are on-rail, and the rear sight is adjustable for windage and elevation. Its safety selector rotates 90 degrees from On Safe to Fire.

Takedown for basic cleaning is simple—there are no loose parts. Just remove the rear receiver pin and pivot the upper receiver to open. The magazines for the .22 LR 416 are made of high-strength polymer and are designed to make loading simple and efficient.

They're available in either a 20- or 10-round version. The suggested retail price for the 416 rifle is \$559.



Ruger combined the basics of the 10/22 with the ergonomics and configuration of the SR-556.

Ruger SR-22

For 50 years, the Ruger 10/22 has pulled faithful duty to earn its place as one of America's favorite .22 rifles. Its proven performance, legendary action and a renowned, reliable rotary magazine has inspired a loyal following over the decades since its 1964 introduction.

To capitalize on those strengths, Ruger combined the basics of the 10/22 with the ergonomics and configuration of its SR-556, which Ruger calls "the AR platform redefined." Basically, the SR-22 Rifle places a standard 10/22 action inside a top-quality, American-made, all-aluminum chassis that is custom manufactured to Ruger specs by Nordic Components.

MP5 Replica In .22

While not an AR, Walther offers another .22 for plinking fun, this one based on the HK MP5 9mm sub-machine gun.

The MP5 A5 features a MP5 standard forearm, retractable stock, navy pistol grip, as well as HK-style sights and an imitation noise suppressor for added looks. The HK MP5 A5 operates on a blowback system, and the bolt holds open when the magazine empties.

Its front sight is adjustable for elevation and comes with interchangeable posts; the rear sight is adjustable for windage and elevation. Its safety switch rotates in the same manner as the 9mm MP5.

The magazine is made of high-strength polymer and is designed with grips for the spring on both sides, which make it easier to load; 25- and 10-round versions of the magazine are available.

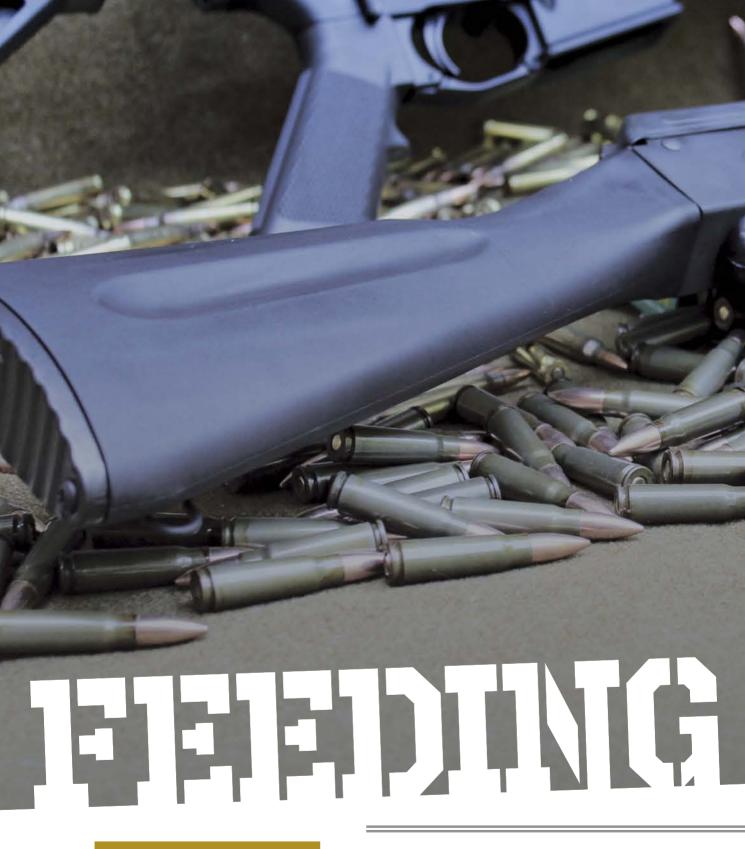
It is proportionate in size to the centerfire version's mag to maintain the authentic look of the 9mm MP5 magazine. The suggested retail price for the MP5 A5 is \$475.

The end product is a feature-loaded rifle that follows AR-platform dimensions between the sighting plane, buttstock height and grip. So the feel is similar to an AR, while function will be familiar with those who have operated a 10/22.

Rotary-style and high-capacity magazines for the 10/22 function just fine in the SR-22—a plus for buys who already own a 10/22.

Other key features include AR-style ergonomics; a Picatinny rail optic mount; rapid-deploy sights; cylindrical, vented, mid-length handguard; hammer-forged barrel; and barrel support block. MSRP begins at \$649. Different variations are offered, and Ruger also offers an extensive array of accessories to allow custom configuration. **AK/AR**

About the Author: KM Lee is a lifelong shooter, and for more than three decades he has been an active participant in all aspects of the shooting sports, including match competition, hunting and reloading. He is also an outdoors writer and instructor.



AMMO FOR YOUR HUNGRY AK AND AR

TEXT BY JIM DICKSON



EEDING A SEMI-AUTO RIFLE with little recoil is a lot like feeding a .22. You constantly want more ammo because you tend to shoot it up very quickly.

Manufacturers offer ammo in a bewildering plethora of choices. Unfortunately, the demand exceeds the supply at



this time and that makes it expensive and hard to come by compared to a few years ago.

Surplus ammo is no longer as cheap and available as it once was, and stocks are sold out much faster when it does come in. Current stocks that I have found have been of insufficient quantity to ensure that what was available at the time of writing would still be there when this article is on the newsstands.

You just have to hunt for it and grab it up quickly if it becomes available, but it doesn't last very long. Two Internet sites that may prove useful are FindMeAmmo.com and AmmoNow.com.



The Importance Of Imports

Any time ammo from the rest of the world is imported, you have good opportunities to stock up. Imported ammo is the nearest thing to surplus in price for several reasons.

For one, foreign ammo with Berdan primers is not easily reloaded and is often less expensive than Boxer primed ammo. The lacquered steel cases used for some imported ammo are cheaper than brass cases, but they still function well. Also, the decreased production costs in many countries can be passed on to the consumer in the United States. All of this can make imported ammo a bargain.

Not all surplus ammo is that cheap. Some of the European ammo is top quality and priced accordingly. That can be a good thing.

For instance, some 8mm Mauser ammo for the scaled up AK-47s that were the Yugoslavian sniper rifles is underloaded in the U.S. to the point that it is in the ballpark of a 30-30.

European 8mm Mauser ammo is loaded to the original specs and hits more like a .338 magnum. It comes in both FMJ and sophisticated expanding bullets, for this is one of the world's great hunting calibers. If you have anything in 8mm Mauser, you definitely want imported ammo.

"SURPLUS AMMO
IS NO LONGER
AS CHEAP AND
AVAILABLE AS IT
ONCE WAS AND
STOCKS ARE SOLD
OUT MUCH
FASTER WHEN IT
DOES COME IN."

Premium Bullets For Hunting

Hunting bullets encompass simple, soft-nose bullets and hightech premium expanding bullets.

For coyotes and varmints, you may not need premium bullets. But when hunting for your dinner or on an expensive hunting trip, those situations dictate that you buy the best ammo available. You don't want to waste your time and money by losing a mortally wounded animal that managed to go just far enough for you to lose it or to have another hunter claim it.

Premium bullets offer more reliable and efficient performance. Sometimes only a little better performance means everything to a hunter's success. When using a cartridge like the 5.56 on deersized game, a premium bullet is almost mandatory, as the wrong bullet in this caliber may blow up and fail to properly penetrate.

The solid copper hollow points scored for controlled expansion hold together much better than lead-jacketed soft points because copper is so much tougher and stronger than lead.

This has made them a popular choice for the 5.56, where the extremely high velocity has made it difficult for conventional, jacketed lead core soft-points to hold together without breaking up after hitting bone.

Once the lead separates from the gilding metal jacket, the weakness of the lead causes it to tear apart under the forces of high velocity penetration. There have just been too many failures with conventional lead-core bullets at extremely high velocities over the years to keep trying to use them in the 5.56 on deer and hogs.

For lower velocity cartridges, such as the 7.62 NATO, the conventional lead-core bullets work just fine. They offer more reliable expansion over solid copper bullets and hollow points, which occasionally fail to expand.

Bonded Bullets To The Rescue

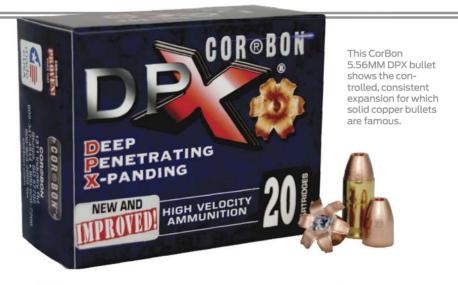
There is a solution to the problem of high velocity and lead cores now. The new methods of bonding the lead core to the copper jacket, creating a soldered effect, has proved an effective and reliable way to use the lead core copper jacketed bullet at 5.56 velocities.

These bonded core projectiles, such as the new Federal Fusion, are a great advance over the conventional jacketed soft points and offer reliable performance at the highest velocities.

CorBon

CorBon has a 150-grain 7.62x39 load at 2,300 fps that looks about perfect for hunting with the AK-47. It has a bonded corejacketed soft-point bullet that holds together and expands exactly the way it should. This is my pick for the best hunting 7.62x39 cartridge. If this won't work, you need a bigger cartridge instead of a better bullet and load.

It also loads both the .223 and the 7.62x39 with its solid copper DPX expanding bullet. These weigh 62 grains and 123 grains, respectively. Solid copper expanding bullets have been gaining a lot of popularity in recent years and this is one of the best.















Federal

Federal has its Fusion line, which has the lead core melted into the copper jacket (hence the name, Fusion) for more than 90-percent weight retention. It features a skived, pre-programmed nose for even, constant expansion.

Designed to reach its ballistic peak in 16-inch AR-15 and 20-inch AR-10 barrels, depending on the cartridge, it is tailor-made for use in ARs. It would be hard to find fault with this line. Federal Fusion ammo is loaded in .223, 6.8 SPC, 7.62x39, .308 and .338 Federal.

Anyone hunting the really big wild hogs in the 800- to 1,000-pound category with an AR should forget about the 5.56 cartridge and take a long hard look at the .338 Federal. A 200-grain, .338-diameter bullet at 2,700 fps is a great hunting cartridge for anything in North America.

Black Hills

Black Hills Ammunition offers a wide variety of .223 loads from the 36-grain Varmint Grenade to the 55- and 62-grain Barnes TSX Bullet to the 77-grain Sierra Match King HP and the 77-grain TMK Bullet. If you want a big choice, this is the place for you. Quality is first rate.

It should be noted that AR-15s have rifling twists varying from 1:7 inches to 1:12 inches. Rifles with 1:12 inches shoot best with bullets weighing 60 grains or less. Rifles with faster twists will stabilize the heavier bullet weights. Bullets of 55 and 60 grains work well in all the AR-15s.

It should be noted that no rifle will shoot minute of angle groups with a bad barrel and there are a lot of cheap, bad barrels being sold today. You don't realize how many until you get involved with barrel-making and procurement. Then you will really open your eyes to the problem.

"THESE BONDED
CORE PROJECTILES,
SUCH AS THE NEW
FEDERAL FUSION,
ARE A GREAT
ADVANCE OVER THE
CONVENTIONAL
JACKETED SOFT
POINTS AND
OFFER RELIABLE
PERFORMANCE AT
THE HIGHEST
VELOCITIES."





The .338 Federal is a first class hunting cartridge for all North American big game. Federal Fusion .338 ammo is designed to operate with maximum efficiency from the 20-inch barrels of AR-10-type rifles.

Winchester

Winchester offers a full line of ammo from FMJ to premium expanding bullets. In addition to old favorites, such as its Power Point and Silvertip, it has its Razor Back copper alloy expanding bullets and the new Power Max Bonded, as well as the new Super X Power Core solid copper alloy bullet.

They really have something for everybody. The Razor Back line was developed for hog hunting and is rapidly making a name for itself in that field among AR users.

SBR

Southern Ballistic Research makes both 5.56 and the powerful .458 SOCOM, a brute developed to address the lack of stopping power of the 5.56 on fanatical jihadists. This is a first-class hunting cartridge offering .45-70 performance on man or beast. It has 1,900 fps with a 300-grain .45-caliber bullet. This is my favorite

caliber of all the cartridges offered in the AR-15 and AR-10 rifle platforms.

Remington

Remington also makes a full line of ammunition with various types of projectiles. Of interest to AR users is its new line of Hog Hammer cartridges loaded with Barnes TSX bullets. These expanding, copper solids offer quick expansion on hogs and 28 percent deeper penetration than conventional soft points.

Be Prepared

Ammo selection is always a part of the fun of guns and hunting. In these perilous times though, it has taken a deadly serious turn and having a lot of ammo and high capacity magazines has never been more important. **AK/AR**

About the Author: Jim Dickson has written for gun magazines in 12 countries for nearly 30 years.

Stock Up On FMJ

Full-metal jacket ammo is the military mainstay and the first choice for civilian defense use for the same reasons the military uses it. It penetrates barricades and cover to reach out and touch the people

who are shooting at you.
Expanding bullets
lack the penetration
needed for combat use,
regardless of whether it is
an individual action or an
army action. Fortunately,

FMJ is also cheaper than expanding bullets.
This is the type of

ammunition you should stockpile for emergencies. As today's world becomes increasingly dangerous, scenarios that were unthinkable to previous generations have become a certainty for the future.

Ammo should be

sands of rounds, not in the tens or hundreds as anyone who has ever been in a war knows. Remember: there will be no going out and buying any more guns and ammo once a crisis comes and you really need it.

counted by the thou-



STANDOUT

18 OF THE BEST AR'S AVAILABLE—WITH A

T SEEMS AS IF EVERY COMPANY WITH A
MACHINE SHOP IS TURNING OUT AN AR-STYLE
RIFLE these days. There's a good reason for that.
The semi-automatic version of the military classic
has never been more popular.

In an effort to separate their products from the competition, manufacturers are unveiling their own innovations to the basic design. There are new chamberings, rails, gas systems, handguards and sights on rifles for competition, defense and hunting.



CHOICES

PRICE RANGE THAT FITS YOUR BUDGET

How do you choose which rifle is right for you? We've narrowed the field for you by selecting our top picks: the best of the best AR rifles offered today.





1. Adcor Defense

Website: AdcorDefense.com Product: ADCOR A-556 ELITE Price: \$2,499

Adcor Defense makes two models of AR-type rifles: the ADCOR A-556 ELITE, which has a gas-piston system with a multi-position regulator, and the ADCOR A-556 ELITE GI.

The Elite features include a free-floating barrel, two-piece keyed quad rail system, tool-less field strip design, ejection port dust wiper, forward reversible charging handle, and ergonomic grip with aggressive texturing.

The Specs

Caliber: 5.56

Barrel Length: 10.5 inches, 14.5 inches, 16.1 inches, 18 inches and 20 inches **Overall Length:** 27 to 40

inches

Total Weight: 6.45 to 7.80

pounds **Twist:** 1:7

Stock: Custom rifle stock

Product Guide AR



2. Anderson MFG

Website: AndersonRifles.com Product: M4 Carbine 5.56 Price: \$1,232

The Anderson AR-15 is the only no-lube rifle available because it is permanently treated with R585, a process that injects calcium into the metal at the molecular level. An optics-ready Picatinny rail, front mounted low-profile gas block, Hogue pistol grip, and quad-rail forend are the special features. These are also California and New England compliant.

The Specs:

Caliber: .223/5.56 NATO or 6.9 SPC

Barrel Length: 16 inches

Overall Length: 36 1/8 inches, extended

Weight: 6.3 pounds

Twist: 1:8

Stock: Magpul MOE

3. Black Rain Ordnance

Website: BlackRainOrdnance.com

Product: BRO-PG2 MSRP: \$2,439

The BRO-PG2 features a BRO-DIT trigger, 9-inch quad rail, milled billet aluminum receivers, MOE grip, low-profile gas block and a gas-impingement system.

The Specs:

Caliber: .223/5.56 NATO
Barrel Length: 16 inches
Overall Length: 33 inches
Weight: 7 pounds 4 ounces

Twist: 1:8 Stock: MOE

4. Bushmaster

Website: BushMaster.com

Product: 16-inch MOE 308 Enhanced ORC

(Optics Ready Carbine)
MSRP: \$1.599

Bushmaster's 16-inch MO 308 Enhanced ORC comes factory-ready in .308/7.62 NATO with full Magpul furniture, including stock, handguard, grip, plus a Troy modular free-float rail system. Other new offerings from the company include the XM-15 3-GUN, XM-15 Basic Tactical, along with other XM-15, MOE series, 300 ACC, 308, and Carbon 15 AR rifles.

The Specs:

Caliber: .308 Win/7.62 NATO Barrel Length: 16 inches Overall Length: 34 inches Weight: 9 pounds

Twist: 1:10

Stock: Magpul PRS



5. CMMG

Website: CMMGInc.com Product: MK3, 308 WIN MSRP: \$1,599.95

The MK3 in 308 WIN rifle is suited for hunting or the range. It has an 18-inch 416 stainless steel heavy taper barrel and CMMG's own RKM15 KeyMod handguard. It also has a single-stage mil-spec trigger and A2 pistol grip.

The Specs:

Caliber: 308 WIN
Barrel Length: 18 inches
Overall Length: 39 inches
Weight: 9.3 pounds

Twist: 1:10

Stock: A1 length fixed butt stock **Special Features:** Single-stage mil-spec

trigger and A2 pistol grip

6. Colt

Website: Colt.com Product: LE6920 MSRP: \$1,229

The new LE6920MP-B has a 16.1-inch, chrome-lined barrel and a 1:7-inch twist. The accessories include the Magpul MOE handguards, MOE carbine stock, MOE pistol grip, MOE vertical grip and a Magpul back-up sight, which is all standard equipment.

The Specs:

Caliber: 5.56x45 NATO **Barrel Length:** 16.1 inches

Overall Length: 35.5 inches extended,

32 inches collapsed **Weight:** 6.9 pounds

Twist: 1:7

Stock: MOE carbine stock

7. CORE

Website: Core15.com Product: M4 Piston Rifle MSRP: \$1,199

Special features include the gas-piston operation, forged 7075-T6 aluminum M4 upper and lower receivers, M4 feed ramps, Picatinny rail flat top, laser engraved T-markings and beveled Magwell for improved reloading speed.

The Specs:

Caliber: 5.56 NATO
Barrel Length: 16 inches
Overall Length: 36 inches
Weight: 5.8 pounds

Twist: 1:8

Stock: CORE15 six-position



8. Daniel Defense

Website: DanielDefense.com
Product: Daniel Defense M4 Carbine, V1
MSRP: \$1,799

The DDM4v1 features a cold hammer forged 16-inch M4 profile barrel and carbine gas system. The DDM4 Rail 12.0 FSP allows the mounting of a weapon light or aiming device forward of the front sight. It also has three low-profile rail ladders.

The Specs:

Caliber: 5.56 NATO **Barrel Length:** 16 inches

Overall Length: 32 1/4-35 7/8 inches

Weight: 6.70 pounds

Twist: 1:7

Stock: Glass-filled polymer with soft-touch overmolding

9. Del-Ton

Website :Del-Ton.com Product: DTI Extreme Duty 316 MSRP: \$1,100

Del-Ton's Extreme Duty has M4 handguards with double heat shields, a Troy DOA rear folding sight, threaded muzzle, an A2 flash hider and a hammer forged, CMV chrome-lined barrel.

The Specs:

Caliber: 5.56x45mm **Barrel Length:** 16 inches **Overall Length:** 35.58 inches fully extended, 32.25 inches

collapsed

Weight: 6.4 pounds

Twist: 1:7
Stock: M4 stock

10. DPMS

Website: DPMSInc.com Product: GII AP4 MSRP: \$1,499

This features a lightweight, 16-inch barrel, MagPul Gen II rear sight, AP4 stock, DPMS carbine-length glacier guard and an M4 six-position collapsible stock.

The Specs:

Caliber: 308/ 7.62 NATO
Barrel Length: 16 inches

Overall Length: 34.25 inches collapsed

Weight: 7.25 pounds

Twist: 1:10

Stock: M4 six-position collapsible



11. Lancer

Website: Lancer-Systems.com Product: L15 Sporter MSRP: \$1,749.99

The L15 is built around the company's patented L15 receiver and lightweight carbon-fiber hand-guard, with tactical beveled magwell. It also has a mid-length gas system, A2 flash hider, mil-spec trigger and Ergo grip.

The Specs:

Caliber: .223rem/ 5.56mmx45 Barrel Length: 16 inches Overall Length: 35 inches Weight: 7.4 pounds

Twist: 1:7

Stock: Ergo F93 Stock

12. Lewis Machine & Tool

Website: LewisMachine.net Product: SLK8 16-inch Ultra Match Stainless Steel Barrel MSRP: \$2.405

Lewis Machine & Tool makes a variety of AR-type rifles with both piston-driven and gas-impingement systems. The SLK8 Ultra Match was built specifically for those involved in 3-gun competitions. The features include a two-stage trigger, tactical charging handle, ambi safety and Ergo grip.

The Specs:

Caliber: 5.56

Barrel Length: 16 inches **Overall Length:** 35 inches Weight: 6.8 pounds Twist: 1:7.5 inches

Stock: SOPMOD buttstock

13. Remington

Website: Remington.com Product: R-15 VTR MSRP: \$1.631

The new R-15 VTR modular rifle was created with features specifically with the predator hunter in mind. It has an 18-inch free-floated barrel, semi-auto gas action, a single-stage trigger, the Picatinny rail runs the length of the receiver and it has an ergonomic pistol grip.

The Specs:

Caliber: 450 Bushmaster **Barrel Length:** 18 inches **Overall Length:** 36 ¼ inches

Weight: 7.5 pounds **Twist:** 24 inches **Stock:** Fixed stock

Product Guide AR



14. Rock River Arms

Website: RockRiverArms.com Product: X-1 Rifle .223/5.56mm

MSRP: \$1,450

The X-1 has a two-stage trigger, fluted barrel, lowprofile gas block, free-float rail handguard and Hogue grip.

The Specs:

Caliber: .223/5.56

Barrel Length: 18 inches

Overall Length: 38.5 inches

Weight: 7.8 pounds

Twist: 1:8

Stock: RRA Operator A2 (Operator CAR stock

available)

15. Ruger

Website: Ruger.com Product: SR-556 MSRP: \$1,995

The SR-556 features Ruger's patent-pending, chrome-plated and two-stage piston-driven operating system. A collapsible stock is also an option.

The Specs:

Caliber: 5.56 NATO
Barrel Length: 16.12 inches
Overall Length: 34.50 inches
Weight: 7.94 pounds

Twist: 1:9

Stock: Black synthetic

16. Sig Sauer

Website: SigSauer.com Product: SIG M400 Hunter

MSRP: \$1,200

The Hunter features a flat-top, direct-impingement gas system and black polymer Magpul MOE forend and grip.

The Specs:

Caliber: 5.56mm NATO
Barrel Length: 20 inches
Overall Length: 38.5 inches
Weight: 7.83 pounds

Twist: 1:8

Stock: Fixed synthetic





17. Smith & Wesson

Website: Smith-Wesson.com

Product: M&P15 MSRP: \$1,249

The M&P 15 has a six-position telescopic scope, thermo-set M4 hand-guard. The barrel is 4140 steel, and the upper and lower are 7075 T6 aluminum. It's gas operated, and it has an adjustable dual-aperture rear sight and an adjustable post front sight.

The Specs:

Caliber: 5.56mm NATO/ .223

Barrel Length: 16 inches

Overall Length: 35 inches extended/ 32

inches compacted **Weight:** 6.74 pounds

Twist: 1:9

Stock: Six-position telescopic

18. Stag Arms

Website: StagArms.com Product: Model 2T MSRP: \$1,130

Model 2T is direct impingement, with a single-stage trigger, an A2-style plastic grip, 40L flip-up rear sight, F-marked A2 front sight and free-floating quad rail. The 16-inch barrel is made of 4140 steel and chrome lined.

The Specs:

Caliber: 5.56 NATO/ 2.23

Barrel Length: 16 inches

Overall Length: 32.25 or 35.75 inches

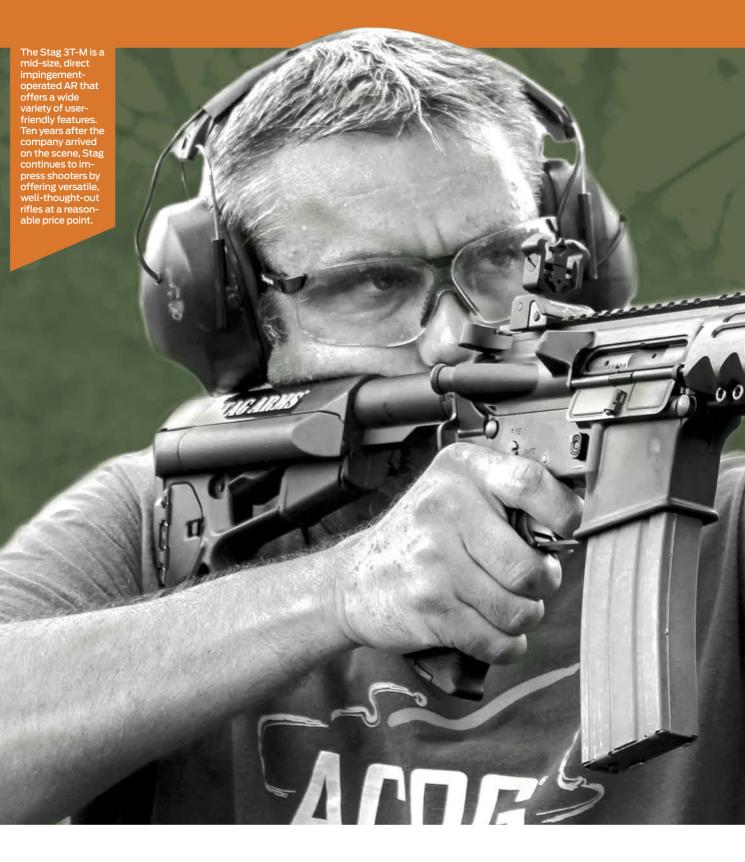
Weight: 6.8 pounds

Twist: 1:9

Stock: Mil-spec six-position

AK/AR

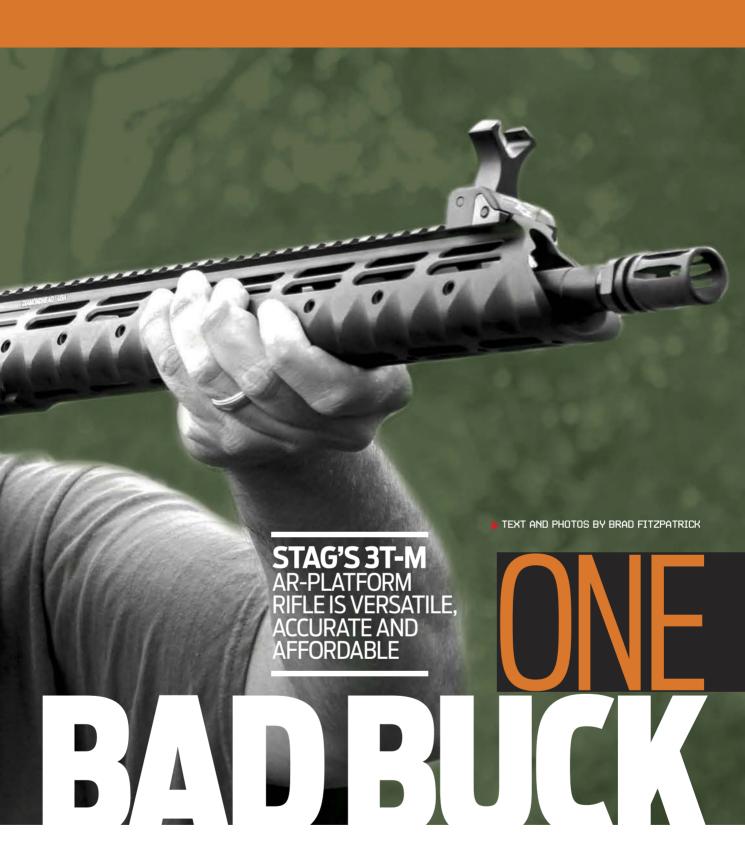
THE SEMI-AUTOMATIC VERSION OF THE MILITARY CLASSIC HAS NEVER BEEN MORE POPULAR.





ITH DOZENS OF COMPANIES PRODUCING ARS for the civilian, military and law enforcement market, it's tough to decide which gun meets your specific needs. That's a good thing for consumers, though, because the competition has inspired companies to deliver innovative and useful guns that are reliable, accurate and reasonably priced.

Stag Arms, which was founded in 2003 by Mark



Malkowski, has managed to stand out from the competition by producing a wide variety of rifles that works every time and meets the needs of shooters, whether law enforcement professionals, hunters or competitive shooters.

New to its lineup is the 3T-M, which is a 5.56 AR rifle designed using input gathered from law enforcement and the nation's top 3-gun shooters. It's intended to serve as a versatile weapon that can perform in a wide variety of circumstances and remains competitively priced. We tested it.



First Look

The 3T-M hardware comes out of the box, ready to go with some of the best accessories on the market. The stock is a collapsible Magpul six-position ACS model that is easy to operate and offers a comfortable design with a wide surface that encourages a solid cheek weld when shooting.

The flat-top receiver offers plenty of space for mounting optics. The 3T-M comes with aluminum Diamondhead flip-up adjustable rear and front sights that operate smoothly and provide solid lockup when engaged.

The 16-inch, chrome-lined, button-rifled barrel is made of 4140 steel and has a government profile, a manganese phosphate coating and a 1:9 twist rate.

There's an A2 flash hider on the muzzle (post-ban models

have a Stag Arms compensator), and the rifle comes with a free-float 13.5-inch Diamondhead VRS-T handguard with indents for a solid grip while firing.

The upper receiver is made of forged mil-spec 7075 T6 aluminum with Type 3 hard coat anodizing and the gun comes with a Magpul MOE grip. The overall length is 33.5 inches collapsed, 37 inches when extended and it weighs 7.5 pounds. The rifle comes with a 30-round metal magazine and has an MSRP of \$1,160.

The 3T-M operates via a direct gas-impingement system, so gasses operate the action without the need to modulate a gas piston. For most situations, the direct gas-impingement system works very well, and in the case of the Stag 3T-M, there were no failures or misfeeds throughout the course of fire.



The Specs

Stag Arms 3T-M

Action: Direct gas impingement semiautomatic
Caliber: 5.56
Receiver (upper and lower):
7075 T6 forged aluminum, with hard anodizing

Sights: Diamondhead aluminum flip-up Trigger: Single stage, 6.1 pounds Barrel: 16 inches, government profile Stock: Magpul ACS six-position Length: 33.5 to 37.0 inches Weight: 7.5 pounds MSRP:

\$1,160

PERFORMANCE RESULTS

Stag 3T-M

| LOAD | VELOCITY (FACTORY, FPS) | AVG GROUP (INCHES) | SMALLEST GROUP (INCHES) |
|-------------------------------------|-------------------------|--------------------|-------------------------|
| Black Hills 60-Grain Hornady V-Max | 3,100 fps | 1.45 | 1.26 |
| Black Hills 68-Grain Heavy Match HP | 2,850 fps | 1.32 | 1.11 |
| Black Hills 69-Grain Matchking | 2,850 fps | 1.05 | .95 |

Accuracy testing was done by firing three-shot groups at 100 yards from a fixed rest, using a Hawke Endurance 1.25-4.5 scope.





"IN THE CASE OF THE STAG ARMS 3T-M, YOU'LL FIND A HARD-WORKING, RELIABLE SERVICE RIFLE."

The bolt carrier has a manganese phosphate coating, and fouling in the gun's operating system was minimal with the ammunition tested. From a tactical standpoint (and the 3T-M was designed as a tactical firearm), extreme reliability is crucial. As such, it is important to test tactical rifles under circumstances that place high demands on the rifle.

In Action

This usually involves rapid firing for extended periods without giving the rifle time to cool and throughout the course of the extended fire test, the 3T-M performed very well.

Using everything from standard 55-grain FMJs to 60-grain V-Max loads to 68-grain Heavy Match cartridges, the 3T-M simply wouldn't quit. There was no babying the rifle, no breaks from the firing. As fast as magazines were emptied, another was replaced.

Throughout the duration of the extended test, which was comprised of more than 200 rounds of ammunition, the 3T-M never choked. In fact, it excelled.

From a tactical standpoint, the 3T-M is easy to use. At its

core, it functions like ARs are supposed to, but it becomes quickly apparent when shooting this rifle that a great deal of time went into the layout and design.

The stock is easy to operate, locks securely in place and the wide dimensions make it comfortable even during prolonged shooting sessions. It is especially nice when shooting long-range targets from a bench.

The Magpul MOE grip that comes standard on the rifle has ample texturing to provide a secure hold, and it is properly angled to provide easy access to the trigger.

The mil-spec, single-stage trigger breaks between 5 and 8 pounds and isn't adjustable. (The test rifle had a trigger pull of just over 6 pounds.) Even though it isn't the lightest trigger found in a production AR, it is functional and clean.

The stock and grip made it easy to find a comfortable position on the rifle whether shooting at long-range targets from a prone position or while firing rapid, close-range shots.

The Diamondhead handguard works very well on this rifle, with its triangular flat-bottom design and seamless integration with the Stag's receiver.

Besides offering a wide, secure gripping platform, the Diamondhead VRS-T also offers a design that allows it to rest comfortably and securely on bags or rests without the inclination to roll, a definite bonus during the range portion of the test.

Diamondhead also supplies the sights on this rifle, and their unique design actually works extremely well for engaging targets. The rear aperture is diamond-shaped and helps naturally center the post on the front sight in the center of the aperture. The resulting sight picture is easy to center and allows for very accurate, rapid shots in close-quarters.

The rear sight boasts a flip-up fine aperture for precision shooting. The sights lock up solidly and are easy to lower by pushing a side-mounted button. When placed in the up position, the deployed sights remain in their upright position without any wobble or play.

Because the primary sighting system on the rifle is iron sights, I spent most of my time testing the gun using the Diamondheads. From 50 yards on the bench, groups hovered around an inch with the best group of the day coming courtesy of Black Hills 68-grain Match load.



Black Hills .223/5.56

Black Hills Ammunition produces a wide variety of high-quality, factory new ammo for a number of firearms.

The most accurate load in this particular Stag rifle was the company's 68-grain Heavy Match HP, which is factory rated at 2,850 feet per second and generates just over 1,200 ft.-lbs. of energy

Not far behind was the 60-grain Hornady V-Max load with a velocity of 3,100 feet per second, a great choice for varmint and predator hunting. The Black Hills load performed very well, both in the 50-yard and the 100-yard tests.

It's no secret that Black Hills produces some truly outstanding products, and in fact the U.S. Military uses Black Hills as the supplier for all of its 5.56 ammunition.

For the Stag rifle, Black Hills offers 15 different factory new .223 loads that range from 36 to 77 grains, as well as 5 different 5.56 loads ranging from 50 to 77 grains.

New this year is the company's 77-grain Tipped MatchKing (TMK) 5.56 load, which offers a long, aerodynamic bullet profile.













With those loads and iron sights it was easy to maintain a consistent sight picture and continue punching holes in near little clusters. The smallest group off the bench with the Black Hills ammo measured .92 inches, and the average was just more than 1 inch.

Shooting while on the move and carrying the rifle on the course is made easier by the fact that the Stag is a relatively compact rifle. Once again the stock, grip, and handguard played a role in helping me hit different targets at varying distance while moving or shooting around cover.

If you believe you're noticing a pattern, then you are absolutely correct. The 3T-M's furniture makes the gun easy to shoot well and that reliable impingement system ensures that every time you press the trigger, another pill is going downrange.

I also tested the 3T-M on the 100-yard range from a fixed rest by mounting a Hawke Endurance 1.25-4.5 scope on the top of the receiver using a Leupold base.

The Hawke has an illuminated dot reticle. I fired three-shot series using Black Hill's 60-grain V-Max and 68-grain Match loads. Again, the results were impressive.

From the bench and with the aid of the scope, the V-Max-loaded ammunition punched holes that measured an average of 1.35 inches for three groups. The Match load managed to best that a bit, maintaining groups that were 1.12 inches on average.

- 1. The Stag's direct gas-impingement system works extremely well and the black anodized 7075 T6 aluminum upper and lower receivers are resistant to corrosion and stand up to a beating. The angled MOE grip puts the shooter's hand in the right position for rapid shots.
- 2. The Diamondhead VRS-T handguard is functional and comfortable. The Picatinny rails on the receiver and handguard mate perfectly, and the triangular shape and finger grooves make it one of the most stable and comfortable hand guards available.
- 3. The rear Diamondhead aluminum sight is adjustable and offers a fine diamond aperture (shown) and a flip-up wide diamond aperture for close-range shooting.
- 4. The handguard runs almost the complete length of the 16-inch government contour barrel and offers plenty of gripping surface for anyone. The flip-up front aluminum sight has a post sight that works well with the diamond rear.
- The Stag's stock is a Magpul ACS six-position model that is easy to adjust, locks up securely and offers a comfortable surface for shooting.

Strong, Solid Choice

Today's AR market demands that rifles are dedicated to one arena of shooting (varmint hunting, competition, close quarters, long range) or are versatile enough to succeed in a variety of arenas.

The 3T-M is primarily a tactical firearm, but it doesn't give up the blessed versatility of the AR platform to perform a single task. It's accurate enough for long-range shooting, either varmint hunting or competition and the gun's profile only adds to the versatility of this rifle.

I performed a helicopter hog depredation hunt in Texas last February. The 3T-M would have been an ideal gun for that trip because its short overall length makes it highly maneuverable, and its gas system was reliable enough to stand up to a lot of shooting.

From a tactical standpoint, the gun offers shooters a host of features that help it stand out in a crowded and growing market. If this were my gun, I'd probably switch to an aftermarket trigger, but that's not really fair to the 3T-M because I'm prone to accessorizing and re-accessorizing every rifle I own.

Otherwise, I'd leave the rifle as-is if I wanted a strictly iron-sighted gun. If not, I'd mount a reflex on that long flat top receiver. While the Diamondhead handguard isn't primed for hanging all sorts of accessories and gear, it is comfortable and extremely user-friendly.

It's a tough world for new AR rifles. Competition is fierce and only the strong survive. Given the nature of the work that service ARs are called upon to perform, that's a good thing.

In the case of the Stag Arms 3T-M, you'll find a hardworking, reliable service rifle that has been outfitted to give the shooter an advantage, whether you're competing for a title or defending your life. **AK/AR**

About the Author: Brad Fitzpatrick has written more than 200 articles on hunting and shooting and is the author of the book, The Shooter's Bible Guide to Concealed Carry. Before becoming a full-time writer, he was a member of Northern Kentucky University's Trap and Skeet Team.

Stag Accessories

Stag's website now offers one-stop shopping for a variety of different AR parts and accessories, and it has everything from spare magazines and sights to .22 conversion kits and bipods.

One inexpensive and valuable accessory on its site is the Blackhawk Storm single point sling, a valuable addition to your rifle which costs only \$30.

For shooters interested in adding holographic sight to their rifles, Stag also offers the EOTech 517 (\$459) and XPS 2-0 (\$489) red dots. The Trijicon ACOG (Advanced Combat Optical Gunsite) 4x32 is available for \$1,449.

Lefties will also appreciate the ambidextrous charging handle, and you can purchase either a left-handed or ambidextrous safety lever as well.

No matter what you plan to do with your rifle, Stag has made it simple and easy to find the gear you need in one place.

For more information, visit StagArms.com/ar15-accessories/.





TAC FOR THE AK & AR-15

PROLONG YOUR FIREARM'S LIFE WITH THESE NINE EASY MAINTENANCE TIPS

TEXT AND PHOTOS BY ABE ELIAS \LEAD PHOTO BY STEVEN PAUL BARLOW



HE AR-15
AND THE
AK-47 are
two of the
most popular rifles in the world.
Each has a proven
history in combat,
and each has a loyal
following among
shooters and collectors, groups that typically enhance their
firearms with aftermarket accessories.

But what is missing from this equation? Care and maintenance, which are too often overlooked. That can be a serious issue, as each rifle has its own unique details for cleaning, and you'll also lose some life off your investment if you don't.

As with any firearm, you first must become familiar with how to field-strip the weapon and perform basic maintenance. Beyond this, there are little tricks of the trade for cleaning and maintenance that will extend your rifle's life and ensure shooting enjoyment.

Regular Cleaning Is A Must

First, it's important to keep a regular cleaning schedule for your rifles.

While they are often cleaned after shooting, it is a good idea to set a regular date once a year to give your rifles a thorough cleaning. Even if you haven't shot it all year long, oils will dry and gum up.

During this scheduled cleaning, check for wear and galling of parts. Check things such as firing pin protrusion and the overall condition of the firing pin's tip.

2 Get The Proper Tools

Invest in a good cleaning kit and a couple of accessories, as they can make a world of difference. One of the most useful items to add to any cleaning kit is a set of dental picks. You often get carbon buildup in those hard-to-reach places, and a set of dental picks allows you to get in there and scrape out the carbon.

A particular feature on the AR is the star chamber, which is uncommon to other firearms. Cleaning it can be difficult, and most cleaning kits don't provide tools specifically for that. Fortunately, there are specialty tools to help clean this. If you want to avoid a little frustration, invest in one.

3 Lubrication Is Important

A friend of mine is a mechanic, and he once told me that people could extend the life of their cars simply by doing regular oil changes. That's true with firearms, too. Not only will proper lubrication greatly increase the life of a firearm, it will also improve its performance.

The AK bolt, for instance, can be run dry due to its piston system. The trick with lubrication is to know when enough is enough. Too much lubrication can promote gumming. In cold weather, the lubrication can even freeze, causing the firearm to malfunction.

To prevent excessive lubrication, I use a makeup brush, which you can find at a dollar store. I put oil on it and use it to lightly coat the rifle parts. On spots like pivot points and the bolt I use a syringe because I can control the amount of lube dispensed.

To put it simply, if you pick up your rifle and oil is oozing out anywhere, you probably have used too much.

4 Plastic Cling Wrap

If you need to lubricate an item and store it or use a solvent to loosen some stubborn carbon, a simple roll of plastic cling wrap is your friend.

You have a part that is caked in carbon. Instead of spending a lot of time with a brush or dental pick, simply coat it in your favorite cleaner and wrap it in plastic, which prevents evaporation and allows the cleaner to work for a longer time with less effort on your part. Set the wrapped part aside. While you are doing other maintenance, the solvent is doing the hard work for you. A good example of this is the bolt. After field stripping it, coat it in solvent, wrap it and proceed with cleaning the barrel. By the time you are done, you will have saved a lot of elbow grease scrubbing and scraping the bolt.

Here's a word of advice: If you are using particularly strong solvents, be careful: long periods of soaking parts in them can affect certain finishes.



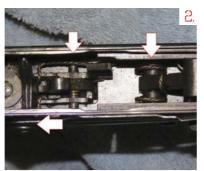


5 Keep Your Parts Tight

Parts that need to move should be lubed and parts that need to stay put need Loctite. When I mount a scope or red-dot sight for the first time, I clean the screws and the screw holes as best as possible. To ensure they are clean, I often use brake cleaner, which cleans and dissolves quickly without leaving a film.

After cleaning, I apply Loctite to the scope-mount screws. During cleaning, I do my best to make sure I don't get any solvent or lubricant in there that might affect the bond.





- 1. During a field strip, it is always good to check the rear screws that attach the buttstock on the AK-47 to the receiver and make sure they are tight.
- 2. The arrows represent a few of the pivot points that should be kept lightly oiled on the AK-47.
- 3. Here is a good example of what can happen with

corrosive ammunition when cleaning isn't done thoroughly. There is light rust left in the AK's gas block even after cleaning because of the corrosive ammunition.

4. Carbon build up on the front of the AK's piston can be scrubbed or brushed off. If it is really built up, you can soak it using cling wrap and the solvent of your choice.





Tools Of The Trade

With the popularity and sheer number of ARs produced, it is no wonder there is a full range of aftermarket accessories made for this rifle. One of the most helpful is the multi-tool, which is designed to help clean and maintain the gun.

Among the most notable are the Leatherman MUT, Gerber's E-ffect, Real Avid's AR-15 Tool and its Guntool Pro AR-15. All of these multi-tools provide basically a small tool chest of items for the AR. Best of all they are very compact, and it is easy enough to throw them in a range bag or carry on your belt.

Some of these tools have other items, such as blades, to make them convenient for everyday use. Multi-tools can be good range bag fillers or a good add-on to a reg-

ular cleaning kit because they have ARspecific tools.

If your only rife is an AR, make life easy. Buy a dedicated AR tool kit, such as the ones from Wheeler. They have two main kits: the Delta Series AR Armorer's Essentials Kit and the Delta Series AR Armorer's Professional's Kit.

The armorer's kit has the tools for major maintenance, containing everything for a total strip down and reassembly. With the Wheeler professional kit, the user gets a total kit for field stripping as well as a total strip down and rebuild.

Both kits come in their own carrying bags. The professional kit will fit every need you have as an AR owner, and it contains a lot of cleaning tools you would use in other firearms.





6 Clean Corrosive Ammo Residue

This tip pertains more to the AK.

One of the great things about the AK is that there is a ton of surplus ammo available for it. At the same time, this ammo does present one problem when cleaning your rifle. Primers on this ammo are mostly corrosive.

To clean your rifle after using corrosive ammo, it is best to use soap and water. I use Shooter's Choice Aqua Clean Bore Cleaner and

Simple Green. I start with hot water and then add Simple Green concentrate. Make sure to give the rifle a full cleaning and oil it when it's dry.

When you do your scheduled cleaning, go the extra mile and boil a few of the main parts, as well as pour some boiling water down the gas tube and barrel. Some of the primers contain mercury and some even contain glass, so it wouldn't hurt to take the time to give the rifle that bit of extra scrubbing. This ensures that corrosion doesn't eventually set in.

7 Check Your AK's Hammer Spring

This is another AK-specific tip. Check the hammer spring each time you clean the rifle. The hammer spring is responsible for the operation of the AK. If it goes, the rifle will no longer work. It is a braided or twisted spring, so look it over for wear and ensure it's oiled to prevent corrosion.

8 Cleaning With Cord

If you need to do a quick cleaning on your AR-15 and don't have a rod or snake handy, get some 550 paracord, take the guts out and tie about five knots in a row in it. Soak the cord in some cleaner and run it down the barrel.

To prevent build up, using a paracord snake is great for a quick cleaning during a long day of shooting or at a match. By the way, I have pulled the cord through dry and still brought stuff out on the cord.

9 Position The Rings

When you take your AR apart for the first time, look at the bolt. You will notice a set of rings. Because the AR has a direct impingement system, the rings on the bolt help prevent gas from going back further through the bolt. They also act as scrubbers, much like rings on an engine's piston. Notice the rings are staggered, and it is important to keep them that way. Staggering the rings prevents the gas from traveling down the gaps in the rings. If they were lined up or not staggered enough, the gas would find a path past them and into the carrier.

Arrow "A" shows improper staggering of the ring gaps on an AR. The gaps are too close together and the gas can find a path through. Arrow "B" shows the proper staggering of the gaps, keeping them far apart.

To get the carbon off tight spots deep inside the bolt carrier, tools such as dental picks or designated scan make the work easier.

You can see why it is important to stagger the rings in the front of the bolt when there is a lot of carbon built up. It is easy to put it in solvent. wrap it in cling wrap, and leave it until last to clean with a brush or scraper.







Contacts Tac-Con USA Tactical Fire Control, Inc. 44047 43rd Avenue Phoenix, AZ 85087-5948 info@tacconusa.com (623) 232-1881

TacconUSA.com

Battenfeld Technologies / Wheeler Engineering 2501 Lemone Industrial Blvd. Columbia, MO 65201 (573) 445-9200 BTIBrands.com Ventco, Inc. Shooters Choice 15050 Berkshire Industrial Parkway Middlefield, OH 44062 (440) 834-8888 Shooters-Choice.com

Gerber 14200 SW 72nd Avenue Portland, OR 97224 (855) 544-0150 GerherGear.com Leatherman Tool Group, Inc. 12106 NE Ainsworth Circle Portland, OR 97220-9001 (800) 847-8665 LeatherMan.com Real Avid 10700 Highway 55 Suite 150 Minneapolis, MN 55441 (800) 286-0567 Real Avid.com



Give Them TLC

The AK-47 and AR-15 are legendary firearms and are loads of fun to shoot. Both rifles are dependable and proven, but even an old warhorse needs to be fed and given care and attention. The AR-15 and AK-47 are no different. To ensure you enjoy your investment for a long time and have hours of enjoyment, maintain your firearms. **AK/AR**

WILL EXTEND YOUR RIFLE'S LIFE."

About the author: Abe Elias—an avid hunter, sports shooter and amateur gunsmith—has been an outdoor writer for more than 10 years. He teaches primitive skills and wilderness survival and is a custom knife maker (Diving Sparrow Knife Works, DSKW.ca).

For a quick
cleaning, take a
piece of 550 cord,
remove the insides, soak
the sheathing in solvent
and use it as an improvised bore snake.

Fastest Semi-Auto Trigger

A new trigger for the AR-15 was introduced at the 2014 SHOT Show. It is Tac Con Trigger's Tac-Con 3MR. The speed of the trigger created some buzz, as it uses the force of the bolt to reset it.

The Tac-Con design is totally semi-automatic, making it ATF compliant. The speeds achievable with the trigger are comparable to some automatics. The clean, crisp feel of the trigger is amazing. Having built a number of bolt-action rifles, I find the Tac-Con trigger to be on par with my target triggers. If you want to see increased accuracy results on any firearm, an improved trigger is a must. With this new product for the AR-15, you not only gain speed, but you now have a trigger on par with a lot of target rifle triggers.

The product is quality built and every piece goes through inspection. It will install into any mil-spec AR and has a lifetime nickel-Teflon coating. The 3MR is a high-performance piece of kit that can improve your shooting in both speed and accuracy for drills and competition.







Alsofa ERCALIBER

WHEN 5.56 ISN'T ENOUGH,
THERE ARE MANY
OTHER CHOICES

▶ BY KM LEE

N RECENT YEARS, THE POPULARITY OF AR-STYLE RIFLES has skyrocketed to incredible heights. Hunters, competitors, recreational shooters and those interested in home defense have all turned to this type of firearm.

That popularity extends in large part to the readily available 5.56 NATO/.223 Remington, the standard military cartridge. However, that chambering is far from being the only choice for these popular rifles. For those who think "bigger is better" with respect to bullet diameter, a wide variety of higher caliber options await.

Choosing The Platform

Conceived by weapons designer, Eugene Stoner, back in the 1950s, the first AR was actually the AR-10 that was chambered for the 7.62 NATO/.308 cartridge. However, it lost out in competition for a U.S. military contract to the M14 rifle. Soon after, the AR-10 was scaled down to become the AR-15/M16 rifle with the new 5.56 cartridge developed specifically for that rifle.

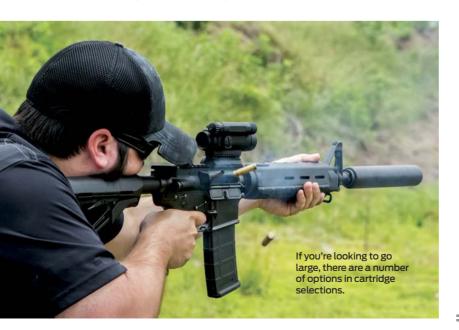


"FOR THOSE WHO THINK 'BIGGER IS BETTER' WITH RESPECT TO BULLET DIAMETER, A WIDE VARIETY OF HIGHER CALIBER OPTIONS AWAIT."

Today, both basic platforms are more available than ever before from multiple manufacturers. Between these two choices, shooters enjoy a number of options in cartridge selections that run larger than .223 inches in bullet diameter. However, because the AR-15 is literally a shrunken AR-10, it runs into limitations in cartridge length much sooner. That limited length restricts case capacity and therefore, the attendant power of the cartridge chosen.

The AR-10, in turn, can easily handle more potent rounds, thanks to its larger magazine dimensions, but the resulting package ends up being bigger and heavier than the typical AR-15.

When choosing a larger bore cartridge for an AR, that decision must also take into account which platform will be preferred or required.



AR-15 Options

The modular AR design means it's quite simple to fit new barrels and/or complete upper receivers with new barrels in new chamberings to an existing rifle. That means some 20-plus cartridges can be chambered in an AR-15 without any modifications to the bolt.

If a new bolt or modified bolt face is okay for a rifle build, that adds another 20-plus chambering options. Toss in pistol-cartridge options for use in a rifle modified for simple blowback operation, and you're looking at more than 60 different cartridges in all.

Out of that gang, the more available and attainable higher caliber options for the AR-15 platform include, in ascending bullet diameter, the 6.5 Grendel, 6.8 SPC, .30 Remington AR, .300 Blackout, .450 Bushmaster, .458 Socom and the .50 Beowulf.







6.5 Grendel

Created as a proprietary cartridge by Alexander Arms with attendant trademark restrictions, the 6.5 Grendel is now enjoying more widespread popularity, including a 123-grain match loading available commercially from Hornady.

Hornady loads its streamlined 123-grain A-Max bullet to 2,350 fps out of a 16-inch barrel for a muzzle energy of 1,508 ft.-lbs. Sighted to zero at 200 yards, it drops less than 9 inches at 300, so it's fairly flat-shooting and packs a lot more punch downrange than the 5.56. That makes it a superior deer hunting rifle, too.

The selection in 6.5mm/.264-inch bullets is terrific; this highly efficient caliber is a favorite among shooters who focus on long-range competition. The Grendel conversion, however, requires a different bolt and magazines, which adds to overall cost.

6.8 SPC

Originally designed for military applications, the 6.8 Remington SPC (Special Purpose Cartridge) uses bullets of 6.8mm, or as is more commonly known in hunting circles, .277 caliber—the same as the .270 Winchester hunting round.

This round was developed by Remington in collaboration with the U.S. military to create a cartridge that hit harder than the 5.56 NATO when used in short-barreled M4 carbines.

Upon its introduction, this choice became widely available, which accelerated its popularity. Hornady also offers a load for this round, a 120-grain SST bullet that gets 2,460 fps and 1,612 ft.-lbs. out of a 16-inch barrel.

At distance, the 6.5 Grendel catches up to and surpasses this load, due to the A-Max bullet's superior ballistic shape, but the margins are pretty small. In general, shooters who buy factory ammunition tend to favor the 6.8 SPC, while reloaders often prefer the 6.5 Grendel. The 6.8 SPC also requires a new bolt- and ammo-specific magazine.



30 Remington AR

When Remington first introduced the 30 Remington AR in 2008, it unleashed some pretty powerful hype.

"Now for the first time, Remington brings you .30-caliber hunting performance in a lightweight, R-15 modular repeating rifle. Our new .30 Remington AR cartridge produces big-game-dropping ballistics similar to the venerable .308 Win. with pressures perfectly suited to our lightweight R-15 platform. Comparable terminal power was once only available in the heavier AR-10 platform."

Unfortunately, a number of factors worked against it: an early intro with late product availability; the physical impossibility of the ballistics claim, with actual results closer to the .30-30 old timer; a larger diameter case that dictated use of a special, single-stack limited-capacity magazine, and more.

The case is based on the .450 Bushmaster case; shortened, which

results in a short, fat round that required use of a modified, larger diameter AR-10 bolt to fit the AR-15 upper.

Claimed ballistics saw a 125-grain bullet reaching 2,800 fps, which is plenty good for hunting. But the 30 Remington AR never really caught on, and it is virtually a dead issue today.

300 AAC Blackout

Developed in the by Advanced Armament Corporation (AAC), the 300 AAC Blackout is also known as the 300 BLK and 7.62 x 35mm. It is intended to match the performance of the 7.62 x 39mm Soviet cartridge in an AR platform while using standard AR-15 magazines at their full capacity.

Also, the regular AR-15 bolt works just fine, because the case is based on the 5.56 design. The 7.62 Soviet cartridge does not perform well in the AR, thanks to the pronounced taper in its case design.



"WHEN CHOOSING
A LARGER BORE
CARTRIDGE FOR AN AR,
THAT DECISION MUST
ALSO TAKE INTO
ACCOUNT WHICH
PLATFORM WILL BE
PREFERRED."

.458 SOCOM And 450 Bushmaster

Call this pair two peas in a pod or twins separated at birth. They are both proprietary cartridges for the AR-15 platform with terminal performance likened to the venerable and still-respected .45-70 rifle cartridge from the era of George Armstrong Custer.

Modern loadings show a 300-grain .45 bullet at about 1,800 fps muzzle velocity. They are both designed to be fully compatible with the AR-15 platform, including use of standard magazines.

The .458 Socom was created by Rock River Arms and is loaded with bullets ranging in weight from 250 grains to 500 grains in weight, with the 300-grain load producing speeds topping 1,800 fps at the muzzle.

The .450 Bushmaster is a proprietary cartridge developed by Bushmaster and loaded by Hornady with 250-grain bullets that leave the muzzle at 2,200 fps. Both produce felt recoil similar to a 20-gauge shotgun, which is very reasonable, and both serve as great big-game cartridges, as long as you're not taking shots much longer than 200 yards.

For close-in defense purposes, both greatly surpass the highly respected .45 ACP to the point of being significantly overly powered.

50 Beowulf

For some people, too much of a good thing is just barely enough, and that leads us to the proprietary .50 Beowulf from Alexander Arms. Using bullets a half-inch in diameter in the AR-15 platform, the .50 Beowulf pumps out plenty of close-range stopping power.

The 300 BLK is multi-talented in that the rounds are effective out of barrels as short as 4.5 inches and is quiet when suppressed, while having more energy and accuracy at longer range than dedicated suppressed submachine guns, such as the H&K MP5 in 9mm Parabellum.

From a 16-inch barrel, the 125-grain load reaches 2,215 fps for 1,360 ft.-lbs. of energy, while the 220-grain load exits the barrel at 1,010 fps and nets 498 ft.-lbs. The 125-grain load makes this round an effective hunting cartridge, and it has rapidly gained a great following among AR shooters.





That makes it especially well suited to close-cover conditions, such as dark-timber elk hunts or wild boars in brush where you really want to anchor the game quickly. The 300-grain loading runs just shy of 1,900 fps at the muzzle; loads range in bullet weights from 240 to 385 grains.

Alexander Arms sells .50 Beowulf-specific magazines that it claims will not handle 5.56 ammo, but standard 5.56 mags often seem to work just fine, holding 10 rounds of the fat Beowulf cartridge in a 30-round 5.56 mag.

This is a very powerful, hard-hitting cartridge for use where shots are not likely to exceed 200 yards.

AR-10 Options

As we jump up in size and weight to the AR-10 platform, we make a big jump up in power with cartridges that are also more readily available, for the most part.

Originally designed for the 7.62 Nato/.308 Winchester round, plenty of variations on that basic case have hit the market for hunters over the years. We'll stick to the more common offerings.

.243 Winchester

Soon after the .308 was announced, Winchester necked the case down to hold a .243-caliber (6mm) bullet. That change netted a big gain in velocity along with light recoil, thanks to a lighter bullet—100 grains for deer hunting and 3,000 fps, compared to the very common 150- and 165-grain .308 bullets at about 2,700 fps.

The .243 also pulls double duty as a flat-shooting varmint cartridge with light bullets, making this a great multi-purpose chambering that remains extremely popular to this day.

.260 Remington

Bump up the hole in the .243 case a half millimeter to 6.5mm, and you get the 260 Remington.

Remington introduced this cartridge in 1997 to great fanfare and excitement—justifiably—thanks to the selection of very accurate .264 bullets with terrific ballistic shapes that carry well at long range.

Common hunting bullets range from 120 to 140 grains with muzzle velocities of 2,700 to 2,800 fps; this bullet also serves well as a dual-purpose cartridge for varmints. It's a great match for the AR

The Ballistics .308 Family Of Cartridges Muzzle Energy Cartridge **Bullet Weight Muzzle Velocity** .243 Winchester 100 gr 2,960 fps 1,945 ft-lbs .260 Remington 140 gr 2,750 fps 2,351 ft-lbs 7mm-08 .308 Winchester 2,800 fps 140 gr 2,437 ft-lbs 2,648 ft-lbs 2,820 fps .308 Winchester 168 gi 2,700 fps 2,630 ft-lbs .338 Federal 2,750 fps 3,107 ft-lbs

| Cartridge | Bullet Weight | Muzzle Velocity | Muzzle Energy |
|-----------------|---------------|-----------------|---------------|
| .458 Socom | 300 gr | 1,845 fps | 2,267 ft-lbs |
| .450 Bushmaster | 250 gr | 2,200 fps | 2,686 ft-lbs |
| .50 Beowulf | 300 gr | 1,870 fps | 2,330 ft-lbs |
| For Comparison: | | | |
| .45 ACP | 230 gr | 830 fps | 352 ft-lbs |

platform, but sadly, the cartridge seems losing popularity and subsequently has lesser availability.

7MM-08

Bump that .260 neck up another half millimeter, and you arrive at the 7mm-08. Actually, in 1980, Remington necked the case down from .308 to .284 to create the 7mm-08.

The 140-grain bullet at about 2,800 fps is likely the most popular hunting load, although a wide variety of bullet weights exist. It offers a slightly flatter trajectory than a .308 and also a bit less recoil. It's still popular today and is a solid choice for all big game in North America, short of big bears or moose.

.308 to .284 One online seller we just checked included 167 different loads in their listings. Hunting loads abound; mit tary-style, full-metal jacketed loads can be had more attractive prices and excel-

CARTRIDGE

AVAILABLE,

PERIOD."

included 167 different loads in their listings. Hunting loads abound; military-style, fullmetal jacketed loads can be had at more attractive prices and excellent, match-grade rounds are there for anybody. You need not develop handloads for your .308 to experience exceptional accu-

.338 Federal

A relative newcomer to commercial status, the .338 Federal rolled out with joint support from rifle maker Sako and Federal Cartridge in 2006.

The large .338-inch diameter bullet creates a larger wound channel than a .308 bullet, which allows it to anchor large game a bit quicker in thick cover—at least in theory.

Typically loaded with 180- to 210grain bullets, muzzle velocities range between 2,600 to 2,800 fps. While not a real long-range cartridge, the .338 Federal is great for most common hunting applications and provides a lot of punch in the AR platform.

.308 Winchester/ 7.62 x 51 NATO

You may have noticed we broke style and listed the larger diameter .338 Federal before the smaller .308 Winchester chambering. That's because we saved the best for last.

For those who are contemplating a large-caliber AR, the .308 really stands

racy.

Introduced in 1952, the .308 is likely the most highly developed cartridge available, period. Although its most common loadings of a 150-grain bullet at 2800 fps and the 165/168 load at 2,700 fps can be surpassed by other cartridges, over the years millions and millions of rounds have been fired in long-range matches to winning effect.

out as the best choice-if you don't

mind toting the larger AR-10 about. The .308 wins hands-down for sheer

availability; when there isn't an artifi-

cially induced ammo shortage in force,

boxes of .308 can be found just about

anywhere ammunition is sold, in a

wide assortment of bullet types.

Delivering excellent down-range performance out to 300-plus yards, the .308 is one of the most effective and versatile calibers you can choose, one that will fulfill all hunting needs short of dangerous game.

It is literally one of the best cartridges in the world. **AK/AR**

About the Author: KM Lee is a lifelong shooter, and for more than three decades he has been an active participant in all aspects of the shooting sports including match competition, hunting and reloading. He's also an outdoors writer, instructor and more.

UNSURPASSED CAPACITY

CZ P-09

With 19+1 in its flush fitting magazine, the P-09 can't be beat when it comes to 9mm service pistols.



MAIN FEATURES

- Interchangeable backstraps
- · Convertible, safety or decocker
- · Omega trigger system
- · Polymer frame with 1913 Picatinny rail
- 19+1 9mm, 15+1 .40 S&W (P-09)
- Two magazines
- · 5 year warranty







SEMI-GOT

PUTTING THE AK & THE AR

AUTOS GAME

TO WORK FOR HUNTING

TEXT BY JIM DICKSON

OTH THE AK-47
AND THE AR-15
have successfully established themselves as hunting rifles.

When the subject of hunting with them comes up, the first consideration is that in their original chamberings of 7.62x39 and 5.56x45, are only intermediate power cartridges.

The Standard AK

The 7.62x39 can be considered the 21st century equivalent of the venerable .30-30 Winchester.

The familiarity of the American shooter with the .30-30 and its strengths and weaknesses applies to the AK-47 and its 7.62x39 cartridge. You just have to work within its limitations.

A basic, military-style AK-47 from Century Arms: the trophy they would not let you bring back from Vietnam.



"THE BOTTOM LINE IS THE 7.62X39 AK-47 IS THE .30-30 WINCHESTER OF THE 21ST CENTURY." One advantage of the 7.62x39 over the .30-30 is that its spitzer bullet has a much better ballistic shape than the round-nosed .30-30 designed for safe functioning in a tubular magazine.

The extra firepower of an AK-47's 30-shot magazine and its semi-auto action place it light years ahead of the .30-30 lever rifle when dealing with vicious dog packs or large herds of wild hogs.

The Soviet Dragunov Sniper rifle offered more power. Based on an AK-47, it was scaled-up to use the 7.62x54R cartridge of the old Mosin Nagant rifle.

This gun has also been made in 7.62 NATO in recent years and both versions have been imported into this country in large quantities. Century Arms has its version of a 7.62 NATO AK in its M77 rifle.

The former Yugoslavia used to make its scaledup AK, the M75 sniper rifle, in 8mm Mauser. This caliber is under-loaded in the United States until it is roughly on par with a .30-30.

The standard European load is more like a .338 Magnum in hitting power. The 196-grain 8mm, when loaded to European standards, is the greatest

game-killing, military full-power rifle cartridge of them all.

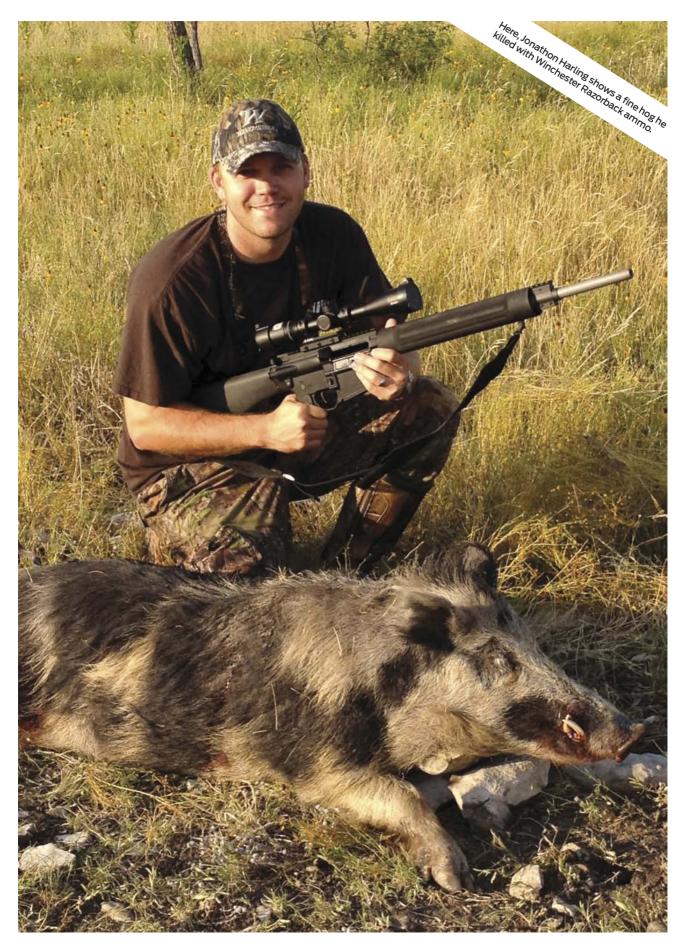
Hunting With The AR-15

The AR-15 was designed for the 5.56x45 cartridge, which is a varmint rifle cartridge. It was intended for wounding or killing enemy soldiers, as opposed to hunting big game, and the ability of its velocity to translate into stopping power on people has been vastly overrated.

It should be restricted to small-sized deer as a hunting cartridge. Modern premium bullets and precise shot placement have resulted in it having success on the wild hogs that are proliferating around the country.

Just because you can do it doesn't make it a great idea. Having seen these brutes reach 800 to 1,000 pounds, I would want something larger myself.

Faced with a choice of the 5.56x45 and the 7.62x39 for a hunting cartridge, I would pick the 7.62x39 as the most versatile and the one offering the greatest chance of success.





Better Cartridge Choices

Other cartridges, such as the 6.8 SPC, 7x45, 30 Whisper and .458 SOCOM greatly expand the AR-15's capabilities.

If I were taking an AR-15 to Alaska, I would choose the .458 SOCOM because the ranges are short in the interior and the moose and bear are big. I definitely don't want a 5.56 there.

Once you move up to the AR-10, you are at a platform originally designed for 7.62 NATO. Versions of the AR-10 are available too, in the excellent .338 Federal.

The .338 Federal is a fine choice for the Alaskan hunter. It has the flat trajectory needed for the caribou on the tundra and the killing power for big moose and bear.

Comments by one grizzled old trapper that the .338 Federal was fine for brown bear, but far too small for shooting Alaskan mosquitoes should be taken with a grain of salt.

Once you've chosen a caliber, the next thing to consider when deciding between an AK or an AR, is the mechanisms of the two rifles.





"The .338 Federal is a fine choice for the Alaskan hunter. It has the flat trajectory needed for the caribou on the tundra and the killing power for big moose and bear."

Accuracy And Other Considerations

While some Soviet AK-47s with issue ammo only shoot 4-inch groups at 100 yards, the ones available to the American shooter are more than sufficiently accurate.

I fired 1-inch groups using Winchester 5.56mm ammo with a Chinese Norinco semi-auto AK-47 just as it came out of the box.

I also got 1-inch groups out of a 7.62x39 AK made by I.O. Inc. in the U.S. With intermediate power cartridges like this, any more accuracy is academic.

Most AR-10s and AR-15s will also shoot 1-inch groups provided that they have top-quality barrels.

Handling is excellent with both guns. That's not surprising because most of the weight is between your two hands.

Prices tend to favor the AK-47 over the AR-15. Beauty is in the eye of the beholder. I have a friend who was shot multiple times in different actions by AK-47s who definitely does not like the way the AK-47 looks.

Men who have carried the M16 or M4 in the service often want the gun with which they are familiar. Interestingly, a lot of men who faced off in Vietnam against the NVA with AK-47s have bought AK-47s instead of AR-15s.

Good To Go, Out Of The Box

You might ask what modifications are needed to go hunting with an AK or AR rifle. The answer is simple: load it. Anything that works in combat will work just fine hunting.

Of course there are many good and useful options in sights. There are red dot and aim point sights for close, fast shooting and various telescopic sights to suit every need and fancy.

I like the 2 ¾-power Burris Gunsite Scout Scope mounted well forward with a German three-post reticle that does not blur in rapid fire as thin crosshairs do.

I find that this is the highest magnification that does not interfere with rapid target acquisition and yet it is all the magnification I need out to 300 yards. People hunting past 300 yards need a full power cartridge and not an intermediate power one like the 5.56 or 7.62x39.

Modern semi-autos often come with Picatinny rails, which make installing sights and accessories easy. I like one on the top of the rifle, but I don't like them anywhere else. I especially don't like it when the rails form a handguard of sharp edges encircling the forearm.

Having said that, one accessory you might want if you have a rail on the bottom of your rifle is the vertical fore-grip. While not as ergonomically sculpted and angled as a Thompson SMG fore-grip, it can still improve accuracy a bit by offering a steadier firing stance.



Reliable Enough for Hunting?

Of the two rifles, the AK has proven to be the most rugged and reliable. Reliability means everything to a combat soldier and the early M16s were neither as reliable nor as popular as the Army wanted the public to believe.

Many of the AK and AR rifles made for sporting use in the U.S. feature far tighter tolerances than their military counterparts. That means they don't handle dirt and powder fouling nearly as well as the military versions. That may not be so much of an issue for the hunter who might not fire as many rounds between gun cleanings.

Night vision scopes are now available and they can be indispensible for dealing with coyotes and wild dogs after your livestock and wild hogs rooting up your crops.

Although expensive, buy the latest generation equipment that you can get. I strongly advise you to only buy the U.S. Armed Forces mil-spec night vision equipment due to the availability of parts and upgrades.

Historically, having the best weapons for hunting and defense has been the key to human survival. The AK, AR, and other semi-auto versions of military rifles are the wave of the future for American hunters. **AK/AR**

About the Author: Jim Dickson has written for gun magazines for nearly 30 years.



Black Hills .300 Whisper

Black Hills .300 Whisper is the answer to long-range shooting with a silenced rifle. More and more hog hunters are using suppressed weapons with night vision scopes on hogs, due to the nocturnal nature of the pigs. Landowners don't like being awakened in the middle of the night by gunshots, so a legal silencer opens up a lot more land for hunting.





Hit Them on the Move

The greatest advantages of semi-auto rifles are their magazine capacities and their ability to afford hunters fast follow-up shots at running game, compared to manually operated firearms.

Aimed rapid fire is the secret to using sights to hit moving targets. It is the only sighting system that enables you to break as many clay birds launched from a standard skeet trap with a rifle as you can with a shotgun.

A training program in aimed rapid fire is a full-length article in itself, but the gist of it is simple. You first learn to cheek and fire the gun in one motion, for your first sight picture is your best one.

Then you learn to start pulling the trigger fast as you align the front sight post on the target, instead of trying to get a good sight picture and then slowly squeezing the trigger.

Moving targets don't wait around for that and you may need more than the first shot to connect. That is why semi-auto scout rifles hit moving targets that bolt action scout rifles cannot.



BY SCOTT BERKEY WITH ABE ELIAS

S WE KNOW, THE AR-15 PLATFORM is known in the military as the M16/M4, and the United States has depended on this rifle since 1962. There is no shortage of stories of how the people who serve and protect have saved lives or had their own lives saved with the M16, given its many years of service.

In the following account, Scott Berkey, a pseudonym for a soldier who served as a United States Marine Corp. sergeant from 2008 to 2012, tells his story. -AE

There are numerous occasions in which the rifle has both directly and indirectly saved my life and the lives of the Marines around me. The one incident that stands out in my mind occurred during my second deployment in the Helmand Province of Afghanistan. I was a turret gunner in a police mentoring team.

Our primary mission was to work shoulder-to-shoulder with the Afghan National Security Forces to make them selfsufficient and capable of handling any number of situations.

In this particular incident, our team was set up in two different ambush positions. There had been previous contact in the area from Taliban forces from known fighting positions.

Our mission was to hold in place and to gain human intelligence/pattern of life and act as a surprise force for any type of enemy activity. We occupied the positions at night so the enemy wouldn't know our plan or location. As the next day progressed, there was no contact. Originally, our plan was to extract during cover of darkness, but the order came down to cut the mission short. Reluctantly, we pulled out in the middle of the day.

Shots Fired

My section was going to link up with the other position for extraction. To do this, we needed to patrol down a well-established road in the open. The two positions were approximately 500 meters apart. Traversing the area would leave the patrol completely exposed to the enemy machine gun bunkers.

As our team got to the road in a long ranger file, we immediately began taking medium machine gun fire and rocket fire from those enemy locations. We began returning fire into the tree line.

As I found cover and returned fire, I took a look back and saw someone lying in the middle of the road. Armed with my M16 and M203 grenade launcher, I was able to suppress the known enemy locations. Their positions ranged from 100 to 300 meters away, which was easily within the capabilities of my M16 to lay down accurate suppression fire.

The team leader ran into the open to retrieve our teammate who was shot in the neck and shoulder. That team leader was later awarded a Bronze Star with combat distinguishing device "V" for Valor for his actions in this battle. In the end, we were able to gain fire superiority with our M16/M4s in order to save our teammate's life and take the fight to the enemy.

Serve And Protect

In the fog of war, we didn't have to think twice about the functionality of our weapons. Properly cleaned and maintained, these weapons were working well for us and allowed us to do what Marines do best: put holes in our enemies.

As a footnote, living in the United States I see a lot of police departments and government entities have adopted the AR as their go-to weapon. Whether as a state trooper, county sheriff, DOE Patrolman Nuclear Security Officer or an individual citizen, the AR is an invaluable asset in the pursuit to protect life. AK/AR

About the Author: Abe Elias, a Canadian resident, also writes for World of Firepower.



AD INDEX Advertiser Page Colt's Manufacturing Company 2 Crimson Trace Corp. 131 **CROSSBREED HOLSTERS** 5 CZ-USA 119 105 Kel-Tec CNC Industries. Inc Major Surplus & Survival 7 132

Sturm, Ruger & Company, Inc.

Tactical Night Vision Company

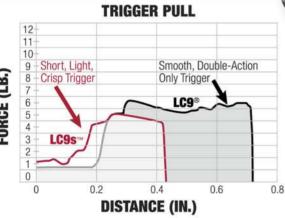
65





THEAL

STRIKER-FIRED, CENTERFIRE PISTOL







Dovetailed, High-Visibility 3-Dot Sight System with Windage Adjustable Rear Sight and Fixed Front Sight



Checkered Grip Frame for Secure and Comfortable Grip



Includes Finger Grip Extension Floorplate

The all new, striker-fired Ruger® LC9s™ features a short, light, crisp trigger pull for faster shooting and improved accuracy. The LC9s™ provides slim, lightweight and compact personal protection with a blued, alloy steel slide, a high-performance, glassfilled nylon grip frame, aggressive checkering and an easily acquired 3-dot sight system. The LC9s™ uses all LC9® accessories and holsters and is just slightly larger (less than 1" taller and 1" longer) than the popular and incredibly compact LCP®.