

POF USA P308



By Charlie Cutshaw ||||| Photos by Chris Rohling

FOR those who may have only recently returned to earth from another planet or who may not have been keeping up to date on military and law enforcement matters in *GWLE*, the AR small arms family, which includes the M16 and its M4 carbine version haven't exactly been covering themselves with glory in the War on Terror, presently being waged in Afghanistan, Iraq and other less well-known spots around the globe. Issues of both reliability and lethality have become commonplace in informal reports from those warriors at the "pointed end of the spear." First-hand quotes include comments like, (regarding the M16) "Thumbs down. Chronic jamming problems with the talcum powder-like sand over there." As to the military standard 5.56mm (.223 Remington) round, the same sergeant had this to say: "They all hate the 5.56mm (.223) round. Poor penetration on the cinderblock structure common over there and even torso hits can't be reliably counted on to put the enemy down." As far as M16 reliability issues are concerned, the rifle was known to require intensive maintenance in order to keep it functioning during the Vietnam War over 40 years ago.

In order to make the M16 reliable, heavy lubrication is necessary

POF USA P308 accepts all standard military optics and accessories including Trijicon's 4x32 optical sight, Vltor MODSTOCK, Laser Devices' DBAL-A² and Keng's Clawfoot bipod.

Boasting custom details galore, it's the **ULTIMATE .308!**

AD

POF USA P308

to soften fouling, but in a desert environment the lube becomes a dust magnet, causing the frequent stoppages mentioned above. To rectify at least some of the reliability and lethality issues, the military has quietly been withdrawing M14 rifles from storage and issuing them by the thousands. Unlike the ARs, the M14s have proven to be reliable, lethal and capable of penetrating the cinder block structures that have proven impervious to .223 rounds. Of course, there are some issues with the M14 as well. The M14 was never intended to accept the many accessories that characterize modern tactical operations and although there are modular stocks for the M14, they actually are “band-aids” that do not solve the M14’s basic problems.

What’s worse, there aren’t any M14s left to issue and tooling to make new ones to military standard no longer exists. In addition, M14 parts are drying up. Things have got-

ten so bad that the military in some cases is requesting the return of M14s previously transferred to law enforcement agencies. Further, the M14 is a VERY expensive rifle to manufacture, being essentially a modified version of the venerable M1 Garand, a rifle that was originally designed in the late 1920s and first issued to troops in 1936. Regardless, the Army officially has no requirement for a rifle to replace the flawed

1) Trijicon TA31RCO is standard USMC rifle sight and has illuminated reticle that operates without batteries. Bullet drop compensator reticles are available in both .308 and .223. Note ambidextrous bolt release just below ejection port dust cover. 2) Trijicon mounts via LaRue Tactical QD mount. LaRue mount is adjustable for tension and wear.



SPECIFICATIONS

POF-USA P308

Caliber: 7.62x51mm (.308 Winchester) • **Operation:** Gas semiautomatic (Select fire available)

Overall length (As tested): Stock extended: N/A Stock collapsed: N/A

Barrel length: 16.5 inches (14.5 and 20 inch available)

Empty weight (As tested): 8.8 pounds • **Price:** \$2300



AD

M16 family. The Marines, on the other hand, have publicly announced that they are seeking a replacement for the M16.

Some believe that the abortive XM8 might be considered as a replacement for the M16/M4 family, but as we were told by an Infantry Colonel at Fort Benning, GA during a discussion regarding the XM8 a few years ago, as far as he was concerned if the Army adopted a new rifle, it needed to be significantly improved over the current family of small arms and the XM8 made no significant improvements to the current family. As a former Infantry officer, I couldn't agree more! Another possibility might be the 5.56mm FNH Mark 16 or the 7.62mm Mark 17, but we understand that these rifles are having teething problems and are not yet in widespread use. The Heckler & Koch M416 gas piston/operating rod upper receiver is in widespread Special Forces use, but it is not available commercially to either civilians or law enforcement as of late 2007. Moreover, no rifle chambered in 5.56mm represents a significant lethality improvement over the current M16/M4 family. Enter POF-USA.

Patriot Ordnance Factory USA has been manufacturing AR-15-type rifles and carbines for several years that not only have a very simple and reliable gas piston/operating rod system, but that also operate without lubrication of any kind. As farfetched as this may sound, we have had a P415 for long-term test and evaluation and have yet to clean or lubricate it other than to wipe the internal



Latest Vitor MODSTOCK offers much improved cheekrest in comparison to earlier collapsible stocks combined with storage compartments for batteries and small items. MODSTOCK has been adopted by military special operations units.

AD

POF USA P308

parts with a dry shop towel to remove what little fouling gets into the receiver. Because the receiver interior is plated with silicon nickel and the other operating components are hard chromed, they are self-lubricating and nothing sticks to them.

The P308 retains most of the features that have led to the P415's success and then some. The P308's receiver is plated with the same silicon nickel as the P415, but there the similarity ends. The P308's bolt carrier is heat treated with electroless nickel and the bolt is hard chromed. The P308's barrel is a real breakthrough in small arms technology. The barrel and barrel extension is heat treated by a "deep nitride heat treatment" which case hardens the barrel. While Frank is understandably reluctant to divulge the exact nature of the process, the results are obvious. The treatment penetrates the barrel steel to a depth of three- to five-thousandths of an inch and gives a surface hardness of Rockwell 68-72. Hard chrome has a surface hardness of Rockwell 65-68, but there are issues with hard chrome that make it less than ideal for rifle barrels, primarily that hard chrome has surface irregularities that cannot be eliminated, which is the primary reason that match rifle barrels are almost universally plain chrome-molybdenum steel. POF's deep nitride treatment, on the other hand, has zero imperfections and is incredibly smooth. For this reason, P308 barrels are regularly achieving amazing accuracy that literally has to be seen to be believed. We'll discuss this at length below. The deep nitride process also virtually eliminates fouling of any kind, copper included.

ON THE RANGE

Current rifles are having thousands of rounds fired through them without cleaning and with no effect on accuracy. As hard as this may be to believe, the durability and accuracy of the new POF P308 has been documented in formal testing. Our P308 test resulted in shot groups that are more in keeping with a bolt-action precision tactical rifle than a gas-operated carbine. Our test carbine with 16-inch barrel shot sub-half minute-of-angle groups out of the box with no break-in whatsoever other than a few test rounds at the factory prior to shipment to verify function and a few rounds to get the Trijicon optic zeroed. More surprising, our test groups were achieved using a 4x32mmTrijicon optic identical to that used by the US Marine Corps. Just as surprising, we have seen independent test results from 14.5-inch P3208 carbines that are as good as those achieved with our test 16-inch carbine.

We have already mentioned the P308 gas system that functionally is identical to



that of the POF's P415. The system consists of a gas piston and operating rod. When it becomes necessary to clean the gas system, disassembly is simply to rotate the FAL-type plug a quarter turn while depressing the spring-loaded latch. The piston and operating rod just fall out when the rifle is pointed muzzle down. The operating system should be checked periodically, since it takes the brunt of hot gases when the rifle is fired. Any



carbon buildup in the gas system can be removed with a Scotch Brite pad. No solvent is needed to clean the P308, nor is any lubrication needed, although we spray our POF rifles with Mil-Comm TW25B dry film PTFE. TW25B spray comes in an aerosol form. The PTFE is sprayed in an alcohol carrier that quickly evaporates leaving behind a dry surface of PTFE that penetrates metal at the molecular level. POF tells us that this extra precaution isn't necessary, but it doesn't hurt anything and because it is dry it doesn't attract dust, so we use it as a "back-up" to POF's 21st century metal finishing processes.

But the improved gas system isn't the end of the story with the P308. The bolt carrier has been modified for increased reliability and accuracy. The bolt carrier surfaces that ride on the upper receiver are somewhat larger than conventional ones, while maintaining recesses to accommodate any fouling that might accumulate. Also, the rear portion of the bolt carrier is essentially unstressed and has lightening cuts as a weight-saving measure. Every effort has been made to make the P308 as light as possible and still maintain reliability and accuracy. Another unique

Best group was delivered using Black Hills 168gr HPBT match ammo. That photo shows three rounds in the same hole fired from 100 yards in a rifle that was brand new and had only enough rounds fired through it to function test it at the factory and zero it with the Trijicon 4x32 optic.

PERFORMANCE						
POF-USA P308						
Ammo	High velocity	Low velocity	Avg velocity	Extreme spread	Std deviation	Avg group size
Black Hills 168 HPBT	2590	2453	2509	137	41	0.45
Remington 165 HPBT	2162	2564	2580	48	13	0.6
Winchester 168 HPBT	2516	2486	2502	30	11	0.55

Bullet weight measured in grains, velocity in feet per second (fps), accuracy in inches for 5-shot group

feature is the P308's ambidextrous bolt release that allows the shooter to drop the bolt with his trigger finger after having inserted a magazine into the mag well—a significant development in terms of ergonomics.

MORE FEATURES

Our test rifle came with single stage Timney match trigger as standard that broke like a glass rod at precisely 3.5 pounds with zero creep or backlash. Another standard feature is Vltor's Modstock. The Modstock is available in several colors and configurations, including black, flat dark earth and OD green. There are two collapsible Modstocks—standard and “clubfoot.” The clubfoot version like that of our test carbine facilitates using the off hand to pull the stock into the shoulder for greater stability. Unlike many others, Vltor's waterproof compartments can be accessed with the stock on the carbine. The compartment adapters provide a flat surface for an excellent cheek weld. The Vltor Modstock is extremely comfortable and thus enhances accuracy. It also raises one's line of sight to an ideal level for either open sights or optics. The improvements don't end with comfort and utility, though. Vltor also redesigned the

POF has taken the AR to what may well be its ultimate level with its P308 because as good as the P415 is, the P308 is even better.

latch on both standard and clubfoot configured stocks. The Modstock also offers several different sling options. The standard M4 sling can be used, but the Modstock has a provision for Uncle Mike's quick detachable sling swivels, one of which is provided in the Modstock modification kit. The Uncle Mike's sling swivel can be fitted to either side of the stock. Needless to say, the Modstock has been adopted by several special operations units.

From an interoperability standpoint, almost all AR-15-type parts including springs and fire control components fit the P308, save for the front hinge pin that is 0.125 inch longer than that of a smaller caliber AR. Thus, those organizations changing over from 5.56mm

ARs to the P308 will have minimal logistics issues. Naturally, components like bolts and bolt carriers from 5.56mm ARs do not fit the P308. Magazines are identical to those manufactured by DPMS for their family of .308 AR rifles and are relatively inexpensive and reliable. Almost all manufacturers of .308 caliber AR-type rifles now use this magazine, so it should be fairly easy to find. About all that is necessary to complete the P308 as a tactical carbine suitable for just about any situation is an optic, a bipod and night vision so the rifle is capable of true 24/7 operations in keeping with today's military and law enforcement tactics.

The military is gradually eliminating traditional iron sights in favor of optics whose technology has brought them to the point where they are virtually as reliable and rugged as iron sights, although every rifle or carbine with optics has backup iron sights, just in case. Better, optics eliminate the need to align three separate elements necessary with open sights—rear sight, front sight and target. With an optic, all that is necessary is to place the optic's reticle on the target and shoot it, although the shooter must still correctly estimate range and windage. Even so, optics are far faster “on target” than open sights and there are *(Please turn to page 83)*

AD

POF USA P308

Continued From Page 68

a variety of optics in the military supply system, but the Marine Corps uses the Trijicon ACOG (Advanced Combat Optical Gunsight) TA31RCO 4x32 optic. This optic utilizes the Bindon “both eyes open” aiming concept, which provides quick target acquisition at CQB distances while enhancing target identification and hit probability out to 800 meters. Our particular sight was calibrated for the standard 5.56mm round, but since our test was conducted at a fixed distance, we chose the military standard Trijicon. Trijicon also makes similar optics with 7.62mm bullet drop compensators. The reticle is illuminated via a combination of fiber optic and tritium, allowing the aiming point to be constantly illuminated without batteries. The tritium illuminates the chevron aiming point in complete darkness, while the fiber optic regulates reticle brightness in daylight depending on ambient light conditions. Our test TA31RCO came with a Trijicon TA57 KillFlash anti-reflection device manufactured by Tenebraex Corporation. This device prevents glint from revealing the presence of a shooter whose rifle is equipped with the Trijicon ACOG.

Next we added a Laser Devices' MIL-SPEC DBAL-A² (Dual Beam Aiming Laser-Advanced² (NSN: 5855-01-535-6166)). The military describes this device as a “Multi-Functioning Aiming Laser System.” The DBAL-A² is a natural adjunct to the P308 for tactical operations within 100 yards. The DBAL-A² incorporates an IR pointer, IR illuminator and visible red laser pointer. A rotary switch selects between the visible laser and the various IR modes, including IR pointer only, IR illuminator only, or both. A low power engagement mode reduces the IR output for use indoors and for CQB. Optical glass generators project different illumination patterns including circle, square, triangle, plus sign or “T” for target designation and pointing. The DBAL-A² is fully adjustable for windage and elevation. The DBAL-A² is constructed of 6061-T6 aircraft aluminum, is 3.7 inches in length, 1.7 inches wide and weighs only eight ounces. Power is from a single AA battery.

One of the most significant developments in night vision technology is Optical System Technology's Gen III+ Tactical Night Sight (TaNS). Like the larger military standard AN/PVS-22, the TaNS must be actually used to appreciate its full effect on night operations. Images seen through the TaNS in almost total darkness are amazingly clear with nothing to distract the shooter. Unlike most other night vision devices, the TaNS mounts forward of the day optic on the P308's MIL-STD-1913 rail via a LaRue throw lever, so eye relief is not an issue. Previous night vision optics like the AN/PVS-14

had to be placed behind the day optic, usually requiring an adapter and IR illuminated reticle with eye relief issues that made them difficult to use. As good as it is, OSTI's AN/PVS-22 sometimes cannot be mounted on short barreled carbines without interfering with other accessories and the TaNS is ideal for these conditions offering night vision capabilities almost as sophisticated as the larger AN/PVS-22 in a more compact package. The TaNS can also be used as a hand-held night vision optic. There is no IR mode on the Trijicon TA31RCO, so the TaNS is almost mandatory for use with the P308 in night operations. The TaNS has no effect on the day optic's reticle or the rifle's zero.

SHOOTING STABILITY

Finally, we added one of Keng's Firearms Specialty's latest Special Operations “Clawfoot” bipods. The bipod clamps directly and firmly to the bottom MIL-STD-1913 rail via a patent pending QD clamp that is adjustable to accommodate any slack that might occur.

We believe that if the US Marine Corps is seeking a replacement for the M16A4, it might well start with POF-USA's P308.

The most visible feature of these new bipods is the large “claws” that form the feet of the bipod. The “claws” are designed to prevent the bipod legs from sinking into soft ground and to prevent rifle movement under recoil. The bipod legs are spring loaded so that they can be instantly adjusted with the rifle on the ground by simply pressing the release button and allowing the rifle to rise on its own or by pressing down on it to lower it. When extended, the claws can also be used as impact weapons. The latest version has a tensioning knob that allows the user to adjust the bipod on the adapter so it can rotate freely, not at all, or anything in between. The latest Clawfoot bipod also has replaceable legs held in place by small bolts. Sales of these bipods are restricted to law enforcement and military.

FINAL THOUGHTS

Shooting the P308 was a true revelation! We have never shot a gas-operated rifle that delivered the level of accuracy of the P308. Right from the box, our test P308 shot sub-half minute-of-angle groups. The P308's accuracy was on a par with the best bolt-operated precision tactical rifles and was like nothing in our experience. We had been told

by POF that the rifle was sub minute-of-angle accurate, but the accuracy we experienced was extraordinary. As mentioned, the Timney match trigger broke like the proverbial “glass rod” at 3.5 pounds. Recoil was less than most .308 rifles, thanks to the proprietary muzzle brake developed by POF specifically for this rifle. That said, while the muzzle brake is remarkably effective in recoil reduction; there is significant muzzle blast to the sides and a noticeable fireball when the rifle is fired. Although this might be an issue with older night vision, it isn't with the autogated TaNS that automatically compensates for flash and bright lights when turned on, automatically and instantly regulating the amount of light delivered to the intensifier tube.

We noted above that the old .308 (7.62mm NATO) round has become a favorite in the “sandbox” based on reports we have seen. Now there is a .308-caliber rifle that delivers everything a rifleman could want—amazing accuracy, reliability and lethality, all in a compact lightweight package. We believe that if the US Marine Corps is seeking a replacement for the M16A4, it might well start with POF-USA's P308.

Testing conducted at Florence, AL Police Department Range, Temperature 45 deg, F, range 100 yards. Ballistic data collected using Oehler 35 chronograph. Group size average of two three shot groups.

For more information:

POF USA, Inc.
23623 N 67th Ave., Dept GW/LE
Glendale, AZ 85310; 623-561-9572
www.POF-USA.com

Keng's Firearm Specialty
PO Box 44405, Dept GW/LE
Atlanta, GA 30336; 404-691-7611
www.versa-pod.com

LaRue Tactical
850 CR 177, Dept GW/LE
Leander, TX 78601; 512-259-1585
www.laruetactical.com

Laser Devices
2 Harris Court, Suite A-4, Dept GW/LE
Monterey, CA 93940; 831-373-0701
www.laserdevices.com

Mil-Comm
2 Carlton Ave., Dept GW/LE
East Rutherford, NJ 07073; 201-935-8561
www.mil-comm.com

Optical Systems Technology
110 Kountz Lane, Dept GW/LE
Freeport, PA 16229; 724-295-2880, x227
www.omnitechpartners.com

Trijicon, Inc.
47 Jack Ellington Rd., Dept GW/LE
Fredericksburg, VA 22406; 540-286-1827
www.trijicon.com

Vltor Weapon Systems
3735 N Romero Road, Dept GW/LE
Tucson, AZ 85705; 520-408-1944
www.vltor.com