



The Thompson/Center Long Range Rifle

Senior Correspondent Rod Pascoe

The latest offering from Thompson/Center is a departure from their signature break-action rifles and, more recently, wide range of bolt-action products. With the proliferation of the metal chassis or, as some manufacturers prefer to call them, tactical platforms, making their way on to the sporting scene, Thompson/Center (T/C) have developed a rifle heavy enough for long-range target work yet light enough to be formidable in the field. *Australian Shooter* had the chance to look at the T/C Long Range Rifle (LRR) courtesy of Australian distributor Frontier Arms.

Its full title is Smith & Wesson Performance Center Thompson/Center Long Range Rifle, a bit of a mouthful but it also acknowledges S&W as T/C's parent company. Its styling suggests T/C along with dozens of other US manufacturers have seen a growing market for entry-level, precision, long-range bolt-action repeaters built on a metal chassis that provides the ability to attach a range of accessories, have a detachable box magazine, a pistol grip and adjustable butt features.

Chambered for the popular .243 Winchester, .308 Winchester and 6.5 Creedmoor cartridges the LRR is available with a black satin-finish barrelled action and Flat Dark Earth (FDE) or black matte finish on the stock. The review rifle is chambered for the 6.5 Creedmoor and has the FDE stock.

The rifle

Chassis stocks are becoming popular for a number of reasons - they provide a rigid bedding platform and can often produce excellent accuracy without the need for additional bedding. The fore-end of the chassis incorporates 32 Magpul M-LOK slots for quick and easy mounting of accessories.

The skeletonised butt is user-adjustable for both length-of-pull and comb height using two independent adjustment wheels. The wheels have deep detents that stop the wheels from moving under recoil and a pair of grub screws lock in the settings. The rubber buttplate has separate adjustments that allow it to move up, down and rotate to make better contact with the shooter's shoulder and the rubberised AR-style pistol

grip sits behind an oversized triggerguard and has three finger grooves. A Caldwell adjustable bipod, complete with M-LOK attachments, is included with the LRR.

The first thing that distinguishes the LRR receiver from others in the T/C range is the small ejection port on the right side of the action. A two-position safety catch is mounted on the right side of the action, just forward of the tang to the rear of the bolt handle. Pressing the lever forward places it in the 'fire' position (the bolt can be manipulated with the safety applied but blocks the trigger).

The three-lug bolt on the LRR has become common on many bolt-action rifles, an advantage being it makes for a short bolt throw since the surface area of the individual bolt lugs is decreased and less rotation is required to unlock the lugs from their seats. The bolt rides in a groove machined on the left side of the body that engages on the action's bolt stop. This anti-bind feature eliminates much of the slop as the bolt moves back and forth and gives it a more precise feel. The bolt handle is fluted for improved grip.

The Thompson/Center Long Range Rifle

The Performance Center trigger has a blade safety lever that sits inside the trigger face and the single-stage trigger is adjustable from 2.5-3.5lb for precise tuning, the review rifle set at 2.5. The 10-shot detachable magazine is made by Accurate-Mag, a popular aftermarket magazine manufacturer, and fits snugly into the well. The rifle accepts Accurate Industries Chassis System (AICS) pattern magazines. The magazine tapers to the single stack and the cartridge feeds directly into the chamber smoothly, the magazine box being 2.9" inside which, for handloaders, limits the cartridge overall length. A 20-MOA tapered scope rail appears to be a combination of a Picatinny and a Weaver-style rail and is bolted to the action with four screws.

Barrel length on the 6.5 Creedmoor version is 24", the contour reasonably heavy and has 5R rifling with a 1:10" twist. The barrel also has five substantial flutes that provide additional surface area for cooling and cut a small amount of weight, the barrel generously free-floating forward of the recoil lug. T/C have elected to keep the barrel exposed rather than incorporate a hand guard as featured on many other brands. The muzzle is threaded to 5/8"x24tpi with muzzle brake fitted.

The rifle ships with a durable black nylon case, Caldwell bipod, 10-round magazine, a set of hex-head keys for stock adjustment, padlock and instruction manual.

The cartridge

The 6.5 Creedmoor is a collaboration between Sturm Ruger and Hornady. Named after the historic rifle range in New York with its long and honourable target shooting



Pistol grip, oversized trigger guard and large mag release.



A sliding steel hook rides inside a T-slot in one of the bolt's locking lugs and plunger-style ejector extends from the bolt face on the other side.



history, the Creedmoor was intended as the cartridge for everything and everyone.

Introduced in 2008, the designers wanted to incorporate the latest thinking in cartridge shape and dimensions using the 6.5mm projectile and also sought the ballistic edge over the other major players - the .260 Remington, 6.5x55 Swedish, 6.5-284 Norma and 6.5x47 Lapua - the Creedmoor claiming flatter trajectory, less wind drift and shorter flight times. A number of rifle makers are now producing the Creedmoor and public acceptance seems to justify Hornady's and Ruger's faith in the round. There's a growing range of commercially loaded ammunition available for hunting and target work as well as plenty of reloading components for handloaders.

At the range

I packed a selection of factory and hand-loaded ammunition for testing, including Hornady Match with its Hornady 120gr ELD Match projectile, Hornady Match with Hornady 140gr ELD Match, Federal Premium with 130gr Berger Hybrid Open Tip Match, Fusion (Federal) with 140gr Fused Jacket hunting projectile and a handload I made using Hornady brass and a moly-coated 140gr Nosler Custom Competition projectile and 35 grains of ADI Benchmark 8208 powder. Cartridge Overall Length was 2.82" and I decided to throw this round into the mix to demonstrate what potential a handload can achieve.

The scope Frontier Arms supplied was a Nightforce ATACR 5-25x56 F1-ZS MIL-R-DIG-C - another mouthful but an excellent choice of precision optics to match the



The skeletonised butt is user-adjustable for length-of-pull and comb height.

LRR. Personally I'd have chosen something with a higher magnification up to about 35 or 40 power with which I could see bullet holes in a paper target out to 200 or 300m. This scope sits pretty high on the rifle but, thanks to the adjustable comb, it easily accommodated my eye height.

I used a sandbag to support the butt. For bench work the shape of the underside of the butt wasn't suited to sitting on a bag as, with each shot, the recoil caused the sloping angle of the butt to slide on the bag, requiring readjusting the butt between shots.

I inserted the bolt and empty magazine with the intention of single-loading my test



Single-stage trigger is adjustable from 2.5-3.5lb.



The fore-end of the chassis has 32 slots for easy mounting of accessories.

rounds but due to the small ejection port in the receiver, shaped to eject an empty case rather than load a live one, single-loading was awkward so I resorted to loading from the magazine. The magazine held nine rounds comfortably, 10 was a challenge, and even then I couldn't insert a nine-round magazine into the rifle with the bolt closed.

I bore-sighted the rifle and fired a shot at the centre of a blank piece of paper, the

Best results from testing

Handload with moly coated 140gr Nosler Custom Competition projectile and 35gr of ADI Benchmark 8208 powder - best group .5"

Hornady Match with Hornady 140gr ELD Match projectile - best group .56"

Hornady Match with Hornady 120gr ELD Match projectile - best group .64"

Federal Premium with 130gr Berger Hybrid Open Tip Match projectile - best group .67"

Fusion (Federal) with 140gr Fused Jacket hunting projectile - best group - .95"

The Thompson/Center Long Range Rifle

clear Nightforce optics allowing me to easily see the bullet hole at 100m so that became my aiming mark. The dot in the centre of the scope's reticle neatly fitted over the bullet hole at 25x magnification.

The rifle's weight of 5.22kg plus scope gave an all-up 6.7kg, well below that allowed for F-Class Open division but the well-behaved 6.5 Creedmoor cartridge with effective muzzle brake made the LRR pleasant to shoot, the pistol grip comfortable and well-fitting. I fired more than 60 rounds from the bench in a single session and at no point did recoil become irritating.

Thanks to the lack of recoil and quality of the scope, seeing hits on the target was easy. As factory ammo goes, the Hornady Match with 140gr ELD projectile proved the most accurate match ammunition of those tested and certainly performed well out of this rifle.

Summary

Thompson/Center Arms has delivered another fine firearm and with the



introduction of the Performance Center Long Range Rifle Bolt Action has made a precision rifle that will fit most shooters' budgets. As mentioned, the rifle functioned flawlessly so long as I was firm with the bolt and didn't try to load 10 rounds in the magazine.

More and more people are becoming involved in long-range rifle competitions such as the SSAA's Long Range Precision discipline and availability of entry-level rifles has increased with improvements in rifle design and ammunition and the ability of manufacturers to keep costs down. This is an exciting time for precision rifle shooters and Smith & Wesson Performance Center has brought a fine rifle to the sporting shooters'

market, one which deserves to be at the top of your list when you get into long-range precision shooting. ●



Specifications

Calibre/Gauge: .243 Winchester, .308 Winchester, 6.5 Creedmoor (reviewed)

Barrel length: .243 Win 26", .308 Win 20", 6.5 Creedmoor 24"

Overall length: 45.5"

Weight: .243 Win 5.44kg, .308 Win 4.99kg, 6.5 Creedmoor 5.22kg

Sights: Flat top Picatinny-style rail with 20 MOA taper

Stock: Aluminum chassis, adjustable stock in black or Flat Dark Earth

Action and trigger: Thompson/Center

Magazine: 10 round, accepts all AICS patterned magazines

RRP: \$2350

Australian agent: Frontier Arms, Adelaide

