Thames Valley Guns
Armourers Report
Ruger No. 1B .243 - Part 6

Introduction

The adding of a .243 to my collection was problematic and in essence unplanned. I had purchased a number of Ruger No.1's in .243 calibre but they where never shot, as they where all destined to be donor rifles and therefore where rebarreled, into .303 and 6.5x47 Lapua. I had worked on Remington's and BSA .243's over the years but never really embraced the calibre as I tended to see it as a hunting round and therefore it never really fitted into my shooting needs.

At the end of 2019 a nearly new Ruger No. 1B came onto the market that was fitted with Bell & Carlson furniture, which is not something you tend to see very often in the UK. Being an opportunity not to miss, I quickly made the purchase and added a .243 Ruger No.1B to the collection as it provided an opportunity to own a Ruger with an alternative stock design. The image above shows a standard Ruger No. 1 .243 that I had in stock at the time and is ideal to use as a comparison rifle.

General

The plan for this new rifle was to assess the Bell & Carlson stock and identify if it offered any advantages over the standard rifle with wooden furniture. The Ruger No. 1B in .243 is probably one of the most prolific No. 1 models available in the UK and this is probably due to the popularity of the cartridge amongst the UK hunting fraternity. This particular rifle was in immaculate condition and had spent most of its life collecting dust in a gun cabinet. The barrel has a 1 in 9 sporter profile which is 26" long, has a round crown, is 1.2" at the chamber, narrowing to 0.63" at the muzzle. With the barrel having a 1 in 9 twist, bullet size is limited to 100 grain. The rifle is fitted with a half rib but no iron sights. Trigger release on this rifle was 3.7 lbs which fairly standard for Ruger No. 1's.

Bell & Carlson Stock

Referring to Bell & Carlson website, their composite stocks are manufactured using a variety of materials, consisting of fibreglass, aramid fibres, graphite, epoxy gel, laminating resins and poly-urethane reinforcement which provides a warm solid feel, rather than the plastic feel of injection moulded stocks. From a personal standpoint, I can both concur and add that they not only feel warm, but solid, robust and the colouring is quiet wood-like and difficult to distinguish at longer distances with the original wooden furniture.

The profile of the B&C stock is slightly different to the traditional wood design in that the pistol grip and the butt are considerably wider and have an increased wrist arch. The pistol grip is 1.69" wide, with the wood being 1.38" at its widest point. Whilst the wood is definitely more cosmetically pleasing, the wider pistol grip and butt is more functional. The fitting and inner profile of the two butts are identical and require no extra fitting, but the composite butt is slightly shorter at 14.5" (wood is 15") but has a substantially larger, albeit softer recoil pad, giving an overall length of 15.5" which has greater recoil absorption, especially with the bigger calibres. The composite butt also has the

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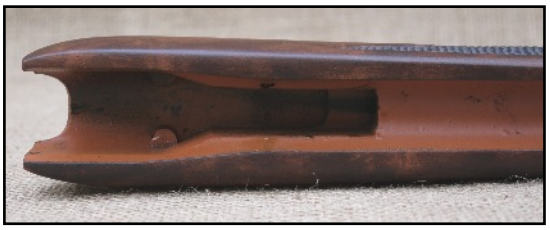
benefit of an increased angle of comb which gives a superior cheek weld in comparison to the wooden model. The composite beavertail forend is 2.0" wide, with the wooden forend being roughly the same width at 2.01". Length is also the same. However there are subtle differences to the composite forend. Its exterior profile is more rounded and internally it has the benefit of two round blocks that sit up against the main spring housing, thereby offering better support.

Although I did not notice it on the first occasion, I also had to fit the forend slightly. When stripping the forend, I noticed that it sprung back slightly which was unusual. Upon closer inspection, it highlighted that the hammer strut was striking the bottom of the forend and required relieving before it caused any damaged.

In the temperate climate of the UK, weather wise the composite forend and butt have the upper hand, however both stocks are subject to equal damage if mistreated, however when the composite stock gets damaged it would be less easy to generate a visually pleasing repair. As with all No. 1's the barrel is not designed to float and like the wooden original forend, the barrel should be supported at the tip and in this regard, the composite model fitted well.

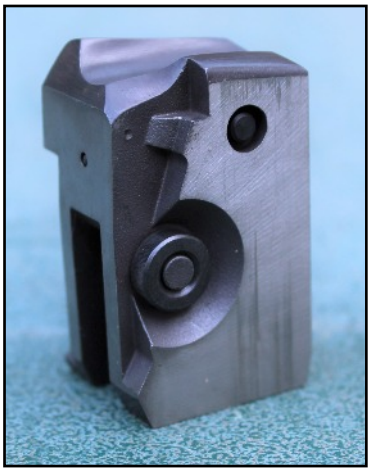


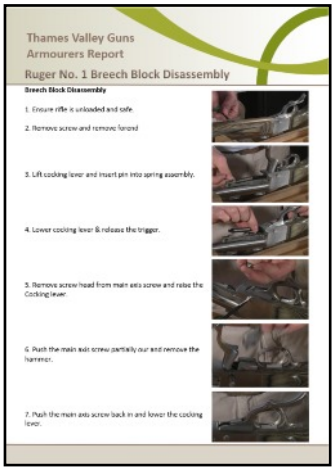
Checking the Bell & Carlson website, the Ruger No. 1 furniture appears to be discontinued. Therefore if the furniture does gets damaged replacement forend or butt assemblies appears to be unlikely, especially in the UK.

In summary, if your rifle is a working gun and tends to be out in all weather, then in my opinion the composite design has the edge in functionality. However no composite can ever look better than a piece of walnut with nice grain.

Service and scope fitting

Having inspected the rifle, it was clear that it was in superb condition, but having had spent most of its life in a security cabinet it did require a clean and service. Like most No. 1's I purchase, the breech block face is always dirty. This is due to the breech block being difficult to strip for many users and therefore they clean the barrel, but breech block remains untouched, which leaves it not only dirty but usually dry.





On YouTube, Ruger provides a good video, how to disassemble and re-assemble the No. 1 to facilitate basic cleaning. I've cheated a bit and made myself a "strip sheet" using the video images, so when I am working on the bench I can have the strip sheet next to me, in case I need reminding of the dis-assembly and assembly sequence. This is particularly handy when servicing any Ruger No. 1's as I prefer to use a good quality gun grease on the major bearing services. Gun oil is fine but over time it leaks out of the mechanism or evaporates and no longer does its job effectively, which is why I often find dry actions on No. 1's. As users find stripping a difficulty, the action stays dry, hence the reason why I use a suitable gun grease.

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When it comes to mounting scope, it depends on the users requirement. I plan to use my No. 1's for target use and out to 600 yards. In the UK ring choice is limited, Ruger's own rings are poor and require considerable lapping. Warne rings are the most prolific or if you can find them I would highly recommend Leupold rings as a good choice.

As I plan to shoot on gallery ranges only and out to 600yrds, I would prefer a x18 magnification or more. However as I had already spent my budget on the rifle, my selection process was some what problematic, as I had less options due to my limited fund.

My first choice was a x15 magnification ZA5 Minox, however as can be seen in the image to the right, using a set of Warne rings limited the scope position as the scopes bell housing was restricted by the half rib and therefore I could not obtain reasonable eye relief and therefore the scope was unsuitable.

Next attempt was to use a classic Pecar 10x45 scope using Burris adaptors which fit directly onto the half rib. Pecar's are good quality scopes and their rich bluing makes them cosmetically pleasing to the eye. Using Burris adaptors have the advantage of increasing both your ring and mounting position options. Whilst the scope was mechanically well suited to the No. 1, I found the thick post of the No1 reticule and the x10 magnification not to my liking for accurate range work out to 600 yards.

Although I had no plan to shoot the rifle with this scope, my next choice was to fit a Sightron 2-10x32 STAC scope to test a scope with a 30mm tube. Its fine reticule and its 32mm objective lens made it a suitable candidate for mounting on the Ruger, although the x10 magnification made it rather underpowered for longer range work. When mounted, the 30mm tube and larger ocular lens did make the scope appear more chunky, but the smaller 32mm objective lens made it more practical than the Minox I had used initially. Another advantage was that I had a set of quality 30mm Leupold rings which permitted the correct eye relief and height to permit easy access to the breech.

If I was going to hunt with this rifle, then the Sightron would probably be my choice of the three scopes, from a practical perspective, if I wanted looks, then the Pecar came through tops, however I wanted more long range accuracy and therefore I needed another scope.

As can be seen above, scope fitting is not as "black & white" as many would assume and more so with a No. 1. Especially if it is to be done correctly. Intended use, price, weight, profile, magnification, bulk, eye relief, half rib and breech block clearance all have there part to play in correct scope selection.

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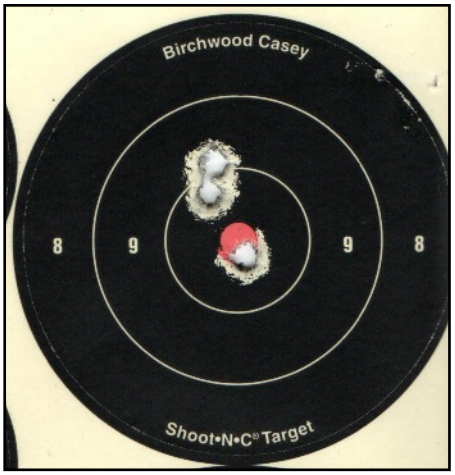
My final decision on what scope to fit was resolved because I invested more funds and obtained exactly the scope type I wanted for long range accuracy. I found via the Internet, a 1" tube 6-24x44 Tasco scope. Many of my Ruger No. 1's are fitted with classic 1" tube scopes with large magnification.

Early Tasco's made in Japan had a far superior build quality to the more recent budget scopes to come out of China and therefore where more in line with the classic Redfield's, Lyman, Leupold and Weavers I had used on my No. 1's to date.

I purchased the scope from the US and despite paying $50 for shipping, it still took two months to arrive. Two weeks of that was at a US airport and a further two weeks stuck in UK customs. Upon arrival I was to receive further disappointment as the scope internal reticule ring had come loose during transit and the required another week being repaired. Here lies a warning, purchasing scopes from abroad can be fraught with problems and unseen costs - buyers beware.



Initial Range test

Other than a major service, this rifle has not been through any restoration process and therefore retains its original barrel, so the first planned range test will be using ammunition that I had built for a BSA Monarch restoration I had completed a few years earlier. That ammunition consisted of Hornady brass, 90gr HPBT Berger bullets and 40.5 grains of Vihtavuori N160.

For this exercise I still had the Pecar scope fitted and I planned to function check the rifle, zero the scope and validate the Bell & Carson furniture, later I planned to see if I could maximise the accuracy when the Tasco became available.

Shooting fully supported from the bench, using a rest and a rear bag, I zeroed the rifle and shot the final group as shown. The group shown was 17mm which was an average for this initial exercise. The rifle shot very well, the Bell & Carson furniture was robust, showed no movement and permitted good handling. Whilst you cant beat a nice piece of wood, I must admit I liked these composite stocks and although not tested, I assumed they would handle well in wet and cold conditions, where they would come into their own.

Follow-up range test

Once I received the repaired Tasco scope, I went about setting it up. One issue to beware with the Burris bases is they need to be fitted squarely and parallel to the bore. The best way to do this is to centre the scopes reticule, fit the Burris bases ensuring the locking screws and their clamps are centred to the half rib and check the scopes alignment using a bore laser. If the scope roughly aligns with the laser, you are in a good position to start securing the scope. One final point, never over tighten scopes that have aluminium tubes, I.e. never tighten more than 16-18 inch pounds as you will potentially crush the tube.

The accuracy test was carried out, using the same criteria as per the original test and using the last of the 90gr Berger bullets, however the major difference was the temperature at a sultry 31°C. I always keep my ammunition covered and never leave it in direct sunlight as it will increase pressure and the velocity.

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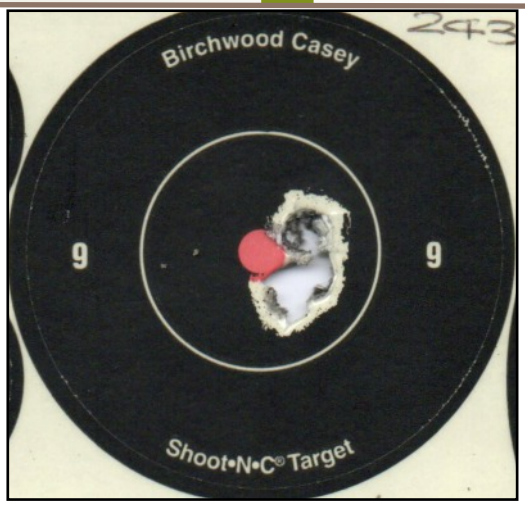
Summary
Unlike other No. 1's this wasn't a planned project and it came into its own because of the acquisition of a No. 1 rifle with a composite stock.



Maybe because this rifle was not part of a planned project I tended to be in the situation where I was never quite satisified with the rifle. It was a light sporter barrel in .243, niether of which really rocks my boat as I prefer heavier barrels. From a optical standpoint, I went through a number of scopes and mounting solutions until I was finally happy.

The Bell & Carson composite stock is an excellent aftermarket accessory and compliments the rifle very well and I wish Bell & Carson would continue to manufactured the stock, however that is no longer the case. Yet despite all these "indecisions" which are purely down to my annoying need for perfection, this rifle is surprisingly good and accurate. The last trip to the range produced a 7mm group as shown in the image above and despite this probably being a one-off, it is all the same, a very good performance for this rifle's configuration.

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