



*Click on any of the images below to see a larger version of the image.*

### The idea!



I had this really great idea (*at least I thought so*) for a range report. I now own four different battle rifles, all chambered in 30-06. I thought it would be great fun to take all four out to the range and stage a competition.

I even came up with a catchy title - **"Battle of the Americas"**.

This title came to mind because all four rifles were issued and used by troops either in the U.S. or South America (*Garand, 03A3, model 1917, and the Madsen*).



The test was not going to be very scientific - just three shooters, shooting each rifle at different ranges, using the same exact ammunition, while recording their scores.

### Some assumptions about my choice of ammunition:

1. *I figured that most of the surplus 30-06 ammunition that is on the market today was designed to function in the Garand;*
2. *The M2 ball is a 150 grain FMJ Spitzer;*
3. *I have used ammo loaded for my Garands in my 03A3 and have achieved excellent accuracy;*
4. *It would be reasonable to assume that what works in my Garand would work fine in the other rifles as well.*

### Mini-History of the 30-06

The 30-06 was adopted in 1906 as the "Ball Cartridge, caliber .30, Model of 1906". The nomenclature was eventually shortened to the well known "30.06". Ironically the original military round used in WWI was a 150 grain bullet.



To prepare for the event, I spent several evenings in my garage, loading 500 rounds of 30-06 ammunition. I had earlier purchased 500 each, 150 grain bullets. I had originally planned to use these bullets to load rounds

for my Garands.

I used my usual recipe for a 150 grain bullet:

Component	Weight
<b>FMJ Spitzer Bullet</b>	<b>168 grains</b>
<b>IMR 4064</b>	<b>51.2 grains</b>
<b>Remington Primer</b>	<b>Large Rifle</b>
<b>Winchester Brass</b>	

My Garands can eat this stuff all day long and always print groups that are worthy of my garage's **"wall of fame"**!

Let's see....48 targets and 4 hours of shooting (15 minutes per target, per person) would be required to complete the competition.



It does not take me long to shoot 5 rounds into a target. My range/club has 15 minute shooting periods. I have found that I spend a lot of time (while I am working on *Surplusrifle.com* range reports or articles) sitting and waiting to walk down range to photograph my targets.

Once I did the math as to what the competition would actually require, I really had to ask myself - **"why was I doing this?"**.

Then one of the shooters was a **"no-show"** (they must have done the math as well). To top it off, the day I picked to shoot the competition was the first day of the year that reached over 100 degrees. It was HOT!

So Tony and I decided not to have a competition and just have some fun instead.

We decided to test out my newly acquired model 1917. I definitely had plenty of ammo, targets, and time on my hands.

### The Weight of Things



At first when I picked up the model 1917, it seemed like the heaviest battle rifle I had ever hoisted.

I performed the obligatory, non-scientific test of holding one rifle in one hand while holding the model 1917 in the other (*the human scale*). I discovered it was about the same weight as the other rifles that I had brought with me (*Garand, 03A3, etc*).

When compared with the weight of other U.S. battle rifles, the model 1917 comes in second in overall weight as the table below shows.

U.S. Rifle or Carbine	Weight
<b>U.S. M1 Garand .30 Rifle</b>	<b>9.5 lbs</b>
<b>U.S. Rifle, model 1917</b>	<b>9.2 lbs</b>
<b>U.S. Model 1903A3</b>	<b>8.6 lbs</b>
<b>U.S. M1 .30 Carbine</b>	<b>5.7 lbs</b>

Being a person with an adventurous spirit, I once took a Garand on a wild pig hunting trip (*remember the word "adventurous" is a code word that translates to - "idiot"*). It was early spring-time and the Central Coastal California fields were very muddy. I found that my feet would easily sink and get stuck, while trying to chase after my prey. In a very short time, my feet were encased in mud. I had to chuckle as I looked like I had huge clown shoes made of mud. I finally got a chance to take a shot at a very large wild pig and missed. I tried running through the mud while hauling around the Garand. I can attest that I soon gained an everlasting and heightened respect for anyone that actually carried a Garand in combat. After a while, I felt as though the rifle weighed a 100 pounds or more and I really did not care if the pig got away.



My point is?

The downside of a big heavy battle rifle is - **"it is a big heavy rifle"**.

On the other hand, I have also discovered -

The upside of a big heavy battle rifle is - **"it is a big heavy rifle"**.



What I mean by this is - big heavy rifles are easier to handle while shooting because they have less noticeable recoil.

When comparing the recoil of the 1903A3 to the model 1917, there is a noticeable difference. Although I dearly love and enjoy shooting my 03A3, it does have a healthy kick to it. It is not to the point of being uncontrollable, I would say it is manageable. The model 1917 has some definite girth and also has a 2 inch longer barrel and 3 inch longer overall length than the 03A3. I believe this does help reduce overall perceived recoil.

### Mini-History of the Model 1917

*When the United States prepared for WWI, there were shortages of the model 1903 Springfield.*

*The '03 manufacturing was not able to keep up with U.S. demand for armaments.*

*The U.S. companies of Remington, Winchester, and the Remington-Eddystone Arsenal, had just completed contracts for model 1914 Enfields, for England and were able to retool the existing manufacturing facilities to produce the model 1914 in 30-06. Thus the model 1917 was born.*

*The model 1917 was phased out at the end of WWI and replaced by the model 1903.*

### Light and Heavy Shooting

Once I started shooting, I was surprised that my model 1917 was not performing as well as I expected it would, in the accuracy department.



I was achieving the same mediocre accuracy at short distances as I was at the longer distances. I was able to keep almost everything in the black, but the spread was considerable. If I had to compare to another rifle, I would say it was comparable to my Garands and not really what I would expect from a well crafted bolt action military rifle.

I had my 03A3 with me and as a test, I tried shooting the same ammo at the same distances as I had with the model 1917. It performed exceptionally well.



Tony and I both experienced the same level of accuracy with both rifles. So, I was able to determine that it was just not my poor marksmanship at work here.

I just happened to have a couple Garand enbloc clips of rounds loaded with 168 grain bullets.

The 168 grain cartridges were loaded with the following recipe:

Component	Weight
<b>FMJ Spitzer Bullet</b>	<b>168 grains</b>
<b>IMR 4064</b>	<b>41.4 grains</b>
<b>Remington Primer</b>	<b>Large Rifle</b>
<b>Winchester Brass</b>	

Both the 150 grain and 168 grain cartridges were loaded using recipes that I had acquired from the book - ["COMPLETE M1 GARAND: A Guide for the Shooter and Collector" by Jim Thompson](#) .

Desperate for the redemption of my recent investment, I tried the heavier rounds in the model 1917 and was pleased to find much tighter groups at both short and long distances.

#### NOTE:

*It is important to note that the experiences here are not known to be true of all model 1917 rifles. For all I know most model 1917 rifles provide excellent accuracy using the 150 grain bullet. It would make sense - since this is the cartridge that was used during WWI.*

*Mine did not. I will attempt to execute a more extensive study to find the best load for this rifle.*

When you compare **figures 10** (typical grouping of 150 grain cartridges) and **figure 11** (typical grouping I produced with the 168 grain cartridges), you find a noticeable difference.



A very noticeable difference.

Both cartridges were loaded using the same powder, primers, and brass. The only variance in the recipe was the amount of powder and the weight of the bullet.



I am really glad that I had the heavier cartridges with me as I was starting to think I had purchased a **"Closet Weight"** (a **"Closet Weight"** is similar in functionality to a **"Paper Weight"**, but is a rifle that sits in the closet - never to be brought out or ever to be used).

**Figure 11** shows the model 1917's accuracy with the heavier bullets. I found this grouping to be comparable to any my 03A3 is capable of producing. According to books I have read, the primary round carried in WWI was the 150 grain bullet. I guess that it would have been difficult and not efficient for the army to try and supply cartridges with different weighted bullets to troops in WWI. One bullet weight for the 1903 and one for the 1917.

### A Little About the Rifle



At first glance the model 1917 seemed overly large, awkward, or gangly in appearance. This opinion wears off quickly as you learn to appreciate the ergonomics and functionality of the stock, bolt handle, and safety lever (and the rest of the rifle's features).



The bolt is the **"cock on close"** type following in the footsteps of other famous Enfield rifles (*No.4, Mark III, etc*). It is bent and swept back to the rear, (as shown in **figure 13**) with a hollow ball. One downside to the bolt is it does not

have any type of cocking knob. The bolt can only be cocked by opening and closing the bolt.

The safety is on the right-rear of the receiver (as shown in **figure 14**) and has two positions. Forward position allows the rifle to be fired. With the safety moved to the rear, the rifle cannot be fired and the bolt is locked in place. The safety is very simple to operate as it can be



actuated by the thumb of your right hand without moving your fingers too far from the trigger.



I think the model 1917 has one of the better sight pictures of U.S. battle rifles. The rear aperture size seems a little too large for my taste, but workable. Despite this fact I find the sights are easy to use and easy to ascertain the

sight picture of the desired target. The aperture is very close to your eye. The only other critical comment I would make, would be that the rear sight does not allow for windage adjustment. This is kind of an issue because drifting the front sight is not as easy as other mil-surp rifles.

The front sights are often staked down and you need to break the sight free before adjusting. Then stake it back so it does not drift on its own. Both the front and rear sights have very distinctive and large wings or guards that protect the sides of the sight (as shown in **figures 13 and 16**).



#### Definition: Staking

**Staking** is a method of fastening by squeezing protrusion formed in one part inside a hole in the second part, and then deforming the protrusion. The act of deformation causes radial expansion of the inner part and locks it in the hole.

#### The rear sight is used two different ways:

1. *With the sight lifted it functions like a typical gradient style sight. On the right of the sight is a sight catch that when depressed allows the sight aperture to be moved up and down the sight's gradient depending upon the desired range. The gradient ranges from 200 to 1600 yards. Graduations are in increments of 100 yards from 200 to 900 yards, and in increments of 50 yards from 900 to 1600 yards.*
2. *When the rear sight is laying down, the model 1917 sight is a **battle sight**. The range of the **battle sight** is set at 400 yards.*

When I picked up my model 1917, the stock was a little

dinged and the lower (rear) hand guard was a much lighter color than the rest of the stock.

I cleaned the stock with soap and water.

Then I took the lower hand guard and applied a couple coats of dark walnut stain and then let it dry over night.

The next day I applied a couple of coats of boiled linseed oil on the lower hand guard, that I had just stained.

When it had completely dried, it was almost identical in color and finish to the rest of the rifle stock.

I then took some [Watco Rejuvenating Oil](#) and rubbed down the rest of the stock components (*upper hand guard and stock*).

When I was finished she was something to be proud of!

**jlm;)**

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