

THE MAUSER MONTHLY
The newsletter for fans of Mauser rifles - the REAL "Riflemen's Rifle!"
Editor/Publisher - Ward M. Clark, Aurora, Colorado, USA

Contents:

1. Reader's comments
2. So Now Which Mauser Is That Anyway?
by: Michael F Berney (berneym@pilot.msu.edu)
3. Case hardening of Mauser Receivers
by: KYRIEELLS@aol.com (Kyrie Ellis)
4. 8X57mm Factory Ammo
by: c96@ix.urz.uni-heidelberg.de (Alexander Eichener)
5. Reader's Ads
6. Publisher's comments by: Ward M. Clark (WCLARK1046@aol.com)

Reader's comments

Hey, Ward, looked at a strange Mauser, K98k style today at Big 5 sporting goods today at lunch. It had two simple characters that looked like script "L"s on the top of the receiver ring where you normally would see something like "S/42". No "modell 98" inscription but had waffenampts. Didn't have my magnifier or flashlight so couldn't tell too much else about it. Hadn't seen those markings before any idea who the manufacturer might be?

They also had a couple of Oberndorf "S/42 Gs" nothing really remarkable about either.

Also had a model 09 DWM Brazilian 7x57. Prettiest piece of walnut I've seen in a long time. Bolt was chromed. Must have been a parade ground piece. Bore was almost completely rusted shut with what looked like pebbles hanging on the rifling. Bolt, extractor, magazine follower etc., had rusted through the chrome and pitted, exterior of receiver rusted and pitted... I almost cried. What a shame. Looks like some palace guard fired it with corrosive ammo and never cleaned it before storing it away in a dusty, humid closet. they wanted \$129...if the wood hadn't been quite so dinged up, I'd have bought it just for the wood.

- Duck Guy@aol.com

I am pleased to finally have a way to write to fellow Mauser fans. I am looking for some actual K-98 German WW 2 slings, not the look alikes. I need four slings and 9 proofed rods. While I was at the Houston show, I saw a lot of K-98s which had been made to match. As always, I look at the condition, the blueing on the sharp edges and also look for the correct manufacture codes. It looks very odd to find a 43 bcd with a byf trigger guard which is matched to the rifle and has a perfect blue job which still smells like rotten eggs. thanks.

- apprai sejo@aol.com

ED2VOL2

In regard to those 18" barreled carbines brought in by Century. I called them right away when I saw the advert in SGN, but by then they were all gone except the Fair-Good ones which I did not want. I did manage to come up with a nice one at a show in Jacksonville. This carbine is exactly like a FN police carbine with Dutch marks that has been in my collection for some time, with the exception of caliber: the Dutch one is in 8mm and the 'Century' is in 30-06. Talking to some of the dealers in Florida I find a pretty broad agreement that this is a police carbine, but the contract country is not clear. Some believe Colombia, as that country was well standardized around -06 in the late forties; refer to the Madsen rifle in that caliber. I also heard a claim that the Century carbines are Dutch ones with the crest ground off; I see no reason for them to do that, as I have a number of Dutch Mannlichers and FN pistols, all with large, untouched crests.

I've not shot these carbines, suspect that would be not a lot of fun...

I'll keep in touch as I dig further. Thanks for your work on the Newsletter, it's much appreciated.

Nick van Vonno (nvv@mlb.semi.harris.com)

Ward, I have a tip on those model 96 Swedish Mausers. As noted in many publications, these rifles shoot about one foot high at 100 yds. All you have to do is get a front sight blade from a model 38 Swedish Mauser, install on the 96 Mauser and the rifle should zero out at about 400 meters (rear leaf sight). The sight blade could be filed to make it somewhat thinner to get a better sight picture as they are relatively thick. I've tried this trick on two 96 Mausers and both sight zeroed out at 400 meters. With a 6 o'clock hold on the 100 yd big bore target, one should be able to place his shots into the center of the target. Haven't seen this trick in print by anyone else, just thought it might be worth mentioning. I am aware that .350 high sight blades are on the market as I have seen them advertised in shotgun news. Keep up the Mauser monthly, its a good publication.

Regards, FRANK49S@aol.com

Ward:

As always enjoyed the issue and regret that I was unable to contribute. I lost all my previous stuff through a viral induced crash and could not even warn others. Hope nobody got bit in the butt by Monkey2. The person who gave it to me did not do so by design, intending it for his employer, but I got nailed. His problems have just begun as he is subscribing to every porn mag known to mankind to be delivered to his work place. He bragged to the wrong guy about leaving "presents" for employers who displeased him, not knowing his audience was a good friend of mine. He even offered to sell virus infected discs to him. At last count, he has 4 people

ED2VOL2

Looking for a chunk of his gluteus maximus. Have bought several Swedes from SAMCO and am impressed with quality of metal. Wood is a little rough but nothing a soldering iron and damp rag won't cure. Mirror bright bores, ANM etc. Concerning the Mod 38. I am convinced that many, if not all are cut down '96's as I got an 1899 Oberndorf marked 38 w/straight bolt. Bought one each of Husqvarna and Carl Gustav. Springfield was selling some '95 carbine stocks a while back so I ordered several for my Chileno. They had been buzzed w/a disc sander and were pretty nasty BUT I did a little fiddling and found that a little careful work with a Dremel tool will allow them to take the '94 carbine action. Stocks for that item don't seem to be available. Will make another for my '94 from some select PA walnut I've been saving. Am relocating to CA in a few weeks to take care of Dad but will retain addresses. Am having Oberndorf bolt cut and bent for scope and mounts attached. Will advise members how things went when done. Ran into a few problems w/44mm scopes and clearances. If possible could you send me all previous issues as I lost everything including my backups in the crash of '97?

(Editor's reply - Due to the use of two computers, mailing of diskettes, etc., and a hard drive meltdown immediately upon my return from Germany, I am still trying to reconstruct a year's worth of newsletters. Back issues will hopefully be available in time, but it may take awhile... please be patient!)

A while back I purchased one of these rifles at a local pawn shop for \$100. The barrel is marked: 'STA. BARBARA-SPAIN-MODEL "GREDOS" SUPER DE LUXE-CAL. 30/06'. The metal is unblued, and the receiver, first 3 « inches of the 24" barrel, and the hinged floorplate/trigger guard are engraved in a combination of scroll and something that can best be described as cross hatching (this latter part is not very well done). The action is basically a FN-style commercial M98, with a sliding safety on the right side of the bolt shroud and a Parker-Hale trigger. Except for the engraving, it pretty much fits the description of Santa Barbara Mausers as provided in de Haas' "Bolt Action Rifles." Having always had a "Jones" for a .308 Norma Magnum, I thought this would be a good choice for the cartridge, as I can get it rechambered and the feeding rails and bolt face opened up for less than \$100. After calling around to several gunsmiths, I found one with the necessary chambering reamer, and took the rifle to him for inspection. Upon finding that this was a "Spanish" Mauser he became worried that it might be poorly made like some of that country's M93 AND M95s, and suggested that I have the receiver hardness tested. (He was also worried that the engraving was a post-original purchase feature and that the metal might be too soft for

the Norma). This I had done, with the receiver registering 46-48 on the Rockwell C scale.

If this rifle was made from heat-treated low carbon steel, I would be worried that it was too hard, and therefore too brittle. However, de Haas doesn't go into any detail on the metallurgy of these actions, so I don't know if its carbon steel or chrome moly. Does anyone have any knowledge of the type of steel used in this action? Also, if the action is made from a chrome-moly steel, is the above mentioned hardness suitable for the work I have in mind? (Santa Barbara Mausers were originally available in several of the short magnums - e.g. 7mm, .300, .338, .458).

Also, does anyone know if the engraving on this model was an original feature? Apparently de Haas didn't have a barrel to examine when he described the action, so I don't know if the

'"GREDOS" SUPER DE LUXE' bit on the barrel indicates a higher end option or not.

Any information which someone could shed on this subject would be greatly appreciated.

Thanks.

el_coyotero@aol.com

(Editor's note: I researched this in Olson and Kuhnhausen, and was unable to come up with any hard data on metallurgy of the Santa Barbara actions. Maybe one of you is more knowledgeable on Santa Barbaras?)

I would like to pose the following questions/comments to the Mauser collectors. I am trying to find/obtain more information on the history/development of the WWI Mauser 13mm Tank-Gewehr (Anti-tank rifle). I have one in my collection and its serial number is in the 5000 to 5050 range. I've seen only very sketchy/short articles about the rifle and the authors of each, seem to have just rewritten an early article so nothing new appears. One of the article said that 5000 were made. Then I guess mine was one of the very last ones made. Does anyone know if the total production was in deed about 5000?

I know that the MG08/15 machine-gun bipod was to have been used as the front support for the rifle. The stamped metal bipod was first used but under repeated firings of the big gun, the light stamped metal bipod would collapse. This lead to the tubular steel model that was designed specifically for the T-Gewehr. These two models (stamped metal and tubular steel) are pictured in Goldsmith's book on the MG08/15. The bipod that came with mine appears to be a second model tubular steel bipod for the T-Gewehr, with the one pictured in Goldsmith's book, being the first tubular steel model, hereafter referred to as the First Tubular Steel Model (FTSM).

There are no dimensions to be able to compare the two different tubular steel bipods but judging on size alone, the bipod I have is somewhat shorter and has a definite angular cant

ED2VOL2

to the legs.

The legs on my bipod are 24 centimeters long. When the bipod is placed on the rifle, the legs are canted 20 degrees to the rear. (From an engineering point of view, the reason of the cant was to channel some of the recoil energy down into the ground so that the shooter's shoulder would not have to adsorb all of the recoil energy.) The FTSM does not have any cant and without the cant, the front bipod would act like a pivot point and not transfer any of the recoil energy to the ground.

One the bottom of each leg is a large cup shaped pad, about 7 centimeters in diameter. These pads are perpendicular to the axis of the leg and are for the energy transfer to the ground. To aid in energy transfer, these pads have the side of the cup that is closest to the barrel of the rifle deeper than the edge on the outside. In the center of each of the pad is a spike, 7 centimeters long, that is 3 centimeters in diameter at the base and tapers to a point. This spike is canted at an angle of 20 degrees relative to the pad. (A total cant angle of 40 degrees relative to the axis of the barrel.) The cant angle on the spikes helps them remain firmly in the ground so that there will be less movement/jump of the rifle, is case a second shot has to be made.

Does anyone agree with my analysis of the bipod? Does anyone else have one of these "second model tubular steel bipods"? Does anyone have any more information on the WWI Mauser 13mm Tank-Gewehr? Does anyone have literature/information on the ammunition? I would like to obtain one round of original ammunition for this unique rifle. If you wish, I can be reached by e-mail at: erma9mm@AOL.com. Thanks.

I presently have one Mod#98 in excellent condition and all the serial numbers match. But I would like to convert it to a .308 but would like some advice from an expert on how to go about the conversion. Prices, reliable gunsmiths, etc... Thanks in advance for any and all advice and help.
John Sloan (j no26@smtp.daci.net)

Here's a conundrum for the Mauser Mavens:

I took my recently acquired Swedish M38 out to the range this weekend for the first time. It shot about 2.5-3" left of point-of-aim. After about 25 rounds, however, it walked itself back to point-of-aim. I assume this is due to some uneven pressure on the barrel in the stock channel -- and when the barrel heats and expands the pressure is more even.

I disassembled the rifle, lightly sanded the barrel channel and reassembled, with a folded piece of paper between the channel and the barrel, just forward of the front barrel band.

Question: do you think this slight extra thickness will even out the pressure on the barrel? Do these full-stocked military rifles respond better to opening the channel and relieving pressure or ADDING pressure, from either my shims or from bedding? What's the conventional wisdom here?

I'd appreciate input from any of you readers.

Thanks,
Hoojy@aol.com

So Now Which Mauser Is That Anyway?
By: Michael F Berney (berneym@pilot.msu.edu)

The recent flood of imported Mauser military rifles has been a boon to all of us who favor these fine engineering marvels, but some confusion has resulted. The following story illustrates this point.

A friend who is a dealer and gunsmith called and offered me some 98 Mauser actions. "They are 08/34 Brazilian, with 30-06 length magazines" he says. The condition was not the best, but the price was right. I figure them for good parts, if not good actions. I pick the actions up, they are a mess, grease, dirt and sand. Some parts are also missing from some of them, but I had been warned to expect this. Some had bent bolts and some had straight bolts. It is hard to tell what is there. I take them home and soak them in kerosene for a week, then start cleaning them. The first one out has a bent bolt, and it seems to go with the action. Once cleaned the finish is not that bad, a lot of blue left, no pitting, a lot of light rust below the wood line. Examining the left receiver sidewall shows the expected "FABRICA DE ITAJUBA-BRASIL". As I am wiping this area I notice grinder marks on the receiver ring, under the blue.

***** Now I knew that Brazilian 1908 rifles were DWM manufacture. I had been told various things about the 08/34, including that they were indeed "MANUFACTURED AT ITAJUBA - BRASIL" It had not mattered much to me until I saw these grinder marks. I knew that some markings had been removed to make room for this declaration of Brazilian manufacture. So I sit down with Olson's "Mauser Bolt Rifles" (3rd ed) and start looking. On page 171 I find: "The CZ Model 24 was also produced in 7mm and 7.65 mm for several Latin American nations: Brazil 7mm. . . . Brazilian specimens were designated Model 1908/34. Many were later converted to 30-'06 and were marked "FABRICA DE ITAJUBA-BRASIL" So I have discovered that these bargain basement actions are not only in better condition than expected, but they are CZ 24s!!!!!! I am elated, as CZ 24s are one of my favorite actions. The next action out of the kero has a straight bolt, and it looks a little odd. In fact it looks like a Turkish Mauser bolt. It does not seem

to fit with the action, judging from wear and finish. Now I am perplexed. So now where am I? I have some good actions, missing some parts and some of which have possible really mis-matched bolts. I am happy but confused. I am trying to get a sample of hardness tests done to compare these actions and bolts with Lion crest CZ 24 and Turk 98 bolts and receivers. Not a definitive test, but a good indication. I will try to get back to you when I have more info. I am sure others have encountered similar situations, and I would enjoy hearing some of them.

Case hardening of Mauser Receivers
By: KYRIEELLI@aol.com (Kyrie Ellis)

In point of fact, the "Kimber" sporters (the 96 Swede sporters, rebarreled by "Kimber" to the .308 Win, .243 Win, among others, with no allowances for the design and metallurgy of the 96 receiver - W.C.) may not be made by Kimber at all. There was a little blurb in the "Industry Insider" section of one of the gun rags which told of the re-emergence of Kimber from bankruptcy. One point of interest was that one of the bail out investors had brought in a bunch of Mauser type sporters from Europe and was selling same through Kimber, as Kimber rifles.

Another point which you may find interesting - re-heat treatment of Mauser and Mauser type actions is not advisable. There are a couple of sections in P. O. Ackley regarding the strength, heat treatment, and re-heat treatment of Mauser action which speak to this. The main points are:

Mauser actions are composed of a low carbon steel, which has been case hardened. This technique produces an action with a very soft core, and a very hard surface. Such an action has a set of very interesting characteristics:

- 1) The soft core provides an excellent ability to take shocks (as happens when the chamber pressure suddenly climbs from zero to forty-five thousand psi in a New York Second, while the hard surface resists abrasion and deformation (read lug set back). A nice analogy is the heat treatment of the Japanese "Samurai" sword - a soft core to prevent the sword from shattering under impact and a hardened edge to take and keep a keen edge
- 2) A large difference between the ultimate and yield strength of the action. A Mauser type action will deform (bend, warp, expand, etc.) long before it will tear or rupture.
- 3) When the ultimate strength of the action is exceeded, the action tends to tear rather than fragment (an important distinction for both shooter and bystanders!).

But there are other important differences between a Mauser type action and

current alloy steel
rifle actions.

The hardness of a Mauser action cannot be accurately determined by either the Brinell or similar methods. The problem here is that Mauser actions are heat treated before final finishing and bluing. It is not unusual for the external surface layer of hardened material to be removed (in part or toto) during the final finishing and buffing before the action is blued. Note that the important hardened surfaces are *internal* (locking lug raceways), and are unaffected by final finishing. In any event, it is not possible (short of sectioning the action) to accurately test the hardness of a Mauser action.

Attempts at re-heat treatment of the low carbon steels used in Mauser actions) can produce quench cracking in the receiver. These cracks may be internal, and undetectable by normal detection methods (like magna fluxing). A re-heat treated Mauser action will, generally, lose the large difference between ultimate and yield strength. The end result can be an action which is not only more likely to fail, but is also more likely to fragment than tear when it does fail.

Re-heat treatment of low carbon steel is generally ineffective.

In any case, the significance of all this can be summed up in two points:

- 1) The re-heat treatment of Mauser actions is not generally a good idea.
- 2) A low Brinell hardness result is without meaning. But a high result may well be a bad sign, as it may indicate that the action has been re-heat treated.

8X57mm Factory Ammo
by: c96@i x. urz. uni -hei del berg. de (Alexander Eichener)

A comprehensive list of 8 x 57 IS (and I) factory loads
(a bit out of date, maybe...)
Version A/04, of 4th July, 1996
Compiled by Alexander Eichener
c96@i x. urz. uni -hei del berg. de

In order to complement the list of available 7,62 x 53/54 R and 6,5 x 55 Swedish factory loads which I had compiled for the rec.guns FAQ in the last year (its URLs are
>
<http://www.tel eport.com/~dputzolu/IIID1b.html>
and >
<http://www.bi geasy.com/~fdi ful co/swedeammo.html>),

Here is another list for the extremely versatile German 8 x 57 IS (and I) Mauser cartridge. The small array of weak American loadings does not realize the full potential of this superb hunting cartridge.

Notice: some of my data may be withered. Please be as kind as to supply corrections and additions, where applicable.

ED2VOL2

The velocity is given mostly in metres/sec, American loads also showing the fps data. The last three figures refer to v-0, v-100, and v-200 in yards and metres respectively.

1) Loadings for the 8 x 57 IS (.321-.323 diameter bullets)

1) FEDERAL (1995)

- "Classic"	170 gr. /10,01 g	Hi-Shok Soft Point	2360 719	1970 600	1620 494
-------------	------------------	--------------------	-------------	-------------	-------------

2) FNM / Indep (Portugal) (1996)

- "Target"	198 gr. /12,8 g	FMJ	760	675	595
------------	-----------------	-----	-----	-----	-----

3) HIRTENBERGER (around 1995)

(presently offered loadings)

-	175 gr. /11,3 g	Sierra	780	718	660
-	200 gr. /13,0 g	Nosler	750	680	614

(discontinued loadings, still available in the 1980s, and included in a 1994 German importer's catalogue)

-	123 gr. / 8,0 g	Tim-HSp	855	720	598
-	170 gr. /11,0 g	ABC	810	700	599
-	196 gr. /12,7 g	Tim-RK	745	660	581
-	197 gr. /12,8 g	FMJ (VM-Spi tz)	730	670	615

4) HORNADY (1996)

- They might offer a LiteMag hunting load with a soft point bullet.

Warning: do NOT use in any semi automatic rifle. This may damage gun and/or shooter, and has done so in case of the FN-49 (with other modern military loads, not with the Hornady).
Due to its slow burning rate, the LiteMag might also work better in the diverse long rifles than in the carbines.

5) LAPUA (1996)

-	200 gr. /13,0 g	SP	750	652	561
	(also marketed by German SK as "Zenith", with the same data)				

6) NORMA (1996)

(Hunting loads:)

-	196 gr. /12,7 g	Alaska	770	676	589
-	196 gr. /12,7 g	Vulkan	770	687	609

(Jaktmatch practice ammo:)

-	123 gr. / 8,0 g	FMJ	860	706	569
---	-----------------	-----	-----	-----	-----

(Target and Match ammo:)

-	200 gr. /13,0 g	Sierra Match	770	721	674
	(This load only available in Germany, not within the USA)				

(discontinued loading, still available back in 1989)

-	165 gr. /10,7 g	SP PPC/Vulkan	870	760	659
---	-----------------	---------------	-----	-----	-----

7) PMC/El dorado (1996)

-	170 gr. /11,0 g.	PSP	2360 719	1969 600	1622 494
---	------------------	-----	-------------	-------------	-------------

ED2VOL2

8) REMINGTON (1996)							
- 170 gr. /11,0 g	Soft Point Core-Lokt	2360	1969	1622			
			719		600		494
9) RWS (1994)							
Target Ammo:							
- 187 gr. /12,1 g	Scheibengeschoss HP	800	695	600			
Hunting Ammo:							
-	187 gr. /12,1 g	H-Mantel -KupferHSp	820	730	650		
- Geco brand	196 gr. /12,7 g	SP RN	770	675	585		
- RWS	196 gr. /12,7 g	SP RN	800	685	595		
-	197 gr. /12,8 g	Brenneke TIG	800	700	625		
9) SAKO (1996)							
- 200 gr. /13,0 g	Soft Point	770	665	572			
-	127 gr. / 8,2 g	FMJ	800		640		500
10) SELLIER & BELLOT (1992)							
-	196 gr. /12,7 g	Tl.m. Scharfrand	790	692	596		
-	196 gr. /12,7 g	Kupferhohlspi tz	783	712	645		
11) WINCHESTER (1995)							
- 170 gr. /11,0	Soft Point	2360	1969	1622			
			719		600		494

And, as part II:

Ammunition in the old 8 x 57 I caliber (.318 diameter bullets):

a) NORMA							
-	196 gr. /12,7 g	SP RN	770	660	561		
	(this one listed in Frankonia's 1995/96 catalogue, but not in Norma's own catalogue)						
b) SELLIER & BELLOT							
-	196 gr. /12,7 g	Soft Point round Nose	710	607	517		

Well, you see there is some choice to select from :-)

Regards from Germany,
Alexander Eichener
c96@ix.urz.uni-heidelberg.de

Reader's Ads

I'm looking for a good side-mounting scope mount for a '96 Swede. The receiver is in beautiful shape and I don't want to desecrate the crest on top. Anyone know where I can get one? If anyone has a used one in good shape I'd be willing to talk.

Ed Gardner (Gardner@smtp.nvg.com)

(Editor's note: Brownell's catalog lists a Weaver-made side mount; I used one in sporterizing a

38 Swede for my daughter. Worked quite well and is very solid.)

Publisher's comments

by: Ward M. Clark (WClark@aol.com)

ED2VOL2

This month I finished up a project I started some time ago. In one of the first issues of this newsletter I related a shooting review of one of Century Arm's sporters built on a M1910 Mexican action with a new .308 sporter barrel. The action was clean and in good shape, and it shot pretty well.

I removed the plain-Jane walnut-stained birch stock, and had the barrel bobbed to 18 inches. I installed a Brownell's streamlined bolt shroud and a Timney trigger with safety. (I normally prefer the solid cocking-piece Mauser safety, but the Buehler-type safety furnished with the Mexican was not installed correctly, and I wanted to try the Timney.)

Next step: obtained a nice semi-fancy walnut inletted blank from Great American Gunstocks, Acra-glassed the barreled action, finished off the stock, fitted a 1.5-5X Simmons scope and ended up with a very pretty little carbine. I have not test fired it yet; it should be capable of 2" groups, based on what it did in its somewhat crudely bedded birch stock.

Now all I need to do is find some feral hogs hiding in some thick scrub oak brush in southern Colorado, and I'll have a field test arranged.

Many thanks to everyone who contributed this issue. We gained a bunch of new subscribers this month; to all of you who are new this month, welcome. I even had the pleasure of meeting a couple of you in person at the February Tanner Gun Show in Denver. (If anyone makes it to one of Denver's huge Tanner shows, look for the table with the sign "The Mauser Man" on the front. I'm the guy with the big black cowboy hat with the brass crossed rifles on the front.) This newsletter depends on reader contributions, and the more readers we have, the more stories, shooting reviews, and tech tips we get. So, if you have any of the above, or anything that the rest of us Mauser nuts might find interesting, write it up and send it to me for inclusion in a future issue.

And, until next month, Good Shooting!

Ward