

## ***A New Rifle from David Tubb***

Several years ago I heard that David Tubb was experimenting with a new rifle. Knowing David's willingness to think outside the box and let design follow mission requirements rather than tradition, I was looking forward to seeing his design. About 2 years ago I was able to handle one of his prototype rifles and to say I was impressed would be an understatement. **Nearly every aspect of the rifle is a departure from the norm.**

For the last 100 years, bolt action rifle has been little more than trying to see how we can change the Mauser 98 design to make it easier and cheaper to manufacture. The design has been simplified, parts eliminated, and features removed to facilitate cheaper manufacture. The most copied bolt action rifle in the world, the Remington 721/700 series was developed with just that design objective. How cheaply can we make something to compete with the Winchester 70 - itself a design that borrowed heavily from the Mauser and Springfield rifles. While there have been exceptions over the years, they have been few and far between.



The new rifle from David Tubb is one of those exceptions. While his first rifle, the T2K as it became known, was a fine rifle and likely the best tool ever devised for shooting across the course HP at the highest level, it really had very little new technology. Basically it was a two lug action in a chassis stock with a tubular handguard. While relatively new when introduced, these chassis stocks have become common fare in the time since. **David's new rifle, the Tubb Adaptive Target Rifle (TATER gun?) is a**

horse of a completely different color. While the rifle still utilizes a rotating bolt design, this is about where the similarity with any existing design ends.

**They say that the action is the heart of a rifle and the stock is its soul.** With the new rifle from Tubb, it is hard to tell where the heart ends and the soul begins. The chassis and action have been morphed into one unit within which the bolt travels and the barrel is affixed, but also serves as the attachment point for the buttstock and handguard. The traditional separation of duties among the parts has been eliminated and parts serve multiple functions.

**If we start with the bolt,** we find a unique three lug design. The rear locking surface of the three nonsymmetrical lugs are angled forward to positively center the bolt within the barrel extension. This ensures that each lug is fully seated in its recess rather than having one or two lugs in contact. The bolt head is removable with sizes available for standard .308 sized cartridges as well as magnum and Lapua. One of my favorite unique features is the cocking cams. Rather than being located on the back of the bolt, they are located on the bolt head within the bolt body. This design allows for several advantages over the traditional location. The most obvious to me is that it gets the lugs enclosed within the bolt where they are protected from the elements. Cocking cams need lubrication and this lubricant can be an attractant for all kinds of dirt and debris in a normal bolt. On the ATR the cams are inside the bolt and protected from the elements so the grease does not turn into lapping compound. This design also allows a smaller more compact striker assembly which allows it to be made lighter for faster lock times. Another small advantage of this design is that it eliminates the need to heat treat the back of the bolt to harden the cocking cams. The bolt body can be made out of just about any material as it becomes just a handle and the bolt head does all the work.

Moving forward from the bolt we find a **massive barrel extension** for the three lugs to lock into. A full 1.4" in diameter and threaded for the barrel with 1.125" diameter threads, the extension dwarfs an AR-10 extension. Length of engagement in the chassis of 1.750" makes for positive alignment and a large barrel nut positively locks it into the chassis. The ATR is sold without a barrel so you will need to purchase the barrel separately and White Oak will be happy to make your barrel.

Where we would typically find a receiver for this bolt to travel in, we find a **70 series aluminum chassis/bolt carrier**. This chassis not only carries the bolt, but also handles chores normally handled by the lower on an AR type rifle or the chassis on a modern bolt actioned chassis rifle. The handguard, buttstock, and magazine are all mounted via this chassis/bolt carrier. The trigger housing even mounts to this by its own easily removable housing. The trigger is Tubb's own T7T two stage trigger.

At the rear **a folding receiver extension holds a fully adjustable stock**. Length of pull, buttplate height, cant and cast on or off can all be easily adjusted. There is even a built in storage compartment for the hex wrench used to make these adjustments. A

simple press of a button allows the stock to fold and a latch ensures it remains in the folded position until you are ready for use. The buttstock has numerous mounting points for a quick release sling swivel adapter.

It seems that each time I pick up the rifle I find more little features that I missed the previous times. The bolt handle stop is a nylon tipped screw so the handle does not hit against metal and can be adjusted so as to allow the correct bolt rotation. The integral rail has 20 MOA of elevation built into it. Simply removing one screw with the onboard stowed hex wrench allows removal of the pistol grip and trigger assembly for cleaning or maintenance. The elimination of a steel receiver greatly reduces weight and the possibility of bedding issues that could negatively affect accuracy. The magazine is fully machined, and can be configured for any cartridge from the 6xc thru the Norma magnum. This combined with the interchangeable bolt heads and ease of barrel change allows for an adaptability not seen in any other rifle design. Need a varmint rifle, screw in your 22-250 barrel, need an antelope rifle, how about a 6.5 magnum barrel. Want to shoot some mid-range prone? Put on a 6xc barrel. PRS shooting, long range prone, Palma, and extreme long range shooting can all be easily attained with the TUBB Adaptive Target Rifle as this platform can be configured to do it all, and do it all very well.