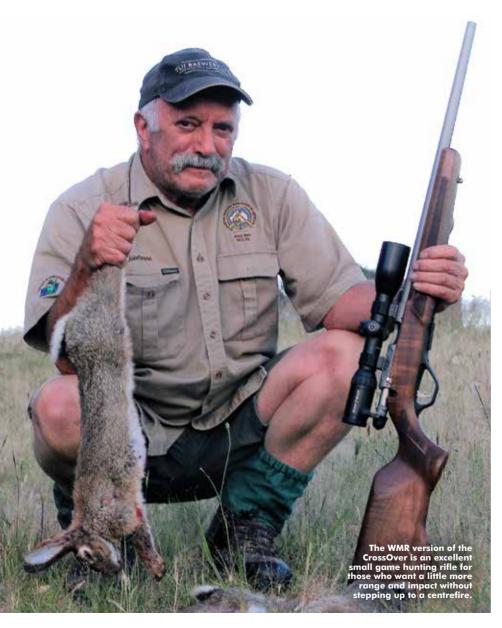
The Lithgow Arms LA101 CrossOver

- a rimfire revisited

by senior correspondent John Dunn



efore Lithgow Arms released the LA101 CrossOver .22-calibre rimfire rifle in 2014. I was one of a number of firearms writers invited to have a look at and test fire the CrossOver at the Lithgow facility in New South Wales. In discussions with the Lithgow Arms staff, I asked if there were any plans to release the CrossOver in either .22 Winchester Magnum Rimfire (WMR) or .17 Hornady Magnum Rimfire (HMR). The answer was probably, sometime in the future. Given that the magazine wells on the early rifles were blocked to accept a smaller .22LR magazine, it seemed the plan was already in place.

The CrossOver is now available in both the calibres I enquired about and in August 2016 I received a CrossOver in .22WMR for review. My reason for asking for a rifle in that calibre was fairly simple. I regard it as a better general purpose small game cartridge than the .17HMR and the more recent .17WSM. The .17 calibres may lead the field in terms of velocity but the WMR has it all over them in the delivered energy stakes.

It is my experience that the WMR is also consistently more accurate out to around 120m, provided the owner has gone to the trouble of researching and finding the load that best suits their rifle. That makes me old-fashioned in some quarters I suppose, but I'm no longer

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dazzled by or automatically sold on products just because they happen to be newer than something I have been successfully working with for years.

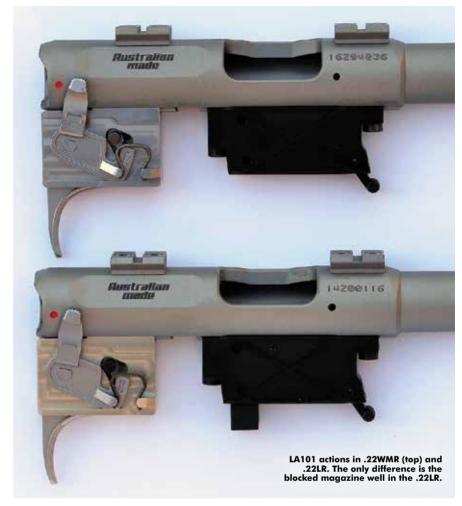
The .22WMR cartridge

The .22 Winchester Magnum Rimfire (WMR) arrived on the shooting scene in 1959, designed to increase rimfire hunting performance on a variety of small-game species. Its predecessors were the .22 Winchester Rimfire and .22 Remington Special, interchangeable cartridges that were both introduced in 1890 for exactly the same reasons as the WMR.

Though it initially made quite a splash, the WMR cartridge seemed to go into the doldrums for a long time, chiefly because of its cost compared to the .22 Long Rifle (LR) and the fact that small centrefire cartridges like the .22 Hornet performed much better and had the advantage of being reloadable.

Even so, it hung around, unlike the 5mm Remington Rimfire Magnum that was introduced as a competitor to the WMR in 1970. It was only ever chambered in two Remington-made rifles, the Model 591 with a clip magazine and the Model 592 with a tubular magazine. Despite its then superior ballistic performance to the .22WMR, the 5mm RRM was not a commercial success. Production of the rifles ceased in 1974 and ammunition manufacture stopped in 1982.

More recently, shooter interest in Magnum rimfires has increased



significantly, primarily due to the introduction of the .17HMR in 2002 and the .17WSM in 2013. The .17HMR is based on the .22WMR case and the technology developed to produce it flowed over into the latter, resulting in improved levels of performance with a much wider range of brands and bullet weights available to reignite shooter interest.

The rifle

For those who came in late, the LAIOI CrossOver is the first Lithgow rimfire rifle made in Australia in more than 40 years. Since its release, the .22LR version has won a great deal of respect and support around the country on the range and in the field and seems set to emulate the success of its predecessors.



The Lithgow Arms LA101 CrossOver

There are three variants of the LA101 CrossOver marque currently available with stocks in walnut, polymer and laminated wood. Metal finish is either titanium or Armour Black Cerakote. An optional threaded and capped barrel is available if required, as is a left-handed version of the rifle. The calibres currently offered are .17HMR, .22LR and .22WMR.

Regardless of calibre, the action used in the LA101 rimfires is exactly the same - a CNC machined high-tensile steel receiver fitted with a three-lug, rear-locking bolt that has a recessed face, with an extractor on the right side and a cartridge guide on the left. The bolt has a two-position safety lever.

The top of the receiver is drilled and tapped to accept a pair of Weaver-style bases that are supplied with the rifle. The receiver is secured in the stock by two action screws, one engaging the bottom of the front receiver ring, the other a



dovetailed recoil lug located between the front of the trigger group and the magazine well.

The free-floating barrel is screwed into the receiver and has a threaded muzzle. No sights are fitted. The polymer-stocked rifles have an integral triggerguard. On both the walnut and laminated stocks the triggerguard is separate, secured by the action screws and a wood screw behind the triggerguard itself. On the review rifle the block in the magazine well had been removed to accept the larger WMR magazine.

Like the LA102 in .308 Winchester I reviewed recently (see the February 2017 Australian Shooter), the stock on the LA101 is made from walnut and I have to say it is a beauty. The timber is dense, precisely machined and nicely finished with enough grain character to catch the eye. In terms of style, it is very similar to the centrefire version as well, though there are some dimensional differences to suit the smaller action.

In short, the LAIOI is a high-quality, rear-locking bolt-action rimfire rifle that's made in Australia for Australian hunters and shooters. A sticker on the plastic pack containing the owner's manual and warranty card says "Thank you for supporting Australian jobs". That's an important consideration for anyone thinking about buying a new rimfire rifle.



Testing

For initial testing I fitted the rifle with a Schmidt & Bender Zenith I.5-6x42 scope. As a long-term user of the WMR cartridge, I reckon a 6x scope is practically ideal for the cartridge. I had six different WMR loads in my ammunition cabinet and all shot reasonably well at 50m. At that range the stand-out accuracy load was the



The best 100m group with the WMR LA101 measured 17mm. It was shot using the Winchester Supreme 30gn JHP load at 2250fps.



A 21mm group shot with the CCI Maxi-Mag shooting a 40gn JHP at 1875fps.



A 25mm group shot using the Winchester Super X load, a 40gn FMJ projectile at 1910fps.



Winchester 45-grain Max HP Subsonic - something of a specialty load for small game. At 100m it shot considerably lower than all the other loads, its high and noticeably curved trajectory effectively limiting its use to ranges of around 60m I would think. Even so, it's an interesting load to shoot. If you follow through properly, you can actually see the bullet strike the target at 50m.

Of the other five loads only three delivered what I would consider acceptable accuracy at 100m, but that's rimfire shooting for you. All rimfire rifles are a law unto themselves when it comes to working out what they do or don't like to shoot, hence the need to try a variety of loads until you find something your rifle likes. The loads that worked for me in the LAIOI are listed in the accompanying table, the figures derived from a series of five three-shot groups. As you would expect, all shot to different points of impact. Wind was a major influence on accuracy, the primary reason the other loads I tried aren't listed. On another day the results may well have been entirely different.

Summary

There's a lot to be liked about the LAIOI CrossOver in .22WMR. It's a high-quality firearm that is practically ideal for anyone who wants to hunt small game at longer ranges than the .22LR without stepping up to a centrefire cartridge like the venerable .22 Hornet.

That said, it does have some drawbacks and these need to be taken into consideration before making any decisions about laying dollars on the gunshop counter. I have only two minor criticisms of the rifle. The first is its weight. Nearly everyone I showed the rifle to made a comment about how heavy it felt. Personally, I don't see that as a problem. There are always trade-offs to be made and I think the weight makes the rifle easier to handle and shoot in the paddock, especially when you're puffing a little from climbing around in the hills. A sling makes all the difference to how the rifle carries.

The second criticism is also about weight - specifically the weight of the trigger pull. It breaks cleanly and that's wonderful but at 1.4kg it's just too heavy for those of us who like to stroke rather than pull a trigger, especially when shooting offhand. The problem can be rectified easily enough and I raise it only because it's something most hunters will have to deal with when making the rifle field ready.

The final consideration is the .22WMR cartridge itself. It hits hard and does a lot of damage, especially with the hollow-point and jacketed soft-nose projectiles. That's all right on larger small game like hares, cats and foxes but it's devastating on rabbits. Unless they are head shot, rabbits taken with the WMR usually go into the freezer as meatier back sections only.

I was impressed with the LAIOI

CrossOver .22WMR and I am happy to recommend it to anyone looking for a good rifle in an old but reliable rimfire cartridge. Call me biased if you will, but the fact that it's a Lithgow only makes it better.

The LA101 CrossOver is manufacturered by Lithgow Arms and distributed by Outdoor Sporting Agencies and retails from \$1080. For more information, ask your local gunshop or visit www. lithgowarms.com and www.osaaustralia. com.au

Specifications

Manufacturer: Lithgow Arms Model: LA101 Crossover

Action: Rear locking, high tensile bolt Finish: Titanium or Armour Black Cerakote

Trigger: Adjustable, single stage, factory set at 1.4kg

Barrel: Drilled, button broached and target crowned in . I 7HMR. Proprietary military grade steel, cold hammer forged in .22 calibre, 531mm long Medium varmint weight, target crowned, optional threaded end available

Calibre: .17HMR, .22 Long Rifle, .22WMR

Twists: One in 9" for .17HMR, one in 16" for .22LR and WMR

Sights: None fitted, dual Weaver bases on

Stocks: Polymer, walnut and laminate Length of Pull: 325-355mm adjustable on polymer stocks, 345mm on wood

Safety: Two-position safety, receiver mounted with red indicator, safety catch blocks trigger

Magazine: Polymer box, five-shot single column. 10-shot mags available

Weight: Polymer and walnut 3.1kg, laminated stock 3.3kg

Distributor: Outdoor Sporting Agencies RRP: \$1080

Accuracy testing

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	Ammunition	Bullet	Velocity	Best	Worst	Average
	Winchester Supreme	30gn JHP	2250fps	17mm	25mm	19mm
	Winchester Super X	40gn FMJ	1910fps	19mm	27mm	25mm
	CCI Maxi-Mag	40gn JHP	1875fps	21mm	27mm	23mm