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There are many reasons why men acquire Mil-Surp rifles. Some are collectors in the strictest sense of the word. They *never* shot their rifles. They buy them, preserve them, and research their history. Some men only collect guns in a certain genre; US rifles or Japanese rifles, etc. They may have a burning desire to get a complete collection of 1911's, one from every contractor who made them. The elusive Singer Sewing Machine Co. 1911 may be their nirvana.

While everyone wants a nice condition gun, a collector often buys a well-worn example to fill the gap in his collection, all the while looking for a cleaner one. When a cleaner example arrives; the lesser can always be sold off. For many collectors, the accuracy of a gun is a secondary consideration. (Note.1)

Most men who acquire Mil-Surp's *do* shoot their rifles. Many begin with one just one rifle. It may be because their buddy has one, or a certain model (and surplus ammo) is widely available.

Quite frankly, many non-Mil-Surp owners are surprised to see just how well some iron-sighted Mil-Surp's shoot. Especially when the Mil-Surp rifle is shooting as well, or even better then the scoped sporter the other fellow has! I've seen this time & time again. The

focal point of accuracy in any rifle *is* the barrel. A good barrel usually equals an accurate rifle. A badly corroded, burned out, or extremely worn barrel almost always means accuracy will be casual at best.

How many times have you been to a gun show, or gun store & the first thing to catch your eye is a sweet looking stock on a rifle? Perhaps it's that wave of black meandering slowly thru golden brown in the forearm, or fiddle back in the buttstock area. If you intend to shoot a rifle, don't let "eyewash" be your guide while looking to buy! Of course you're going to give the outside of a rifle the "once over". Look for obvious damage, missing or broken parts. Work the bolt & safety, trip the trigger etc. (Note.2) If all that passes muster, then remove the bolt and make the most important examination, the barrel.

Maglite® Solitare® makes a great bore light.

Maglite® Solitare® in a CZ-24 Mauser action.

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Maglite® Solitare® in a Mosin action.

This is where a bore light comes into play. Most dealers have one, but best to bring your own. The lighting in most gun shows is abysmal! Most “bore lights have a curved, clear plastic tip. They require being held in place no matter which end of a rifle you are examining. They are almost a requirement for checking a semi-auto rifle. For bolt guns I use something a bit different. I prefer a Maglite® Solitare®. This item is available from Wal-Mart for $4.96 + Tax. It will lay in the action of most popular Mil-Surp or civilian bolt guns while you examine the bore.

Put the light in from both ends. By shining it up from the chamber you can check the muzzle. Very often, an otherwise good bore is ruined by excessive muzzle wear in the first inch or two down from the muzzle. This is the result of bad cleaning techniques. Don’t be to put off by a dirty bore. Many times just passing a cleaning rod with a patch thru the bore will push out burnt power residue to display a nice bore with well-defined lands.

A shoulder bag is great to carry in a gun show. Besides the pull-thru & bore light, I carry copies of my C&R license, pens, a notebook etc. I also store small purchases in the bag.

Most dealers have a rod & patch at their table or store, but you can carry a pull-thru of your own. You can buy a commercial pull-thru, or, make one from heavy "weed wacker" line. .095 diameter line and a .30 caliber patch mike a fine pull-thru. Any dealer who refuses to let you put a pull thru or cleaning rod thru in a barrel is trying to hide something. Just smile, put down the rifle, and walk away from his table.

Be super critical when examining a bore. What's the over all condition? Is there a specific area that appears to be trouble? Once, I examined an otherwise nice rifle, but the first inch of bore behind the muzzle was badly rusted. The rest of the bore looked fine! Look for evenness in the lands & grooves. Do they appear the same height & depth the full length of the barrel? A wood handguard can hide a bulge in the barrel. Careful examination under a bore light can disclose a large spot inside the barrel.

Color isn't a critical factor. A shiny bore that is worn literally to nothing, just won't shoot! I examined a rifle like this once. The interior shined from chamber to muzzle. Unfortunately, just a faint vestige of the lands remained. The barrel was completely worn out. I simply put the rifle back on the dealer's table, thanked him, and walked away.

A barrel interior that is dark, but the rifling strong, can be an excellent shooter. A few **faint** pits don't spell doom for a barrel. However, be on the watch for literal rust ditches that eat away complete sections of the lands and leave deep trenches in the grooves.

A barrel that has a good appearance may be a bit roomy. Mil-Surp barrels tend to run to the large side of tolerance. Carrying a few lead bullets, each of a slightly larger size in your pocket can be used as a sort of "snap gauge". IF the bore is even from end to end, then inserting different lead bullets in the muzzle can tell you the approximate bore size. I did this recently with a group of Ishapore .303 Enfield NoI Mk3's. With 3 different bullet sizes, I was able to select the rifle with the bore size I wanted. That rifle is one sweet shooter too.

The lands of *some* Mauser barrels **may not** have sharply defined edges. This isn't wear; Mauser engineered it that way! They felt a softer edge would make cleaning easier. This was probably a hold over from black powder thinking. Not all factories used this technique in barrel production. Just be aware that an otherwise good Mauser barrel with **slightly rounded** edges on the lands may have been made that way.

Mil-Surp barrels can have anywhere from 2, 3, 4 5, 6 or 8 lands & grooves. The most common is 4 grooves with 4 narrow lands. In terms of practical accuracy, barrel condition and consistent sizing from end to end is infinitely more important then the number of lands & grooves.

The chamber end of a barrel bears special attention. Unfortunately, this is a hard area to examine. As closely as possible, look at the chamber. Does it seem concentric? Free from chatter marks from a poorly guided reamer? Free from rust or corrosion?

I've saved the best, or worse, for last. **The leade.** The leade is the hardest area to examine in a barrel. The leade is that area just ahead of the chamber that tapers to the lands & grooves. This is the area that a bullet starts in as it clears the end of the case mouth. This area is also subject to the most amounts of heat, pressure, gas cutting & fouling. Layers of powder fouling and jacket material can build up in succeeding layers causing real problems here. Often this area can be badly worn, while the rest of the barrel appears to be in fairly good condition. If just a minimal amount of wear is present in the leade, then simply seating bullets further out in case necks will restore accuracy in such barrels. However, if this area, and the beginning of the rifling are both in bad shape, accuracy will be very casual. Some barrels can be so burnt out in this area; it's simply not feasible to seat a bullet out far enough. A fellow I knew bought a South American contract Mauser in 7X57. He couldn't get it to group with 139-grain loads. I suggested he try 175-grain bullets; as that is the weight bullet the rifle was designed for. These wouldn't group either. He had been simply seating bullets to the cannelure. We checked how far a bullet would have to be seated to engage the rifling. There wasn't enough bullet length, even with the long, 175 grainers, to engage the rifling! Later he removed the barrel, and cut into the leade area with a hacksaw. The leade & rifling origin was simply burned out.

Let's recap the main points.

► Be critical when examining a rifle's bore, chamber & leade. If the rifle is a worn out, rusted wreck, don't tell the dealer, he already knows. Just smile, hand it back & walk away.

► A shiny bore doesn't necessarily equal good, a dark bore doesn't necessarily equal bad. Land & groove condition is more important then color.

► The number of lands & grooves in a barrel is secondary to barrel condition.

► The chamber & leade bear special attention. This is much easier to do in a Lee-Enfield then in a Mauser- type rifle

► An otherwise good looking bore can be roomy. Lead bullets of different sizes can be used as snap gauges in a rifle bore.

► Bring your own bore light and pull thru so you can examine the barrel properly.

There is never a guarantee a rifle is going to be a shooter. However, paying attention to the issues we've covered in this article will materially increase you chances of finding a good shooter.

Note 1
In my humble opinion, the *only* reason required to acquire any arm, Mil-Surp or otherwise is: **"I WANT IT".**
Note 2
There is no reason not to be allowed to dry fire a centerfire arm (at least once). If the dealer tells you not to dry fire a centerfire rifle, smile, put down the gun & move swiftly away from his table. The dealer may tell you not to drop the trigger on a rimfire arm. This is a legitimate request. Many rimfire arms can get the chamber dinged by tripping the trigger on an empty chamber. Carry a small container (old pill bottle) of .22 "Snap Caps" in your pocket or shoulder bag. Show the dealer you have a snap cap, and politely request to dry fire the rifle with the snap cap in place. If he says "*No*", once again, smile, put down the gun & move swiftly away from his table.

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