



PUTTING POF'S NEW E² CHAMBER **TO THE TEST**.



EVER HEAR OF A RIFLE THAT'S TOO ACCURATE? BET NOT.

BY **SGM KYLE LAMB (RET.)** PHOTOS BY **LUKAS LAMB**

This may sound crazy, but the accuracy of one of my Patriot Ordnance Factory (POF-USA) 7.62s actually cost me the rifle. Here's how.

As I sat on a hillside in Wyoming, knocking down targets out to 750 yards, my trusty sidekick and mountain-man buddy Robb Wiley looked on appreciatively.

"Can I have a go with that rifle?" he asked with a grin like he just ate the neighbor's cat. That smile continued to grow as he began slamming down steel with ease. "It isn't you; it's the rifle, and it's awesome."

Before I knew what hit me, that rifle belonged to Robb. My next trip with him, however, was bought and paid for with that POF rifle.





Wolf ammo was used for the entire test. It worked perfectly in this platform, thanks to the POF chamber treatment.



Lubrication
was applied at
the 1,000- and
3,000-round
marks just to
make the author
feel better.

THIS GUN IS SO BORING; IT JUST KEEPS RUNNING AND RUNNING."

- KYLE LAMB



The P308 just kept hammering away. Five-thousand rounds is a test of man and machine, and in this case, the machine won. The muzzlebrake is extremely effective.

SQUARE PEG, ROUND HOLE

Frank DeSomma is the brains behind Patriot Ordnance Factory and has become a close friend over the years. He and his crew have been providing piston-driven AR systems to the market since 2004. Frank comes from an aerospace background, so when it comes to quality control, "good enough" isn't good enough; he expects perfection.

I had been getting information from Frank about a new chamber in the latest POF .308s called E^2 , an idea to jam a square peg into a round hole. E^2 allows small amounts of gas to vent past the

case, breaking it free from the chamber wall and allowing easy extraction. As Frank likes to say, it is a push/pull situation, with gases pushing as the extractor pulls.

It makes sense but sounds almost too simple to be true. HK has fluted chamber walls in the past. It worked, but the brass was rendered unusable from the damage. That's not a huge party foul — unless, of course, you reload. Still, I wasn't yet convinced. So, imagine my surprise when a new rifle along with 5,000 rounds of steel-case ammunition showed up at my range. If this rifle could

extract and eject some of the least friendly .308 ammo out there, I would be convinced.

THE TEST

Firing 5,000 rounds of 7.62 is the easy part. The chore is loading them all into magazines. For this part, I enlisted the help of several buddies who had a hankering to shoot a little.

We began with the rifle as it was received. Frank wanted to try it with little to no lube on the bolt carrier to see what happened. This is completely against my way of thinking. No lube equals more parts wear and malfunctions. Finally, I couldn't take it anymore, and at the 1,000-round mark I oiled the bolt carrier with a few drops of Rand CLP. I admit that this was more for my benefit than for the rifle's, but the dry bolt and carrier were nagging at me too much. As a soldier, I had always kept my rifle well lubed to ensure proper operation. The only time I let up on the lube was when we were headed to the desert. Then I replaced the wet lube with grease.

With a test like this, you wonder just how many rounds can be put through the system without a malfunction caused by the rifle. I suspected there would be at least one magazine malfunction, but to my surprise the Magpul 20- and 25-rounders just kept feeding. When we reached the 3,000-round

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POF-USA P308	
Туре	Piston operated, semiautomatic
Caliber	7.62 NATO/.308 Win.
Barrel	14.5, 16.5, 20 in.
Overall Length	34 to 39.5 in.
Weight	8.1 to 8.5 lbs.
Handguard	11.5- or 14.5-in. M Rail
Stock	Magpul CTR
Grip	Magpul MOE
Finish	Black, NP3, Burnt Bronze, Tungsten, olive drab
Trigger	POF, 4.5-lb. pull
Magazine	10, 20 rd.
Muzzle Device	Triple-port muzzlebrake
Sights	None
MSRP	\$2,760
Manufacturer	POF-USA 623-561-9572 pof-usa.com



The small Allen screw that holds the ambi portion of the safety in place was tightened twice during the test. Loctite would have fixed the issue permanently.

mark, this test had moved from fun to a job. The rifle just kept working. Providing no additional lubrication or care, we kept hammering away.

RELIABILITY

Why do shooters use poor-quality ammo? The primary reasons are the lack of availability and the high price of the good stuff. Cheaper ammo does allow for more shooting, so I agree with that, but cheap ammo is much harder on firearms. POF reasons that the E2 system will maintain reliability for a longer duration since parts are wearing less, especially the extractor. With larger-caliber ARs, we often see extractors giving way with a lot less shooting than with standard 5.56 rifles.

Another reason is the metal chosen for every part. Utilizing Frank's experience in the aerospace field, he has all metals tested in extreme heat and cold. A good example of this would be S7, a metal used by many manufacturers in the gun industry. When subjected to cold temperatures,

this metal could be compared to the Titanic. In extreme temperatures, it will shear - not a good choice if you want uncompromising reliability. POF understands all the ingredients it uses. It goes through an independent metallurgical lab to document its testing and get the facts before even one part is cut.

FURTHER TESTING AND ISSUES

With winter coming, we needed to finish the evaluation, so with the help of the entire Lamb clan, I went to work hammering out the last 2,000 rounds. I once again oiled the rifle to gain some feeling of righteousness, then resumed shooting. The right side of the ambidextrous thumb safety started to come loose at around 3,000 rounds. It was tightened but not Loctited, since the test was ongoing. It was tightened once more near the 4,000-round number. At 3,500 rounds, I actually ran a BoreSnake down the barrel five times, not that it needed it. Also, somewhere around that number my daughter faked an old football injury to get out of the grueling test. Her husband and my son hung in until the very end.





One of the two stovepipes was caused by the broken dustcover hinge-pin retainer cip. The fix was to remove the dustcover, after which the rifle performed 100 percent.

I don't remember the last time I felt bad for not cleaning agun, but this was insane. The Wolf.308 ammunition just kept pouring in and out of the POF, so we didn't slow down other than to let the gun cool slightly, which was for our benefit more than the rifle's.

I did encounter two stovepipe malfunctions where the case extracted but did not clear the ejection port. I was shocked when the first one happened at 3,600 rounds, then I had another one within 200 rounds. Shortly after, I realized that the dust cover was loose and the spring was unable to push the cover all the way open. I'm not positive that this caused the two stovepipes, but as soon as I removed what was left of the dustcover and hinge rod, no more occurred.

TAKEAWAYS

When the test was finished, I was relieved. Five thousand rounds is a lot of ammo to burn through, but the POF E² chamber had proven itself. I really wish I had another 5,000 to use to see when the gun would break. Given the choice, I would prefer





to have this chamber in all of my 5.56 and 7.62 semiautos. It just makes sense.

I sit on the edge of my seat when I talk to Frank DeSomma because you never know what he will come up with next. His engineers are mad scientists constantly striving to increase performance. As Frank says, "To exist, we have to create and innovate." Well, he has done that. Frank and the staff at POF are patriots; they fight to build the best products possible and strive to support our Second Amendment rights along the way. Next time you get a chance, jump on the range with a POF and the E2 technology. The rifle will not disappoint.