



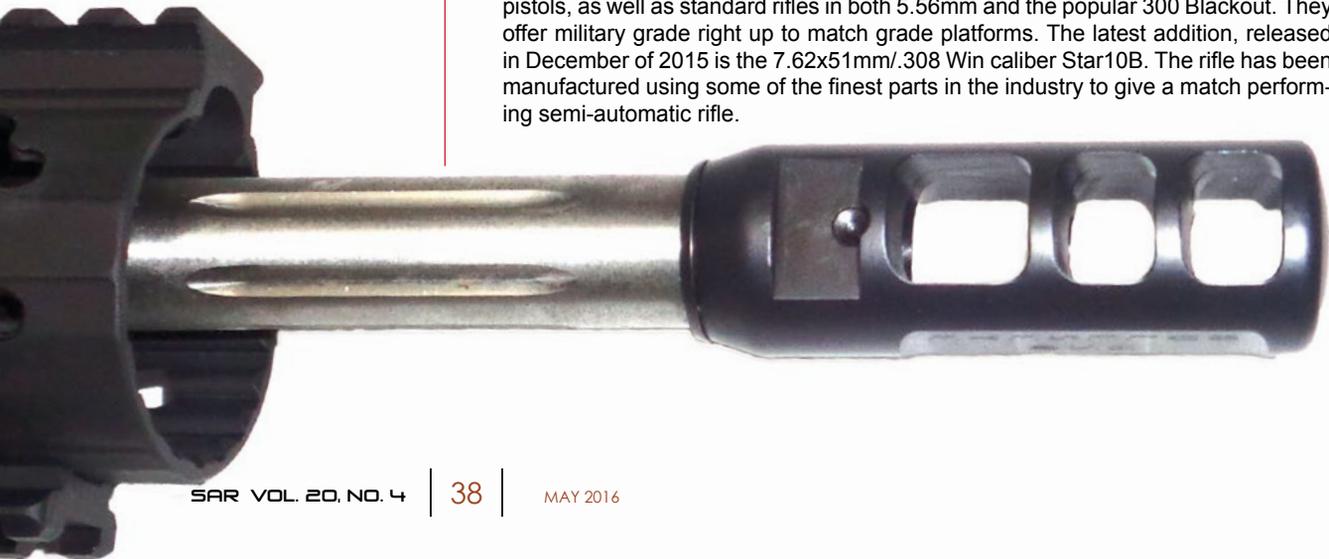
THE DOUBLESTAR **STAR10B**

By Christopher R. Bartocci

The AR-10, although thrown on the scrap heap by the U.S. Ordnance Corps in the late 1950' and early 1960's, has been resurrected and with a vengeance. Who would have known that in 2016 there would be dozens of companies making this rifle, and all with their own spin on it. Some of the rifles are basic copies of the same thing and a few companies have taken it a little farther. DoubleStar has been known for their 5.56mm and .300 Blackout rifles and now they have entered the 7.62x51mm/.308 Win market as well with the introduction of their STAR10B.

In 1978, Jack and Teresa Starnes started an AR-15 manufacturing company with a very simple plan; provide their customers with quality American made firearms parts and accessories and outstanding customer service. 38 years later, this same family continues to do just that. From a small house in Winchester, KY to a multi-million dollar facility, DoubleStar Corp continues to grow by leaps and bounds. DoubleStar started as J&T Distributing; stocking AR15 parts and accessories from all the major manufacturers, such as Knights Armament, Ergo, and the list goes on. J&T's bread and butter was their quality barrels, lower parts kits, stocks, and of course the combination of those parts, the AR15 build-it-yourself kit. J&T kits were so popular, customers demanded a complete AR-15 rifle from the Starnes family. That is when DoubleStar was born. Teresa and son Jesse Starnes (two Starnes=DoubleStar) started the rifle company while Jack maintained the parts side of the business. In 2007, DoubleStar Corporation purchased California based Ace Limited and moved it to Kentucky. Adding Ace to the thousands of parts J&T Distributing already stocked not only added more quality, but also more options for great rifles using Ace stocks. With shelves full of the most popular and high quality parts and accessories, there isn't much that DoubleStar can't build for their customers.

DoubleStar offers a diverse line of AR-type rifles. They offer Short Barreled Rifles, pistols, as well as standard rifles in both 5.56mm and the popular 300 Blackout. They offer military grade right up to match grade platforms. The latest addition, released in December of 2015 is the 7.62x51mm/.308 Win caliber Star10B. The rifle has been manufactured using some of the finest parts in the industry to give a match performing semi-automatic rifle.





ABOVE TOP: The left side view of the DoubleStar STAR10B rifle. Notice the ACE Hammer Aluminum stock assembly, Hogue pistol grip, US Optics scope and ATLAS bipod. ABOVE: The ACE Hammer aluminum stock assembly is very well made and has 7 positions. It is quite comfortable and operates very smoothly. LEFT: The DoubleStar designed and manufactured BULLSEYE muzzle brake was designed with accuracy, speed and precision in mind. What makes this muzzle brake unique is the "V" shaped baffle system.

The rifle weighs in at 9.8 pounds without any magazine or accessories. With the stock extended the rifle has an overall length of 41 inches and with the stock closed 37 1/2 inches. Starting with the rear of the rifle and lower receiver, the stock chosen is the aluminum ACE Hammer stock. Both the receiver extension and stock assembly are manufactured from aircraft grade aluminum. The dimensions are Mil-Spec in length using the cut/short buffer. The receiver extension has 7 positions and the positions are laser engraved on the left side of the receiver extension. The latch has 5 spring-loaded ball bearings to ensure smooth function. The stock itself has an adjustable cheek piece to adjust the shooter's eye to align with the optic. There is a sling cutout for a cloth sling on the top rear of the stock. On top of that is a machined quick-detach mounting point for a sling swivel. There are gripping grooves on the rear and bottom of the stock to ensure against slippage. According to DoubleStar, they chose the ACE stock because "The Hammer" is one of the strongest buttstocks on the market, but weighs the same as the Magpul UBR stock. With the "meat tenderizer" on the toe of the Hammer stock, "if you are out at a shooting event and you are served a tough piece of meat, you are good to go!" The stock is one of the slickest and highest quality that this author has come across. It is not by any means light, but it is on a long range sniper platform and not a CQB entry rifle. The lower receiver is manufactured from a billet of 7075 T6 aircraft grade aluminum. This lower is where the rifle really stands out above the rest. When they fire Black Rifles, many people like to hold it with their non shooting hand gripping on the front of the lower receiver (magazine well) and magazine. Not

the most comfortable position due to the smooth rounded edges. What DoubleStar did was extend the magazine well down significantly and put checkering on the front of the magazine well making for a comfortable grip. According to DoubleStar "The front of the mag well is the balance point of the rifle. That is where I place my hand, and the extensions prevent disrupting the magazine feed angle and protects your hand in case of an out of battery event. The extended lip can be used on barricades as a rest or the face of the mag well can be pressed against a barricade." There is a nice flair on the magazine well. Curious as to whether this change would have any effect on magazine compatibility, a good selection of the most popular magazines were put together to test. These magazines included Knight's Armament, D&H Tactical, Magpul Gen 2 and 3, Advances Storage Components, C-Products, C-Products Defense, X-Products drum and Lancer Systems. The only issue was with the Lancer Systems and X-Products drum. Due to a lip on the front of the Lancer magazine it would not insert. The drum stopped the magazine from being inserted with the extremely long front of the mag well. All others seated and locked perfectly and held the bolt back on the last shot. The trigger guard is part of the receiver and is large enough to use with heavy winter gloves. The pistol grip chosen is the Hogue Over Molded Rubber pistol grip. The safety and bolt catch are standard.

The trigger is the CMC Flat Trigger. This is a drop in unit which comes as a trigger pack. The trigger is two-stage and the trigger pack is held in place by CMC anti-walk hammer/trigger pin set. One end of each pin is held in place via a C-clip. The trigger itself is flat to the pull. This author does better with a



curved trigger but this is really a matter of preference. Both work well and it is up to the individual which feels better. The T&E rifle trigger broke at 3 1/2 pounds with literally no creep and a clean break.

The charging handle is the proven VLTOR produced Gunfighter 7.62mm. It has an extended latch on the left side. The extended latch comes in handy when the back of the scope overhangs the charging handle. The latch is what makes the charging handle accessible.

The bolt carrier group is the basic DPMS pattern bolt carrier group. The carrier group is finished with NiB-X. This is an extreme use nickel-boron coating. It has a hardness of 70 Rockwell and a CoF of .08. This coating can be applied to all ferrous and non ferrous alloys except magnesium, providing a hard, lubricious surface to complex geometries. NiB-X conforms to material standards ASTM B607 and AMS2433C and is applied in an NADCAP accredited facility (highest process control standard achievable in the aerospace sector). The advantage to this finish is that it is harder than Tennifer, Melonite, nickel Teflon and hard chrome. It is environmentally corrosion resistant and very lubricious. The finish is easy to clean, requires less maintenance and offers higher reliability and enhanced performance.

The upper receiver is also manufac-



LEFT: The bolt carrier group is the standard DPMS pattern NP3 coated bolt carrier group. The charging handle is the VLTOR Gunfighter with extended latch. BELOW LEFT: The Samson Evolution free floating handguard. Attached to it is the Atlas BT46- LW17 SPR bipod with the ADM 170-S standard lever. The rail takes removable rail panels so the end user can put on only what is needed. ABOVE: Perhaps the most immediately notable feature of the STAR10B is the elongated magazine well with gripping grooves on the front of it. This was very comfortable firing from this position. Short 10 round magazines did get lost in the magazine well though! BELOW RIGHT: The CMC Flat Trigger is a drop-in unit which comes as a trigger pack. The trigger is two stage, and the trigger pack is held in place by CMC an anti-walk hammer/trigger pin set.





The rifle was tested and is compatible with the Knights Armament steel magazine (left), CProducts Defense (center) and Magpul Gen 3 Pmag (right). In the rifle is the D&H Tactical steel magazine. Only the Lancer and X-Products drum were found to not be compatible with the extended magazine well.

tured from a billet of 7075 T6 aluminum. There is a fired cartridge case deflector as well as an ejection port dust cover. The upper does not have a forward assist assembly. This is good in this author's opinion. The AR10 was designed by Gene Stoner without it. The forward assist causes far more problems than it cures. From a mechanical stand point, you should never force a round into the chamber. If the bolt does not lock, in law enforcement we call that a clue! Something is wrong, get that round out of the chamber/rifle. Some people use it in the loading process and others to verify the rifle is loaded, these are training applications that have nothing to do with the mechanical operation of the rifle.

The barrel itself is manufactured by Wilson. This rifle has an 18-inch fluted stainless steel barrel with 5 lands and grooves and a 1 turn in 11.5 inch right hand twist. The barrel is air gauged at the factory. This is a match grade barrel capable of firing the heavier M118LR 175gr OTM projectile giving the rifle a maximum effective range of over 800 yards. The muzzle device is the Double-Star designed and manufactured BULL-

SEYE muzzle brake. It was designed with accuracy, speed and precision in mind. What makes this muzzle brake unique is the "V" shaped baffle system. There are three chambers which are slightly offset to the bore's centerline which allows gases to escape in the perfect direction for optimal muzzle control. It also has a pilot hole that can be adjusted for a left- or right-hand shooter. The gas block is low profile and is held on by set screws on the bottom side of the gas block. The rifle uses a rifle length gas system.

The handguard chosen for the STAR10B is the Samson Evolution free floating handguard. The handguard is rifle length (15 inches) and is manufactured from 6061 T6 aluminum. The rail weighs 13.4 ounces with an inner diameter of 1.56 inches and an outer diameter of 1.8 inches. The rail system includes Integrated Anti-Rotation Tabs. The rail is Type III Mil-Spec Hard Coat Anodized. The top rail permits a constant rear to front continues Mil-Std-1913 rail. The rail is provided with a 303 stainless steel barrel nut. There are various length removable Mil-Std-1913 rail segments

which may be installed by the end user wherever they are needed.

As previously stated the new magazine well was tested with various types of magazines. The industry standard AR10/SR25-type magazine is what the STAR10B was designed for. This would include the most popular magazine in the industry and what the rifle is provided with, the Magpul PMag 20LR. This magazine has all the Magpul proven features and has the constant curve shape of the 7.62x51mm ammunition stack. The rifle was tested with both the Gen 2 and Gen 3 PMags. The steel magazines tested were the Knights Armament Company, D&H Tactical, CProducts and CProducts Defense. All are straight magazines. The D&H Tactical has witness holes to let the shooter know how many rounds are in it. The Knights Armament is the military issue for the M110 Semi Automatic Sniper System (SASS) rifle. That same magazine is issued to British Sharpshooters with their LMT L129A1 rifles. These all functioned perfectly in the STAR10B. However there were two magazines found to be not compatible. The Lancer polymer magazine and the

X-Products 50 round drum. The Lancer magazine has a magazine stop to prevent over insertion. This is on both the 10- and 20-round variants. This stop prevented insertion into the magazine well of the STAR10B. The X-Products is a drum magazine. The drum magazine is designed to begin right outside the basic industry standard magazine well. With the longer magazine well of the STAR10B, the drum magazine will not seat into the mag well at all. These were the only two magazines found not to fit in the STAR10B.

The bipod chosen was the Atlas BT46-LW17 SPR bipod with the ADM 170-S standard lever. This is a very well built bipod. It is manufactured from 7075 T6 aluminum, just like the rifle receivers. The adjustable legs have a height range of approximately 4.75 to 9 inches. It also has a 15 degree \pm of preloaded pan, and 15 degree \pm preloaded cant. The legs may be stored locked at 45° rearward, or 90° or 45° forward. It has fore and aft picot limiting bosses with non rotating legs. The unit weighs 13.61 ounces. The mount is a throw lever with lock and mounts to a Mil-Std-1913 rail. It comes in black only. The precision manufacturing and quality is exemplary. The bipod has an MSRP of \$319.99.

The optic chosen to test the STAR-

10B is the US Optics ER-25 5-25x scope. Though not a small scope, measuring 18-inches in length and weighing 2.50 pounds, this scope is capable with the proper rifle and shooter to take accurate shots out to 2,000 yards. The eye relief is 3.5 inches and field of view of 16.6-5.3 with an objective lens 58mm in diameter. The scope is manufactured from 6061 T6 aluminum and then Type III hard coat anodized to a matte black finish. The reticle is illuminated by a push button to turn the reticle bright red for low level light shooting. The intensity is selected by the shooter by either hitting the increase or decrease button on the illumination control of the scope. The knob elevation is adjustable by EREK 1/10 Mil 110 clicks and windage by US#3 1/10 Mil 100 clicks (right). Optics are crystal clear. The MSRP of the optic is \$3,301.00 for the basic optic. The scope is mounted to the rifle with an ARMS, Inc. #22 High-throw lever rings. These allow for quick detach. These are the newest version which has an adjustable mount so if the rail does not conform to the proper Mil-Std-1913, the mount can be either increased or decreased to compensate for the manufacture of the rail being out of tolerance. The rings have an MSRP of \$129.95 for the set of two.

The rifle was tested with some different types of ammunition. The first is the Black Hills Ammunition 7.62x51mm 175gr OTM. Second is the Remington .308 Win 168gr Match OTM. Third was Barnes Precision .308 Winchester 175gr OTMBT and last is the Winchester .308 Win 168gr Matchking HPBT. All these are excellent precision long range cartridges. There were a total of 300 rounds fired through the rifle. There were no malfunctions with any of the magazines or ammunition. The best group at 100 yards was .55 inches with Black Hills Ammunition 7.62x51mm M118LR loaded with a 175gr OTM projectile. All of the ammunition tested was sub MOA. All averaged around .75 inches. The rifle was not unreliable with any of the ammunition and had neither mechanical nor accuracy issues.

The DoubleStar STAR10B is a very accurate and reliable rifle for whatever you may ask of it. The precision target groupings are clearly qualifiers as an LE sniper rifle, DMR, and for target shooting, hunting or as a self-defense rifle. The main components are all industry standard so there is an excellent supply of parts available as well as options to accessorize. DoubleStar did very well with their initial entry into the ring of .308 Win caliber semi-auto rifles.

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