AK47 Rifle Variations

Needed AK47 Accessories

So you have decided that you need an assault rifle to survive the apocalypse, and have settled on getting the famous AK47. Here’s the essential stuff you need to know. (Believe it or not, this is the SHORT version. Entire books have been written on this.)

AK47 rifles were made by many countries, and while essentially the same, some are just different enough that parts do not interchange among all variants. AK47 rifles divide into 2 main subgroups,

1. Milled receiver models
2. Stamped receiver models

Milled receiver rifles cost more, are heavier, and less common. However, they have a reputation as more accurate. A milled receiver AK can be identified by the rectangular lightening cut along the body of the receiver, as seen here:

![Milled vs Stamped](image)

However, when used with ammunition made to western standards, stamped AK47s (more accurately called AKMs) are capable of decent accuracy as well.

The vast majority of AK47s available to American shooters are stamped models, so this will be our focus.

Among the stamped AK47 variants (available in the US), they break down into these subgroups;

1. European models
   a. Russian
   b. Hungarian
c. Bulgarian
d. Polish
e. Romanian
f. Egyptian (while not in Europe, the Egyptian rifles were exact duplicates of Russian guns, made by Russian workers in a Russian built facility on Russian tooling.)

(Nearly all AK47s in this subgroup have interchangeability of parts, but vary in quality of fit, finish and quality control. When the AK74 in 5.45x39 came along, the variants made by the above countries diverged and took different forms, with less interchangeability. Most 7.62x39 AK47 rifles for sale in the US are of the euro subgroup.)

2. Chinese models (still very close copies of euro models, but vary in barrel diameter, receiver width, metal finish.)

3. Yugoslavian (yes, Yugoslavia was/is in Europe, but they were different. These rifles have different wood mounts, non-chrome bores, heavier receivers, and sometimes have gas cut-off levers for launching muzzle-fit projectiles like rifle grenades.)

Add to the mix above that cut up parts kits (the entire rifle less the receiver) of all these variants have been imported into the US for years, and many folks have assembled those parts kits on new receivers to make a functional example of the original rifle. Sometimes this was done well, with skill and attention to detail, sometimes not. Most notably, the ATF now stipulates barrels must also be destroyed when these kits are imported. US-made barrels have had to be crafted to allow for the completion of these kits. Often, the American made barrels were not chrome-lined.

So unless you locate a Chinese or Yugo AK at a screaming good price you can’t resist, you are likely going to acquire a European model. (I happen to own a Chinese variant myself, but that’s because it was the right price.) Among these, they rank in affordability and value like this;

Cheapest to most expensive:

1. Romanian ($450 range)
2. Hungarian
3. Egyptian
4. Polish
5. Yugoslavian
6. Chinese
7. Russian
8. Bulgarian ($800+ range)

But, in common availability, they rank like this:

1. Romanian (most common)
2. Hungarian
3. Russian
4. Bulgarian
5. Chinese
6. Polish
7. Yugoslavian
8. Egyptian (very uncommon)

**Pre-ban/Intra-ban/Post-ban variations**

So let's assume you have found a common Romanian AK47. We first need to inspect it to look out for some features that have been previously imposed by the assault weapons ban that are undesirable. We want either a Pre-ban or Post-ban rifle. Some rifles that were made/sold during the ban years (Intra-ban) have now with the end of the ban been converted to Post-ban variants. But what do you look for?

1. **Threaded muzzle** (some ban-era rifles have had their threads turned off with a lathe and cannot be restored, but have had pre-ban features added, like folding stocks. Check the muzzle. Make sure that muzzle device actually removes and is not permanent.)

2. **Magazine relief cut** (some rifles were made with receivers that were designed for a special single-column narrow magazine that only held 10 rounds. These are California-compliant rifles, because Ca. said if the rifle can even accept a hi-cap mag, it can’t be sold there.)
3. **Which Romanian AK is that?** (Romanian AKs have been marketed as the WASR. Variants in 5.45x39 are called WASR2, .223 versions are WASR3, and 7.62 versions are WASR10. But a slightly better quality one available since 2007 is called the WASR10/63.) The preferred WASR10/63 rifles will be marked like this:

![WASR10/63 Marking](image)

But beware;...some of those narrow-mag Romanian rifles also carry the WASR10 designation, so check it out carefully.

**Desirable Accessories**

The 3 best features one can add to their AK are:

1. Folding stock
2. Optics
3. Accessory rails (also called Picatinny or 1913 rails)
4. Better heat-resistant forestock

**Heat-resistant forestock**  The standard forestock on an AK47 is a laminated wood piece with brass reinforcing pins. The laminated wood is quite resilient and tough, and provides adequate heat protection,...but the damned brass pins act as heat conduits, and will carry the heat right out into your
hand. In rapid fire, the pins will heat up and burn your hand nearly as well as if there was no handguard there at all.

So one thing the Romanians did to solve this issue was make a wooden pistol grip stock to replace the standard Russian design.

It works to prevent the heat from burning ones hand. But, it interferes with rapid and efficient loading and unloading of magazines into the gun, since they rock in and out, rather than drop free.

The Russians eventually realized their mistake. In frozen Siberia, the heat was not an issue, but in Afghanistan, it was a bitch. The latest versions have one that looks like this (and I have one on my Chinese AK);

The good ones also have a metal lining heat shield to keep the plastic from melting.
Some also feature accessory rails as part of their structure. But being plastic, they can only be so resilient and take only so much torque on them before an accessory might snap off.

**Accessory Rails**  As can be seen above, rails for mounting additional devices can be placed on AKs, but are essentially limited to being part of the handguard.

To be resilient and strong, the rails should ideally be made of metal. But being near the steadying hand holding the rifle, metal in this area is a burn injury risk. But, of these metal types, one is currently used by the US military on modified AKs they have in inventory for special purposes. This is the model made by **Tactical Response**. Cost for the Tactical Response rail system is $160.
However, the gas tube section of the Tactical Response unit is not very likely to cool well, since it replaces the factory gas tube. If an electrical optic red dot sight is mounted to it, there will be considerable heat transfer, potentially damaging the optic. Slightly more affordable at $125, the Midwest Industries rail system is a design many shooters are adopting and have reported happy results with.
Optics  While the rail systems above allow for the mounting of a non-magnification red dot sight, if you need magnification, then you need an optic mounted in the traditional location closer to the shooter’s eye. But the somewhat flimsy sheet metal top cover of the AK series makes for a poor mount. The Russians themselves devised a system where the mount is attached to the left side of the receiver via a rail affixed there. Referred to as side-rail mounts, nearly all euro pattern AKs come with this capability as a standard feature.
This is handy, but presents 2 problems:

1. The height of the mount makes getting a good “cheek weld” to the stock difficult because of how high the head must be held to get a good view through the optic. When spending a lot of time viewing through the optic, the shooter’s neck will fatigue.
2. If utilizing a side-folding butt stock, models which fold to the left will be unable to fold closed with this mount in the way. Either a rigid non-folding stock must be used, or one which folds to the right or underneath.

And of course, not all AK rifles have the euro style optic side-rail. What then? In recent years, some inventive mercenaries who have had to use AK rifles in their assignments have devised a solution. It works with all folding stocks and keeps the optic mounted as low as possible. It even provides a superior iron sighting system as a back-up, which provides more accuracy than the original sights do, due to an increased distance from front to rear sights. This is the Texas Weapons Systems “Dog Leg Scope Rail”.

There are at least 2 other designs similar to this which are based on the same concept. The most famous of which is sold by Krebs Custom Gunworks. The Krebs model is better known, but nearly $300!! This competing model is just as solid and reliable, but costs half what the Krebs costs, at only $140. I will be ordering one of these myself in the near future.

**Folding stocks**  First, decide if a folding stock is important to you. Regular fixed stocks are resilient, functional and cheap. But if you might be getting in and out of a vehicle with your rifle, or have limited storage space wherever your rifle might be stowed, or foresee a need to conceal the rifle under a long jacket,...a folding stock can be a great feature. Some folding stocks are great, some are not, and some types only come on certain rifles because the rifle has to be specially built to have that stock as part of it. Other folding stocks are modular and can be added or removed at will. There are 3 types of AK folding stocks;
1. **Under-folding** (these suck, don’t even bother)
2. **Side-folding steel**
3. **Side-folding plastic**

Under-folding stocks for the AK were developed by the Russians not long after WW2, and they simply stole the design from the German MP40.

These stocks, typical of a communist product, were designed by a committee that had no end-users as members of the decision-making body. While the design stows away efficiently and makes for a compact package, actually using it is difficult and painful. The part that pushes against the shoulder is slick and doesn’t want to stay put, and the sharp rectangular sheet metal struts can cut into the cheek of the shooter. It also leaves the head awkwardly positioned when trying to use the sights.
Under-folding stocks are permanent and unalterably part of the rifle. If you get one, make sure it is what you want, because you’re stuck with it.

**Steel side-folding stocks**  There are essentially 2 types of steel side-folding stocks;

1. Those which are integral to the weapon and permanent
2. Those which are modular and come off

The permanent type were first installed and used not on the 7.62 caliber AK47, but the 5.45 caliber AK74 when first fielded in Afghanistan. It is much better than the under-folding type it replaced, and the Afghan gunsmiths of the Khyber Pass region near Pakistan began converting many standard fixed stock 7.62 rifles they captured into this type of folding stock weapon. They did this so that they could conceal the rifles under their smocks when travelling. Today, any 7.62 type AK with this style of side-folding “triangle” stock is referred to as a “Khyber Pass AK47”.

Unfortunately, in addition to being a permanent alteration to the rifle, these fold to the left. They will fold closed when a side-mounted optic is removed. But if left in place (as an optic should be) the stock cannot close shut.

A steel side-folding stock which folds to the right, and solves this problem is the type used on East German, Polish and Romanian rifles.
While perhaps not as comfortable to use in the extended position as the Khyber Pass type of stock, this style solves several problems.

1. It is removable and not permanent
2. It allows the use of ComBloc side-mount scope rails
3. It allows the weapon to be loaded, cycled and fired either open or closed
4. It does not interfere with mag changes using the left hand

Mercenaries working for Uncle Sugar over in Hadji Land have gravitated to this model because it can be ordered cheap as surplus and fitted to most all the surplus AK rifles laying around. It is also rugged and tough. I have this very model affixed to my own Chinese AK. Cost is anywhere from $60 to $100 depending on current supply. However, these vary in their release mechanism. The Romanian models are a push button style, while the East German and Polish are a lever release type. In my opinion, the lever release is superior, but at the time I bought mine, only push-buttons were available.
An even better option in metal folding stocks is available from ACE Ltd. USA. However, all ACE products are expensive. The benefit, however, is that their base attachment folding mechanism is modular and adaptable to many different lengths and styles, and even whether they fold to the left or the right. They are removable. Many people with the money to spend swear by them. Average cost for one is $175-$200.

Notice in the images below, although the Ace stock is set up on this example to fold to the left, it clears the scope side-rail. Assuming a slide on mount of sufficient thin profile is used for the optic, the stock should be able to close over it. When set up to fold to the right, however, these stocks tend to interfere with operating the bolt and/or safety lever.
Notice, however that when closed to the left, easy access to the magazine release is blocked. To allow such easy access, another stock option exits from Ace.
**Plastic side-folding stocks**  There is an American manufactured commercial side-folder made for civilian consumption, and a Russian design that is based on the “triangle” Khyber Pass type.

The Tapco stock has become a popular choice because it is inexpensive and can be had in Green, Tan or Black. However, when folded, it nearly blocks the trigger from being pulled by a right-handed person. They are available at Amazon.com for $30.

The Russian polymer stock is a type that is built into the rifle. They are currently only available on Bulgarian rifles sold via Arsenal of Las Vegas. Called the SGL21-94 or the 107-FR, it costs about $850-$950 at retail.
These are the current issue AK series that Russians and Bulgarians are using today. However, as with the metal Khyber Pass rifles, the stock cannot close when an optic is actually mounted.

Magazines  Original magazines for the AK47 are legendary for their toughness, and they are an important part of the overall ruggedness and reliability of the AK47. However, even more variations of the magazines have been made than of the rifle. It would be difficult and confusing to cover all the variants here. Almost all are useable and worth owning. Almost. Some are better than others, however. They break down into two main groups;

1. Steel
2. Polymer

Steel magazines  These are also of two distinct types;

1. Ribbed (also known as European style)
2. Non-ribbed (commonly called “flat-back” or “spineless” or “Chinese style”)

Ribbed or euro AK mags are made to original Russian specs, which leaves a raised rib or spine on the back of the mag body where it is welded together. This, however, makes for a very uncomfortable object to grip with the hand when it is time to insert or remove one from the rifle. This high protruding edge tends to jab you right in the crook of the main joint of the thumb. In this way, it also keeps you from applying much grip pressure and the result is the magazine is not always held as firmly as might be desired.

Flat-back magazines, however, don't have this feature and are much more user-friendly.
Ribbed magazines are the most common around, and the cheapest to acquire, running anywhere from $7 to $12 each. Nearly all spineless AK steel mags are Chinese, and have not been imported for many years. Therefore, you will have to look harder to find them and will often pay about 40% more. But sometime people selling them don’t know how they are different and more desirable, and sell them for the same price. Of the metal AK mags I have in my own personal stash, they are all Chinese flat-backs.

**Polymer magazines**  The Russians were the first to start experimenting with making their AK mags with polymers, producing a dizzying array of Bakalite mags in a rainbow of colors. Collecting all the numerous variants has become its own genre of military collectibles. But the Russians never did it quite right. The best polymer mags ever made are produced by the Bulgarians and Finns. (Finnish mags are difficult to find and expensive as a result, so let’s just focus on the Bulgarian ones.) These have become so sought after, however, that copycats of substandard construction have been produced to fool unsophisticated US buyers. Below is a comparison (from my own collection);

Often referred to as Bulgarian “waffle” mags, they come in many colors, but black is most common. Many copies say “Made in Bulgaria”, but true specimens will have the “Circle 10” stamp. They also will have steel end caps, not plastic. Unlike the cheap copies and all other polymer mags for the AK, the Bulgarians have a metal skeleton inside the polymer body, so they are actually a hybrid design. They have flat backs, don’t burn your hand if left in the sun, don’t rust and have fewer sharp edges. Prices for
these can vary wildly. At one point, people were paying $40 ea. for them, but the prices dropped and I bought all mine for about $14 ea. Unfortunately, prices have risen again, and now they are about $25 ea. Mostly, this is due to a recent article in June of this year where a respected gun-writer torture-tested all the main AK47 mags commercially available. The genuine Bulgarian Circle 10 mags defeated even the original steel designs, while the cheap copy in the picture above failed early on and came in last. You can read the article here (sorry, no pictures available, but I have the hard copy in my literature collection).

http://www.thefreelibrary.com/Are+kalashnikov+magazines+as+robust+as+their+reputation%3F+He+tormented...-a0262692779

Stay away from magazines made by TAPCO, I.O., ProMag or anything that isn’t steel or have the Circle 10 logo on it. The only exceptions are the new all-plastic mags made locally in Scottsdale by US PALM. They are good, but cost $27 ea. If you’re going to spend that much, get the Circle 10 Bulgarians.

Muzzle devices  There are 2 types of muzzle devices you can hang on the end of your AK47 barrel, and they do 2 very different things. One cannot do the task of the other, and vice versa, NO MATTER WHAT ANY MANUFACTURER OF THES DEVICES CLAIMS. These are;...

1. Flash suppressors
2. Muzzle brakes (recoil reducer)

The only flash suppressor worth bothering with is the Vortex type. Originally designed and sold here locally by Ron Smith at Smith Enterprises, they have been so effective that the design has been ripped off and produced around the world. When using ammo with COPPER jacketed bullets, there is NO flash, NONE.

On the flip side, muzzle brakes, use the escaping gas from the barrel to try to add a thrust-reversing action to attenuate and reduce kick from the weapon discharging. Some work better than others, but the genuine Russian design works well, and looks appropriate to the rifle.
However, the trade-off is that the weapon is louder and produces more flash with these things.

**Ammunition** There are a lot of choices in surplus or other affordable 7.62x39 ammo. Unlike with .223 ammo, you need not fear which of these type may or may not function well in your rifle, since the legendary AK reliability will see that it feeds them all. Therefore, your issues to consider when selecting ammo for your AK47 are;

1. **Price**
2. **Terminal performance** (particular ability to create wounds worse than other types)
3. **Corrosive vs. Non-corrosive**
4. **Position disclosure** (flash and other muzzle signatures when fired)
5. **Long-term storage**

**Terminal Performance** You can research prices fairly easily yourself (although I’ll touch on the economics of 7.62x39 ammo later in this report), so for now, let’s start with Terminal Performance. The typical AK47 projectile is of a “boat-tail” design. This allows for a bullet with less drag and therefore better retained velocity further downrange. It produces a bi-lobe yaw in tissue when it begins to tumble after about 7 inches of penetration. However, if the hit is a periphery to the torso or a limb, the round can exit the body before beginning the tumbling that produces the maximum wounding potential for the round. Ideally, we want a projectile that begins its “energy dump” (tumbling) immediately after penetrating. The science behind all this can take up entire books (and does), but suffice to say that a flat-base bullet, unlike a boat-tail bullet, is heavier in the butt and wants to tumble more quickly upon impact, thereby creating more reliably a more deadly wound, even with hits to the extremities. The difference in the wound profiles looks like this:
The Russians set the pattern for almost all ammo production for the 7.62x39 service round, so most of the world’s surplus ammo in this caliber is of the boat-tail M43 type in the top of the picture. However, the Yugoslavians, always being just a little different, produced their 7.62x39 ammo with a flat-base bullet, known as the M67 type. The difference is a deadlier round. (More about the Yugoslavian surplus ammo later.)

There are also non-FMJ options available. Soft-point and hollow-point ammo, which obviously have greater lethality, are available all over the place. Prices for these (if produced overseas in the same non-reloadable casings) are only slightly more than the FMJ stuff. The absolute best stuff is made in America and Europe, in reloadable brass cases, but the price is easily double over the previously described options.

**Corrosiveness** Corrosive ammo gets its corrosive properties from the type of priming compound used in the cartridge. The formulation of non-corrosive priming compound is more expensive to manufacture, so for decades, the communist countries continued to produce corrosive ammo long after the western world had almost completely switched to non-corrosive types. The residue left in the gun after firing corrosive ammo leaves little microscopic salts from the primer compound detonating. These salts are hydroscopic, which means they begin to immediately draw in ambient moisture present in the air. Despite dry climates like here in Arizona, this condition MUST be addressed soon after firing, or “staining” (a rusting process) will occur very quickly, and is irreversible. (This is why chrome bores are so important, as the chrome resists staining better than bare steel.)

In the late 80’s and early 90’s, when almost all the 7.62x39 ammo being imported was coming from Cold War stocks out of China, East Germany, Czechoslovakia and Hungary, it was almost universally all corrosive. Demand for non-corrosive ammo eventually resulted in the demand being met. Today, the most common 7.62x39 ammo available through brands like Wolf, Tula, Ulynovsk, Brown Bear, Silver Bear, Golden Tiger,...are all non-corrosive. However, supplies of older corrosive ammo still turn up, often for a bargain price, so be on the lookout for it.
Use of corrosive ammo is fine, however, as long as care is taken to douche out the gun shortly after firing. It need not be a complicated affair. A simple spraying down with WD-40, or even Windex, will neutralize the salts and wash them away. Even dunking the rifle in water will achieve this, although be sure to dry and then oil the gun afterwards.

**Position Disclosure**  When shooting at the enemy, it would be nice to be able to do it unseen. At night, this is difficult to do if you have big muzzle-flashes telling the enemy right where you are. Use of the VORTEX flash suppressor listed previously in this text conquers any display due to the burning propellant, regardless of how bright it might be. But there is another property of ammunition that can produce a signature at night, and the VORTEX can’t do anything about it. This is the material construction of the bullet itself.

While traditional rifle bullets are copper-jacketed, or even sometimes given a jacket of brass (because brass is copper and zinc, and thus brass costs less than pure copper), the soviets (and other combloc countries) needed to make their ammo as cheaply as possible so as to crank out more of it. Instead of copper or brass, they developed a very soft and malleable mild steel material to substitute. It works fine for its intended purpose, but with one serious drawback. Because of the steel-on-steel contact when these bullets are fired, they produce a shower of sparks out the muzzle that make for quite a brilliant show. There is no remedy for this sparkler effect other than to use copper-jacketed ammo instead.

The ideal answer is for there to be non-corrosive ammo loaded in cheap and affordable disposable casings, with copper-jacketed bullets. At one time, Wolf was selling exactly this product. It differed from the standard Wolf packaging as you see in the picture below’
If you ever see the yellow-label ammo on the right in this photo,...buy all you can afford. It is rare now and hard to find. It combines the best of all the features you want.

But since that particular batch is unlikely to be had, the current next best deal is the Yugoslavian surplus. Brass cased, copper-jacketed, throwing the flat-based FMJ bullet and among the most inexpensive ammo currently available, the only drawback is that it is corrosively primed. It can also be had in unopened crates,...perfect for long-term storage. (Two different batches have been imported; 1970’s production dates, and 1990’s production. Obviously, select the 1990’s era ammo, if you can.)
Long-term storage  So now you are nearly complete in your essential AK47 knowledge. You have acquired the rifle, the accessories, the magazines,...and now you are looking for ammo. But you intend to primarily lock this ammo away for a long time in case of “what if”. Sure, you’ll have some on hand for using occasionally, but the “break glass only in case war” ammo,...what do we look for?

Fortunately, the various producers of the ammo in former communist countries still are in the habit of packaging it for shipping to the USA in the same manner as they did during the Cold War when they might be storing it for a very long time. This most often in the form of “spam cans”, steel cans that are hermetically sealed and require a giant can opener to get into.

The down side to this, however, is that the markings on the spam cans are usually still in Cyrillic type language, such as Russian, Yugoslavian or Bulgarian. Just be sure that before you put away for a long time, use a label-maker or grease pencil or permanent marker to mark it now, so you don’t wonder about it later.
A Quick Note On 5.45x39 Caliber AK74 Rifles

In recent years, the .22 bore Russian answer to the 5.56nato round used in the M-16 has been made available to American shooters. And along with it, AK rifles chambering the unique round. We will not get into here as to the merits of the 5.45 vs. 7.62 debate. Those reasons are fairly well known already. Essentially, only 4 brand names have been available in 5.45x39. They are;

1. Romanian WASR-3
2. Russian Saiga
3. Bulgarian (numerous name designations)
4. Polish Tantal

As the supply of genuine surplus rifle barrels imported into the US before the ATF instituted their policy of prohibiting them has dwindled, American makers have made the move to give shooters what they want, and new manufacture barrels have been produced. Many rifles were subsequently built with these USA-made barrels before a problem was noticed. The metric 5.45 bore measures out in SAE to .214 inch. But American barrel makers didn’t have hardly any metric cutting tools suitable for barrel making, so they approximated as best they could. It wasn’t good enough, and the bullets sent through these early barrels were not stabilized. They tumbled in flight, or “keyholed”, as it is known. The majority of the rifles built with these bad barrels were Polish Tantals, distributed through Century International. Once the problem became common knowledge, ALL Tantals were suspect. Perfectly good
examples were treated like the plague, because until it was purchased and fired, proper accuracy and functionality could not be verified. But then, if it was a bad one, it was too late. You rolled the dice and came up snake eyes.

As a result, the only rifles in 5.45x39 that can be trusted to be reliable functioning specimens, are either the Bulgarian or Russian produced rifles. Verify that it has a chrome bore and chamber, as the badly made early US production 5.45 barrels are bare steel. (And considering that the cheapest 5.45x39 ammo is surplus corrosive Russian stuff at half the price of new production versions, that’s just smart to begin with.)