



AllTerra Arms rifles are built to stand up to whatever you throw at them.

immaculate. There wasn't a blemish to be found, down to the perfectly timed muzzle brake.

**Action**

The patented AllTerra Arms receiver starts out as a massive 8 pound chunk of pre-hardened 416 stainless steel 2" round bar and ends up a work of art that weighs less than a pound. Starting with this solid round bar does result in significant metal waste, something most manufacturers completely shy away from, but it also allows them to integrate the recoil lug into the receiver. From there, AllTerra uses an EDM machine with an electrified wire that cuts the metal to the concentric center of the receiver and bolt lug with .0005" accuracy. Other manufacturers often drill out the center mass followed by broached raceways, techniques that can allow things to wander off the centerline and lack concentric accuracy if not done absolutely perfectly. The result for AllTerra: A receiver built dead-straight for supreme accuracy.

**Bolt**

One factor many don't consider when evaluating rifle performance is 'lock time', that crucial time between the break of the trigger and ignition of the cartridge. The longer that process takes, the more opportunity for the shooter to flinch and take the rifle off target. AllTerra has designed a smarter, faster

# AllTerra Arms AllTerra Steel 300 PRC

By Kevin Madison, WHJ Shooting Editor

**I**n 2015, Drew Foster set out to not just improve the standard bolt action rifle, but to completely redesign it by approaching the problem of bolt face to barrel, and, barrel to receiver alignment, in an entirely unique manner that ensures precision accuracy and high reliability. Under this premise, Axial Precision was born, the name conveying the notion that every rifle component was built along a single axis. And while that name worked for a while, leadership at the company felt it lacked the attitude that

their guns have for delivering guaranteed long-range accuracy in all terrains and the new name of AllTerra Arms was launched this year, embracing that spirit.

As a prospective gun buyer, when I read that type of company information, my interest is certainly immediately piqued, but always with a healthy dose of skepticism. Would their claims of sub .5" three round groups with factory ammunition and sub .25" three round groups with custom ammunition really amount to a difference in real life? Only one way to find out – put some rounds

down range in all types of conditions and see how it performs, so I was excited when I got that much anticipated tracking number confirming my new AllTerra Steel chambered in 300 PRC was on its way.

Taking this new rifle out of the box, it was apparent immediately this wasn't even in the same category as your regular run of the mill production rifle. This rifle is a thing of beauty! And while I fully intend to abuse it in every type of weather condition Mother Nature will throw at me, it is nice to start out with a sexy looking rifle. The fit and finish is

firing pin to cut down lock times. Instead of the firing pin spring snaking under pressure inside the bolt, AllTerra's floats in the center without rubbing against inner surfaces, resulting in faster pin movement as well as better cold weather performance where others may potentially freeze up.

The bolt also features their patented No-Fail Cycling. To ensure shooters won't experience bolt-binding due to things like the dust, dirt, and debris we all deal with on our hunts, AllTerra has machined relaxed tolerances between the bolt and receiver during cycling, which helps send debris out of harm's way, so it can't jam the gun. The bolt also features patented conical lugs, which engage and lock into a patented elliptical raceway, making the surfaces literally "self-cleaning" with every cycle of the bolt. The entire bolt body is also coated with Nickel Boron for added durability and more "slippery" cycling.

## Barrel

There are two barrel types to choose from — carbon fiber or stainless steel. For my build I chose to go with the match-grade, hand lapped stainless version, available in either fluted or no fluted varieties. As I had just built a custom .300 Win Mag with a carbon barrel, I chose to go with the 24" stainless fluted version for this build. Barrels come 5/8 x 24 threaded, with an end cap, for either suppressors or a muzzle brake, both of which I utilize regularly depending on what situations I anticipate. Having the barrel come threaded from the manufacturer is a huge

convenience.

Most manufacturers attach their barrels to their receivers with 16 pitch threads. These threads are a great place to introduce inaccuracies in the build, especially once the intense pressures of a fired round are introduced to them. AllTerra combats this with not only a more generous 20 thread pitch, but additionally they feature two precisely machined tenons — machined fore and aft of the threads. These tenons form the solid union between the receiver and barrel creating a significantly reduced and balanced harmonic pattern with every shot.

To cut the rifle's chamber, AllTerra again doesn't just take the easy route by simply cutting with a reamer. Instead they start with a small drill followed by a boring bar that cuts concentric to the bore, instead of potentially wandering offline. That removes most of the steel. The rest is finished with a chamber reamer for the exact bullet casing geometry, with .0001" of concentric and axial tolerance to the bore. These proprietary processes ensure the receiver, bolt and chamber are precisely aligned.

## Stock

You can have a barreled action built with the tightest tolerances possible, but if the fit between the shooter pressing the trigger and the rifle itself isn't perfect, you'll introduce unwanted inaccuracies. AllTerra ensures they are providing a properly designed stock that quickly and accurately aligns the shooter's body and eyes with the bore

**MANUFACTURER** AllTerra Arms  
**MODEL** AllTerra Steel 300 PRC  
**OFFERINGS** 22-250 Remington, 243 Winchester, 243 Ackley Improved, 6mm Creedmoor, 260 Remington, 26 Nosler, 6.5 Creedmoor, 6.5x284 Norma, 6.5 PRC, 6.5 SST, 6.5x47 Lapua, 280 Ackley Improved, 7mm Remington Magnum, 300 SS, 300 PRC, 30 Nosler, 340 Weatherby Magnum, 33 Nosler, 338 Winchester Magnum, 338 SS, 338 Edge  
**TESTED** 300 PRC  
**SCOPE USED IN TEST** Leupold Mark5 HD 7-35  
**MAGAZINE CAPACITY** 3+1  
**BARREL** 24" stainless fluid, 5/8x24 threaded  
**OVERALL LENGTH** ???"  
**WEIGHT (NO SCOPE)** Starting at 7.5lbs (stock weight and barrel length are customizable)  
**LENGTH OF PULL** 13.50"  
**TRIGGER** TriggerTech Special  
**SIGHTS/SCOPE MOUNTS** 20 MOA picatinny rail  
**MSRP** \$5,095  
[allterraarms.com](http://allterraarms.com)

line as well as manages recoil optimally, from their lightest 6mm offerings up through their heaviest .338 magnums by controlling 100% of the design, materials, and craftsmanship that goes into each stock. None of that is delegated to a third party. Made from 6-layer carbon fiber, the stock features:

- Negative Cheek Comb:**

For harmonious scope-eye alignment, a solid cheek weld, and minimal felt recoil.

- Above Centerline Heel:**

Spreads recoil straight back and evenly across the entire butt pad.

- Tilted Palm Swell:** Keeps the wrist in a proper, straight posture to reduce canting and recoil torque.

- Optimal Grip-to-Trigger Reach:** Puts the index

pad in the ideal position for an accurate trigger squeeze.

- Subtle Beavertail**

**Forend:** Promotes a neutral, comfortable forward grip.

- Molded-In Texturing:**

For a slip-free grip, even when wet.

- Optional:** Molded-in camo patterns that won't chip or flake.

## Performance

To test just how this rifle would perform, I started with the two most popular factory ammunition options for the 300 PRC, Hornady's 212 ELD-X and 225 ELD-M. The third option I tested was a custom 212 ELD-X load that was provided by AllTerra.

Following their owner's manual, each of the first 10 rounds fired were followed by a barrel cleaning. Next, they recommend three round groups followed by cleaning for the next 15 rounds. One last five round group, a last thorough cleaning and a fouler shot to remove any residual cleaning solvents from the barrel, and I was now ready to really see what this thing could do. Being one who is not a big fan of shooting paper for groups (I generally prefer to establish a solid zero at 100 yards then take my rifles to the field and practice on steel and rocks at various distances and from various shooting positions), I was apprehensive about how both myself and the rifle would do.

Starting with the factory 212 ELD-X's, I was pleasantly surprised by that first initial group. Having sent 31 rounds down the barrel prior to shooting this first

## GUN REVIEW



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group for accuracy, I had developed a strong comfort level with the trigger break and the very modest recoil of the rifle and the results, right under .5", reflected that. Subsequent shooting with the factory 212s established an average velocity of 2,925 fps which I would expect to increase a bit over the next 100 to 200 rounds when barrels generally see small increases in speed.

The factory 225 ELD-M's were next and performed much like the 212s had, with a slight smaller group at just under .4". At this point, I was loving this rifle. Shooting a 30-caliber magnum cartridge comfortably under .5" groups was a very pleasant experience. Aver-

age speed later proved to be at 2,875 fps with these 225s.

Last up was the custom 212 ELD-X ammunition. The first two attempts to shoot groups with this round showed why I generally dislike the process. Both times the first two rounds would be nearly in the same hole, only to crumble under pressure on the third round and send a slight flier that opened up the group to roughly .65". This by itself would be generally be perfectly acceptable precision for any elk hunting rifle, but I knew it could do better if I could control my end of things. After letting myself and the rifle take a nice, extended break, the third time turned out to be the charm.

Shooting paper for groups isn't my strong suit, but the AllTerra Arms 300 PRC easily exceeded the manufacturer's accuracy guarantees and is by far the most comfortable 30 caliber magnum I've ever shot.

With the first two rounds falling into nearly the same hole like the first couple of attempts, I was finally able to execute that third precise trigger press that sent the last round again into nearly the same hole. Measuring a group like this is really splitting hairs to get an exact measurement, but suffice it to say, it was comfortably at that sub .25" range guaranteed by AllTerra.

With that stress of shooting for groups out of the way, I called it a day, saving ammunition for the following weekend when I hit the mountains where I can set up steel targets at extended ranges. With a Roosevelt elk hunt approaching soon, I set up an 8" target at 400 yards, another 8" at 600, and lastly a 16" target at 800 with the intent of validating my ballistic calculator's projected drop chart. With only a moderate sub 5 mph full value wind to deal with, the 400 yard target proved to be an easy target to hit with very minimal wind hold. At 600 yards, holding just off the edge of the 8" target, I was making hits that looked good both vertically and horizontally. At 800 on the 16" target my initial round resulted in a hit with good vertical but the edge of plate hold wasn't enough to center up the hit and the target spun hard. A .5 mil adjustment on the next three rounds did the trick and was pleasantly surprised to later measure that group at just over 5 inches. Yes, that would technically fall outside the

sub .5" (or .5 moa) guarantee, but for not shooting off a solid concrete bench and having at least some wind to deal with, that is the kind of field performance I was hoping to see from this rifle when the project was first presented to me.

### Bottomline

There are many hunters who instantly get sticker shock when looking at the price tag on a custom rifle but in today's world, where many people are waiting 15 to 20 years if not more to finally draw those premium trophy tags, I can't help to want only the best possible equipment with me on those hunts. And after shooting the AllTerra Steel in 300 PRC now for over a month, I can strongly say this rifle would definitely fit into that 'best possible equipment' category. When I first got into 'long range shooting' over two decades ago, my buddy who was mentoring me at the time would often hear me complain about the price of quality components, but his words of wisdom rang true back then and they still ring true now: "the bitterness of poor quality remains long after the sweetness of low price is forgotten." I've since learned he stole the phrase from Benjamin Franklin, but the point remains. Investing in extremely high quality goods, like the AllTerra Steel I've been shooting, is always a wise investment and one as the guy pulling the trigger, you won't regret. **WHJ**