



Views of an FR-8 Mauser

By [Mark Trope](#) & [R. Ted Jeo](#)

NOTE

This article has been modified on 1/20/2004 after new information was presented by one of the readers. Being that the reader gave specific references and even images of manuals, I felt it prudent to update the information on the history of this unique and marvelous rifle.

WARNING!

There is a LOT of back and forth banter as to whether the FR8 is safe to fire full load 7.62 NATO or .308 Win ammo in. As we have no control over your rifle, ammo and shooting habits, there is no implied or otherwise stated fact that YOUR rifle is safe to use. When in doubt, have a qualified gunsmith check it out. Here we present information gathered from sources on the web and combine them with our OWN rifles, ammo and shooting experiences for your information only.

Okay, so I have to admit up until about 8 months ago, I did not know what the hell an FR-8 Mauser was. I just thought, well, a Mauser is a Mauser is a Mauser. You know the picture, bolt action, long barrel, internal magazine well, shroud type safety, etc. Well, that was until I kept hearing about how Mark won this match, or that match, or wiped out all the silhouettes and how easy the FR-8 Mauser was to shoot. Okay, I said to Mark, send me a photo, which he did.

When I got the photo, the first thought that came to mind was a line from an episode of Saturday Night Live, hosted by Steve Martin back in 1980. The skit featured Steve Martin and Bill Murray. All they did was look oddly at "something" and kept saying..."What the HELL is that?" Well, that is what I thought of the FR-8. Which Bubba gunsmith got a hold of this poor rifle and did this to it?



The front end of the FR-8 could pass as something off of a modern day assault rifle, but the back end.....



The back end of the FR-8 looks like it came right out of the trenches of WW1.



A whole view of the rifle reveals a tight, compact carbine that is a joy to shoot.

When you look at the rifle, you see the front end that looks modern, like an assault rifle. Most of the ones that I have seen are even Parkerized. Even the bolt is Parkerized. In my particular rifle's case, I had to use a Dremel polishing tool to remove the Parkerization on a few points on the underside of the bolt that was causing the bolt to ride rough. It has a flash hider, it has a front post sight that is not a blade, it has something that looks like a gas-op tube under the barrel. BUT, then you see the back half you think.....well. World War I! Like, a straight handled bolt action, a straight military wood stock, stripper clip loaded, 5 shot internal magazine. Okay...so it looked strange, but it looked INTRIGUING. So off to the World Wide Web I went.

Turns out that the FR-8 is exactly as I thought, a half 20th and half 19th century rifle (*sort of*). Back in the 1950's, the Spanish government was working with CETME (*Centro de Estudios Tecnicos de Materiales Especiales or center for the study of technical materials*) to develop an assault rifle for its armies. German weapons

designers working with CETME developed the so called CETME assault rifle, which was later to become the G3 rifle for the German army. Without going into a complete history of the CETME assault rifle (which this article is not about), the break down is such. The CETME model A and B were designed to shoot the so called 7.62mm CETME round, a lower powered version of the 7.62 NATO. This is not to say that the CETME round was developed from the NATO round, but, rather, it seems the CETME round was developed independently from German WW2 data/experimentation/modifications of assault rifle development. The model C CETME rifle was designed (modified) to shoot 7.62 NATO ammo.

7.62mm NATO vs. .308 Winchester

Okay, the big question, the question that always comes around...

7.62mm NATO vs. .308 Winchester

The same?

In a nutshell. No. Maximum pressure ratings for the two are not the same, the NATO round is rated at 50,000 psi (Cartridges of the World, 9th Ed). The .308 commercial is rated at anywhere from 52,000 to 62,000 psi depending on the source of the information. Even the units and methods of testing are not the same.

The idea here is this. The FR7 and FR8 were designed to shoot the 7.62 NATO round, not the commercial .308 round. If you reload, you can easily keep your loads below the max. If you want to shoot mil surp ammo, use NATO approved rounds. If you want to use commercial loads...DON'T.

Also, if you reload for this rifle and use military brass, do note that nearly every reloading manual out there recommends reducing loads because military brass has less internal volume because of thicker walls and bases.

Of course, this entire issue is still dependent on the condition of your specific rifle.

I have gone so far to make sure that when I reload .30 caliber ammo, I mark it as "7.62 NATO" or ".308 Win" depending on which brass, load and rifle I loaded it for.

For more information go to:

<http://www.gunboards.com> (and do a search in the message boards)

<http://www.fulton-armory.com/308.htm>

http://www3.sympatico.ca/shooters/7_62vs308Pt2.htm

So, Spain was in the process of implementing the CETME assault rifle, but there were not enough of the new assault rifles around for issue and training. They did, however, have gobs of old Mauser bolt actions (1916 and

1943 models). They developed a rifle that not only could be used to arm non combatant and “Guardia Civil” troops, but also would fill the gap in training purposes until more CETME assault rifles were on line. Hence, the FR-7/FR-8 was born. These rifles were designed to shoot the 7.62mm NATO round. It has a “similar” front end as the CETME assault rifle (*gas tube is on top on these rifles*) but is a bolt action. Interestingly, the sights on the FR-8 are quite similar to that of the assault rifle, that is, a rear peep sight that is adjustable and a front post, very similar to what is on an AR-15 today. On that note...don't you think the bird cage flash hider looks familiar to the AR's? It is possible that the AR's may have gotten its bird cage flash hider from the FR-8, which, in turn got it from the CETME assault rifle. The birdcage flash hider is actually designed to fire NATO rifle grenades. As a side note, a standard AR muzzle cap fits on the FR8.



FR8 with inert rifle grenade attached.



Close up of FR8 flash hider.

Technical Data

Model: FR-8 (Fusil Refromando No. 8, or Modified “musket” number 8)

Caliber: 7.62 NATO (.308 Winchester) (NOTE: read warning above)

Weight: ~7.5 lbs

Total overall length: 39 inches

Barrel length w/flash hider: 19 inches

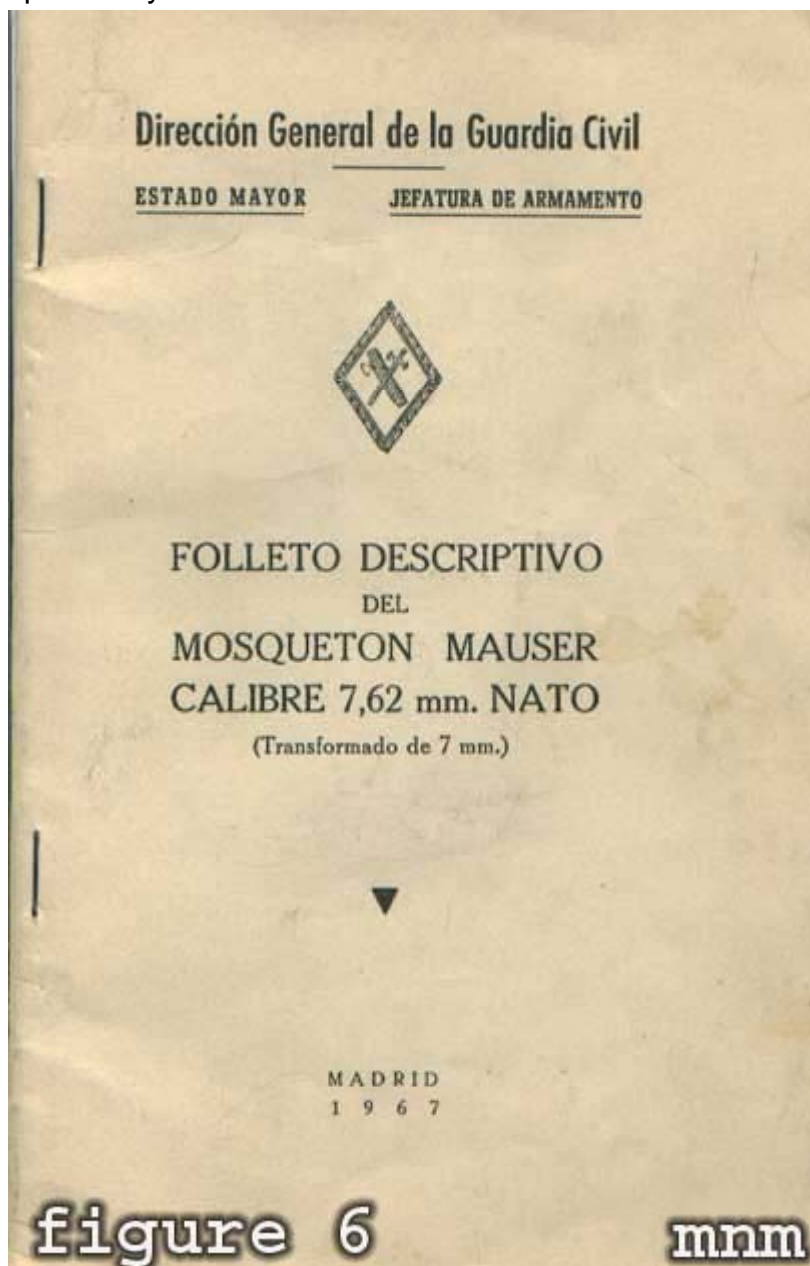
Rifling: right hand, 4 groove, 1:12

Magazine: 5 rounds

Rear sight: Adjustable for elevation peep dial

Front sight: Adjustable for elevation/windage eccentric post.

Now, this being said, I have to mention something about the FR7 rifle. The two look very much alike, however, the FR-7 was developed using the 1916 Mauser actions. This action has two instead of three lugs on the bolt. The current controversy that I have seen going back and forth is that this action is “weaker” than the FR8 1943 action and therefore you should not shoot 7.62 NATO ammo in it. This appears to be totally wrong. As mentioned above, the FR7 was designed to shoot the 7.62 NATO round. The M1916 Guardia Civil rifle (*also made from the old 7mm 93/95 action*) is also rated for the 7.62 NATO round. See the cover of the manual where it specifically states “7.62 NATO”



Cover of M1916 Guardia Civil manual translation: Main directorate of the Civil Guard General Staff headquarters of armament. Descriptive pamphlet of the Mauser musket (rifle). (transformed from 7mm).

FR-7 vs. FR-8

FR-7	FR-8
<i>Uses 1916 Mauser action</i>	<i>Uses 1943 Mauser Action</i>
<i>Bent bolt handle</i>	<i>Straight bolt handle (usually)</i>
<i>Caliber 7.62 CETME</i>	<i>Caliber 7.62 NATO</i>
<i>Straight stock grip</i>	<i>Pistol grip stock</i>
<i>Bolt uses 2 locking lugs</i>	<i>Bolt has 3 locking lugs</i>
<i>Bolt has flat base</i>	<i>Bolt has round base</i>
	<i>Fore stock has finger grooves</i>

The rear sight has a dial selector that allows for the choice of apertures for 200, 300 and 400 meters as well as an open "V" notch for 100m. Interestingly, the choice of which distance aperture to use does not change the diameter of the hole, rather it moves the hole either up or down according to distance. Starting with the sight at the "V" notch (100m) position, turning the sight counterclockwise one notch goes to the 200m aperture, turn it again counterclockwise and you go to the 300m aperture. If you turn the sight back to the "V" notch and then turn it clockwise, you get to the 400m apertures. Very ingenious, huh? Ah, but it gets better.



Looking toward the back end of the rifle, note the dial peep rear sight. Also, note the side mounted sling attachment.

The front sight is a pointed post, much like the original AR-15 sights. The interesting thing about the front sight is that it is eccentric in nature, that is, as you screw it up or down it also moves left or right. The post is off set to one side of the thread of the screw. A special tool is needed to move the sight which can be gotten from TAPCO.COM. Thus, this rifle can be adjusted coarsely for elevation using the rear sight and then "fine tuned" for elevation and windage using the more adjustable front sight.



Use of the TAPCO.COM CETME front sight adjustment tool.

They also added the “gas” tube under the barrel. Turns out, this tube is actually a mounting point for the bayonet and serves as a storage tube. I do not have a bayonet for the rifle, but the CETME model C bayonet fits the FR8 rifle. The tube has no functionality at all for the operation of the rifle. I have heard that it was used to carry a cleaning kit, but I have also heard it is used to carry cigarettes also. I keep my front sight adjustment tool in mine. Weight of the overall rifle is about 7 lbs or so. The stock has a side rear sling as well as a swivel under the buttstock in the traditional location. There is a front sling swivel also.



Taking apart the “fake” gas cylinder reveals a clever place to store a cleaning kit, or, in this case, the front sight adjustment tool.

There is some speculation as to why the rifle is designated “FR-8”. The FR is pretty much agreed upon that it means “Fusil Reformado” or “Modified Musket (Rifle)”. The numbers 7 and 8 are a little more controversial. Some say that they come from the original caliber of rifle converted. That is, the FR-7, which came from the 7mm 1916 rifle and the FR-8 which came from

the 8mm 1943 Mauser rifle. Another theory is that the numbers reflect what military regions the rifles came from in Spain. I am thinking that they tried to make an FR-1 through FR-6 but failed at their attempts. Is that not how military numbering works?? (ha ha)

Home of the FR8

La Coruña (or A Coruña) Spain

(*ã kōroo´nyä*) , formerly *La Coruña* , city (1990 pop. 256,579), capital of *A Coruña* prov., NW Spain, in Galicia. It is a busy Atlantic port, a distribution center for the surrounding farm area, and a summer resort spot. It has shipyards, metalworks, an oil refinery, glass and ceramic plants, and an important fishing industry. A *Coruña* reached its height as a port and a textile center in the late Middle Ages. The *Armada* sailed from its harbor in 1588. The city was sacked by Sir Francis Drake in 1598. In the Peninsular War it was the scene of the battle (1809) in which Sir John Moore was killed. The city was a focus of antimonarchist sentiment during the 19th cent.

Chief landmarks are a 13th-century church and the Roman *Torre de Hércules*, now a lighthouse. Glazed window balconies, or *miradores*, are characteristic of *A Coruña*. It is the site of an arsenal and army garrison. The city is also spelled *Corunna*.

Source: Encyclopia.com

Mark has been using his FR-8 for several years in military rifle silhouette matches that they hold at his club in Lubbock. He reloads for these matches using cast bullets. In a separate article on this website ([Cast Bullets- How Filler Improves the Breed!](#)) we actually go about reloading the ammo that he uses in the matches, including using a filler in the case.

Mark's rifle club has a lot of mil surp Shoots. The match director is quite creative when it comes to developing new mil surp matches. Consider this, most of the fellows have families, and trying to convince their "Domestic Engineer" (*Wife*), that a new, \$900.00 rifle is needed for a particular match may be a bit dicey. Getting clearance for a relatively inexpensive Mauser is fairly easy. So, when a mil surp, cast-bullet-only Silhouette Match came into play, he wanted a short, handy, aperture sighted rifle. The FR8 exceeded all his expectations! With properly assembled cast bullet hand loads, knocking the iron critters over is easy with the FR8. The rifle balances about perfectly, so you don't get tired during the firing relay. Once the sights come on target, it's a lot easier to hold them then with some other rifles. His FR8 is in the "never sell or trade" category.

I reloaded about 50 rounds using the technique we describe in our other article (<http://www.surplusrifle.com/shooting/castfiller/index.asp>) and headed out to the range. It happened to be deer season sight in days at the club and I managed to turn lots of heads when I hauled out this oddity amidst all the

civilian deer rifles. I managed to turn more heads once I started shooting, for a few reasons.

Our range has 25, 50 and 100 yard target stands. At the time I started, only a spot on the 25 yard was open. I got some raised eyebrows when I managed to place all shots but one touching each other just off to the left of the bullseye. Recoil was very easy to manage. I would think that full military loads may be a different matter. The other reason I got looks from other shooters was that the buffer we used in our reloads gives off a very distinctive "burnt plastic" smell when you shoot. Finally a spot at 100 yards was open so I hopped over and got a few more rounds off. The shots were a bit high and still to the left (*I did not do any sight adjustments*), but formed a 2-2 ½ inch group. The final test was to shoot at steel swingers out at about 160 yards in an unsupported offhand stance. That was just plain down right fun! The rifle shouldered with ease and the sights are superb for a mil surp rifle. I started with the large 3 foot circular gong and worked my way down to the 12 inch wide gong. Once I figured the correct sighting for the distance, it was easy to "ring the gongs". As many of my club members said when they picked it up, a well sized and weighed rifle for a brush gun. (*Now WHY would anyone want to use a mil surp for hunting..?*)



25 yard target showing 6 shots all touching (except one)



100 yard set up. Spotter target in front shows 4 shot group.

Now this is not a rifle that you go and pick up from such places as Century Arms or Southern Ohio Guns. It is actually pretty rare from what I can determine. I have seen a few on online auction sites which looked in pretty good condition. Selling prices ranged from \$200 and up. I had run across only one in a gun store, that one was going for \$160 and if I did not already have one AND could have managed to sneak it back home, I would have picked it up. All of the ones that I have seen have been in very good or better condition. It seems that these rifles were not used for long and then were correctly stored for the long term in arsenals before being released in the 1980's. Interestingly, these rifles are hard to come by in Spain. Now, would I stay away from the FR-7? Nope. If I did not have an FR-8, I would go for the FR-7 if the opportunity presented itself, but in either case I would stay away from the commercial .308 Winchester ammo.

I have to tell you, this little 7.62mm carbine is one of my favorites of the collection.

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