

RED'S MOSIN NAGANT M44 PROJECT RIFLE. BY RED BARBAROSSA

I would like to preface this article by stating that I am not a professional gunsmith and that any information stated or implied in this article is to be taken as amateur opinion and not based upon professional knowledge or professional experience. If you decide to duplicate the modifications I performed, you and you alone are responsible for the outcome. My goal is not to establish myself as a professional but to illustrate that for a modest cost and a bit of elbow grease, the average gun enthusiast can convert an inexpensive curio & relic rifle into an accurate hunting tool that will harvest everything from coyotes to deer sized and larger game.

That having been said, it is always advisable to have any curio and relic firearm checked by a reputable gunsmith before, and after you have performed any modifications. Remember too that curio firearms were designed for the ammunition of their time. If you decide to reload for your C&R firearm, pressures must be kept within certain limits in accordance with the quality of the steel that was used at the time of the arms manufacture. Exceeding pressure limits can lead to catastrophic failure of the weapon and serious injury to the shooter.

Your Basic Platform

The first thing you must do is decide upon a suitable platform. I chose the Mosin Nagant, Russian M44 carbine in 7.62 X 54R caliber because of its availability, simplicity and low cost. Since I have a Federal Curio & Relic FFL, I was able to purchase the rifle mail-order for a cost of under \$70.00 and have it delivered to my front door. Applying for a Federal Curio & Relic FFL is very easy and inexpensive. The cost of the license is only \$30.00 for three years and it allows the holder of the license to purchase Curio & Relic arms and have them delivered to their front door. If you don't have a C&R license, serviceable Mosin Nagant rifles can usually be found for about \$100.00 or so at sporting goods stores and local gun shows.

When my Nagant arrived, I was like a kid at Christmas. I was excited about opening the package but apprehensive about the advertised condition of the rifle. Well, I have to say that upon opening the box, I was pleasantly surprised. The rifle was advertised to be in very good condition and it was. The stock was near perfect, the bluing was 95% and the bolt face looked as though it had never fired a round. The bore looked pretty good at first glance and I was very pleased with my first C&R purchase. Alrightie then; now all that's left to do is tear it all apart.



The C&R Mosin Nagant Model 1944 Carbine, right out of the box.

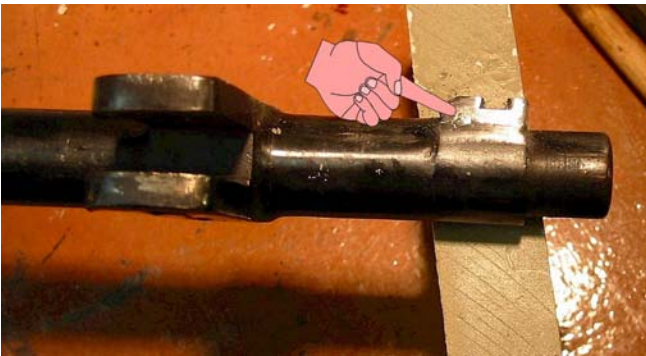
This was my first experience with this particular model of rifle so there were some lessons learned. I will point the "learned lessons" out along the way so you won't have to make the same mistakes. My first job was to strip the action from the wood stock and remove all of the bayonet and sight fixtures. This seemed like an easy enough process but in retrospect, I should have done some additional research on the web before touching anything. The photo below shows the action removed from the wood.

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The simplicity of the Mosin Nagant M44 action is illustrated above.

The next step was to remove the front sight and rear sight. The front sight is held in place by two pins. The following illustration shows the forward pin. Both pins were not easy to see and were blended into the metalwork very well.



Here is the location of one of the front sight/bayonet assembly retaining pins.

After removing the two pins that secure the front sight/bayonet assembly, you'll need to heat the assembly a bit with a propane torch and then use a wood block and a hammer to tap the assembly off the barrel. I jammed some wet wood dowels into the barrel prior to heating the sight/bayonet assembly area to keep the barrel itself from getting too hot.

I had some difficulty driving out the two pins that retain the front sight/bayonet assembly on to the barrel. They've been in place for many years and the cheapo Chinese punches I was using bent and failed quickly. I had to use a good quality, hard steel drill bit as a punch and finally the pins began to move. It's also very important to secure the barrel while attempting to drive the pins out. The next photo shows the end of the barrel with the sight and bayonet assembly removed. You can also see the location of the second pin that holds it on the barrel.



Location of the front sight assembly, rear retaining pin.

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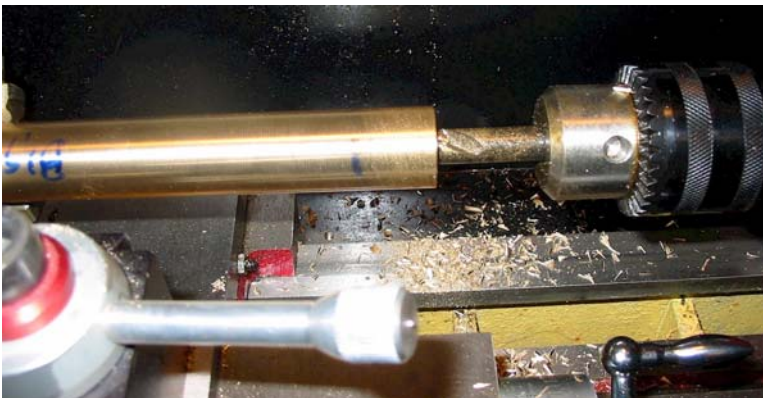
The next thing to do is to remove the pins in the rear sight and remove that assembly by sliding it forward. The location of those pins is a lot more obvious so I won't point it out with a photo. The rear sight pins gave me some trouble too but persistence pays and before too long I was able to slide the rear sight assembly towards the muzzle and off the barrel.

Now, you're left with a section of the barrel that is stepped. I have seen other sporter conversions of the M44 and the barrel was simply left this way. I did not want to leave it that way for several reasons. Consider the fact that the M44 fires the 7.62 X 54R cartridges and it packs a bit of a punch. As far as its size is concerned, it's between a .308 and a 30-06. Therefore, I thought a muzzle brake would be a welcome addition. Since I am fortunate to have a Mini-Lathe, I thought I'd put it to work and make my own muzzle brake.

Since the rifle has such a short barrel and fires a respectable round, I thought it might be good to have a bit of weight down at the muzzle end. I decided to make my muzzle brake out of some 1-inch brass bar stock I had.

The area of the M44's barrel that is stepped measures about 3.75" so I decided to make the brake about 5.25" overall and have 1.5" of muzzle brake exhaust holes. I wanted this much brake to barrel contact because I did not have a means to accurately cut threads in the brake and on the barrel. I decided that I would bore out the brake until I had a very snug fit to the barrel and then use two 1/4 X 20 set screws to hold it in place.

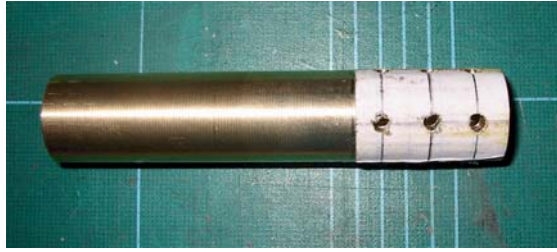
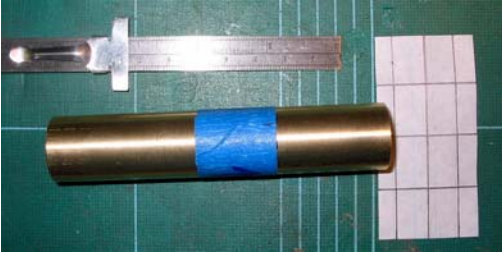
The first step was measuring the overall length of the desired brake and cutting the brass bar stock with a hacksaw. I then set the bar stock into the lathe and faired the end cut from the hacksaw with a tool mounted on the lathe. Next, I bored out the business end of the muzzle brake using a 3/8" size drill bit. I wanted to make sure the bullet would not make contact with the brake as it left the barrel. I drilled completely through the brass stock to make room for the lathe's boring bar. The boring bar's bit would remove just enough material to smooth the inside of the brake and allow the brass stock to fit snugly on the barrel. Using a boring bar is a slow process but multiple passes allowed me to remove just enough material for a tight fit.



The lathe drilling the brass bar stock for the bullet exit and room to insert the boring bar.

Next, I took the rough brass stock piece and did the layout for the muzzle brake exhaust holes. This was done on a piece of paper and then the paper was sprayed with adhesive and wrapped around the barrel to index the holes for a center punch.

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The next step was to drill two holes in the rear of the brake to tap for $\frac{1}{4}$ X 20 stainless set screws to additionally anchor the brake to the barrel. After the holes were drilled and tapped, shallow anchoring holes were drilled into the barrel where the set screws would engage the barrel. The set screws will be below the surface of the brake when installed and filled to flush out to look.



Rough turned and dry fit for a final inner diameter check.

The next step was prepping the end of the barrel to accept the muzzle brake. The barrel was roughed up considerably and index marks were made for center reference on the barrel and the brake. A wood dowel was inserted tightly into the barrel to plug it and not allow any retaining compound to enter the barrel.



The barrel is ready for the brake installation. The seat holes for the setscrews are not visible in this photo.



This photo shows the brake, fitted to the barrel. The end of the barrel is $\frac{1}{16}$ " short of the first set of brake holes.

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The brass stock was put back in the lathe for final outside turning and crowning touches. Next, the barrel and the inside of the brake that comes in contact with it were lightly buttered with JB weld and the brake was tapped on to the end of the barrel with a wood block and a mallet, carefully making sure the muzzle brake exhaust holes were indexed properly. Next, the action was sanded and all the other parts were made ready for painting. Once cleaned and degreased, the action and other parts were sprayed with Krylon anti-rust, satin black paint.



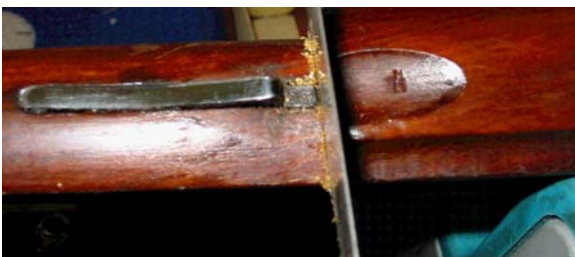
After waiting several days for the paint to harden up, it was time to install the new ATI aluminum Picatinny rail style scope mount on to the receiver. This process was not difficult but you must make sure the rail is located exactly square on the receiver. ***If your mounting is off, the rail's base will interfere with the bolt's operation. Measure carefully and check the bolt clearance before center punching your holes for tapping the receiver for the scope rail fasteners.*** Dry fit your parts using double faced carpet tape and check the bolt clearance before center punching the receiver for the scope rail mounting screws. Mine just clears and I didn't even think about the bolt clearing the rail's mount until after completing the project and sliding the bolt in for the first time. This could have been a total disaster if my measurements had been off by a hair. I quickly and humbly said a silent prayer of thanks. After thanking God for saving my bacon (again), I mounted a Sightron 3 X 9 scope that I had in my gun safe.

Now it was time to put this baby together and admire my work. I assembled the action into the new ATI composite stock and tightened everything down. I immediately noticed two problems. The stock was not exactly true (at the fore end) and there was too much barrel to stock contact. Also, when I tried to insert the bolt, it was binding in the action. That meant that the action area in the ATI stock was warped or not accurately manufactured so when the action was tightened down, it was actually being bent. I figured I'd relieve the barrel channel and bed the action into the stock. That should cure the problems.

To make a long story short, I tried everything to fit the action into the new ATI composite stock and nothing I did worked. It was way too flexible for my taste and after trying it out at the range and noting my group size, I decided upon an alternate plan. Good-bye ATI composite stock.

I noticed that the original Mosin Nagant stock was in excellent shape so I decided to cut that stock down and use it. The original wood stock has metal inserts to strongly support and align the action so in essence, I should have used it to begin with and saved myself the \$65 bucks I spent on the ATI stock. Live and learn.

To alter the old stock, I used a Japanese pull-saw to make my cut just behind the forward section taper. This allowed me to then gradually round the edges with 80-grit sandpaper and fine sand the shape to where it looked natural.



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Cutting the stock down.



The photo above shows the metal inserts in the original Russian stock. The photo also shows that I had to remove some wood (love that Dremel tool) at the front and rear of the trigger area for the new Huber Concepts adjustable trigger. No biggie, a five minute job.

After cutting down the stock and shaping the fore end, I inserted the action into the old stock and tightened the action screws. All was fine and the **Jim Robert modified bent-bolt** glided into the receiver like a hot knife through butter. Next was the installation of the Huber Concepts, adjustable trigger.

The Mosin Nagant trigger assembly is a very simple mechanism but the original trigger pull is horrible. Something had to be done. **Enter Huber Concepts.** This company manufactures triggers for a variety of Mil-Surp firearms and installing and adjusting the Huber Concepts trigger on your Nagant is within anybody's mechanical aptitude. One pin is removed, the old trigger taken out and the Huber trigger installed. Replace the pin, follow the adjustment instructions and now you have a match-grade, sweet trigger on your new Nagant sporter. This operation could not be simpler and the Huber Concepts trigger is worth every cent I paid for it.

While we are on the topic of value and great workmanship, the name Jim Robert comes to mind. Jim, otherwise known as "Boltman" will take your original Mosin Nagant straight bolt and convert it into a bent-bolt design. He even offers a selection of styles so you can pick the exact bend-style of your choice. When I got my bolt back, it was a shiny work of art that glided into the receiver and totally enhanced the look of the rifle. It also allowed me to use a receiver-mounted scope mount instead of a scout style, bolt-on type.

Upon fitting the action into the original cut-down wooden stock, I did decide to relieve the barrel channel and free-float the barrel. So, I removed the action from the stock and used 80-grit paper wrapped around several different sized wooden dowels to get the exact fit I wanted. After sanding and checking the fit about ten times, I had everything fitting perfectly and the barrel was free of any stock contact.

The next step was fine sanding the entire stock and laying down about seven coats (sanding with 220-grit between coats) of satin finish Varathane. The old stock came out looking very nice. I remounted the action, tightened all the action screws and I really liked the end result.

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You'll notice that the brass muzzle brake is now polished to a bright finish. I found that after firing the rifle at the range, the paint was being blown off the muzzle at the exhaust port areas. So, I pimped it out and polished the brake to a mirror finish. I can always dull it for hunting trips.

I now have a very nice, lightweight, 5-shot, easy handling sporting rifle capable of taking just about any type of game in North America. I have some sling swivel studs coming and that will complete this particular transformation. The following is a list of suppliers and parts that contributed to the rebirth of the old 1944 Mosin Nagant.

Mosin Nagant M44 Carbine	\$69.95
Huber Concepts Match Trigger http://www.huberconcepts.com	\$69.75 (<i>almost the cost of the rifle</i>)
Jim the Boltman (a great guy) http://www.mosinnagant.net/Boltman/Boltman.html	\$55.00
ATI scope mount & bent bolt kit (\$37.00) (I sold the bent-bolt kit parts on ebay for \$17.00)	\$20.00
Brass bar stock	\$12.00
Misc. varnish, etc.	\$10.00
TOTAL	\$236.70

After all is said and done, I am very happy with this project rifle. I can't wait to get out and shoot it again. It was garage time well spent. Now, on to the Ishapore .308 Enfield project.