

# Spike's Tactical

## Compressor 5.56mm

By Abner Miranda - Photos By Norman Mark



Seldom does one get an opportunity to have a say in the design of a weapon. In early 2009 I got that opportunity. I started having conversations with Spike's Tactical CEO, Tom Miller regarding the possibility of building an AR-15 variant specifically for the LE community. The end result needed to be fully ambidextrous, rugged, lightweight, exceptionally accurate, and ultra-compact.

I wanted a rifle that would excel at building clearing, active shooter responses and vehicle operations. These are all things that the modern LEO must engage in from time to time, and as such he needs a weapon with high maneuverability that can do it all, and do it well. The end result is the Compressor 5.56mm. I named it so because it draws its reliability from an adjustable, gas compression, muzzle device - I'm getting ahead of myself here. Let's start at the beginning.

### Define Your Goals

The initial prototype for the Compressor was a suppressor driven test gun chambered in .22 caliber. I poured thousands of rounds through it running all manner of drills to test the ergonomics of the design. It proved to be a valid platform out to 100 yards, clearly far exceeding anything that a cop would find himself having to deal with.

In late 2009, Tom and I worked out the specs of the 5.56mm version and made plans to move ahead with production. To get the design the way we wanted it would entail having to come up with some sort of muzzle break device that would vector all of the hot gases straight downrange so as to not burn the operator's hand.

SPIKE'S TACTICAL R&D



We tested the Noveske, KX3 Flash Suppressor with high hopes. Unfortunately we melted a couple of them during test firing.

In true Spike's Tactical fashion, Tom devised his own "Plan-B" in a secret project that has now come to light as the Spike's Tactical Adjustable Break or S.T.A.B. for short. By utilizing heat resistant alloys, Tom has constructed a muzzle break that can be dialed up or down so as to control back pressure which is crucial when working with short barreled rifles or SBRs. The S.T.A.B. also has the added benefit of assisting in controlling cyclic rate. By dialing the graduated cylinder up or down you build or decrease back pressure as needed.

The device is self-locking with a built in, spring loaded mechanism. During testing, every 16 clicks have been shown to decrease cyclic rate by 14 RPM. Spike's Tactical has put several thousand rounds through the S.T.A.B. and has yet to burn, or deform one. The S.T.A.B. is coated inside and out with Melonite for corrosion resistance and durability. The cone has been made from a proprietary alloy which is impervious to high temperatures.

The Compressor is, by design, a Direct Impingement weapon with fully ambidextrous controls that were designed in, not retrofitted in.

ST-COMPRESSOR NOMENCLATURE

An all new rail system was designed to meet the tight tolerances of the Compressor.

The S.T.A.B. Can be dialed up or down as ballistics demand.

Fully Ambidextrous controls are designed in, reducing operator errors under stress.

The use of mini red dot optics such as this Insight Tech Gear, MRDS are a perfect fit for the Compressor.

Troy Industries, Micro Folding Battle Sights are compatible with the low profiled MRDS.

Compressor is compatible with all Mil-Spec accessories



SPIKE'S TACTICAL ADJUSTABLE BREAK

With the advent of the S.T.A.B., one of two existing problems with the Compressor had now been overcome. The final problem was simple and yet a world away. My idea for the Compressor was born of working with conventional carbines which can burn the operator when placed on a sling. The Compressor, had to do away with this problem and the S.T.A.B. had done so beautifully by creating a funneled, heat vent to control hot spots. However, the stab now created a problem all its own. Its diameter was too large to fit inside of all existing free float rails. I stressed to Tom that the S.T.A.B. must fit down into the rail, without exception "otherwise we've made just another SBR." Tom countered with "there's no rail on the market that can accommodate the S.T.A.B." My response was simply three words "then make one?" So, he did.

He created a free float rail system that can accommodate all known muzzle breaks and suppressors INSIDE of its dimensions. The rail is

beautifully machined from aircraft aluminum, tumbled to absolute smoothness, and finished with Type III hard coat anodizing. It's so new that it still hasn't been given a permanent name.



BILLET DONE RIGHT



Once we had our major problems knocked out we moved ahead with a functioning prototype. Apparently Tom had taken my idea and run with it to its fullest extent. "If we're going to build a new rifle, make sure it's

a NEW rifle and not just another creatively dressed AR-15."

Tom got together with fellow AR designer Glen Seekins of Seekins Precision and created an entirely new line of AR uppers and lowers. These gentlemen have done for the AR-15 what Glock did for the handgun. The Spike's Tactical billet line of uppers and lowers boldly addresses several real problems with the AR-15 weapons system. When designing a rifle you have to look at both aesthetics and mechanics. The AR's features

must solve a problem or they need to go. As such, Tom chose to go with 7075 billet for a more rigid rifle than could be achieved with forgings. Also, by moving into a new set of parameters with billet, Spike's Tactical was able to design solutions to problems that've plagued ARs for decades.

**Lower Specs**

The Compressor's lower is built with not only the LEO in mind, but also the department armorer – eventually every gun



NECESSITY: THE MOTHER OF ALL INVENTIONS

When you have a weapon that's hot enough to take skin off on contact, you must find a way to shield the shooter from the barrel. The custom rail system does this beautifully.

- Abner Miranda -



needs maintenance. When this project got underway ambidextrous guns were something that had to be retrofitted to become an operational reality. The Compressor, utilizing the Spike's Tactical billet line, is the first ever purpose built, fully ambidextrous SBR on the market. The billet lower due to its beefed up lines offers an integrated winter style trigger guard, an ambi bolt release, and a flared magwell for faster reloads. The magwell is also textured on the front for added grip in all weather conditions. Should your agency choose to go to select fire trigger groups, the lower is already machined with a low shelf for RDIAS. The lower also offers armorer friendly features like a captured buffer retaining pin, a captured rear takedown pin, and a set screw for both trigger reset, and upper to lower tension. The bolt catch and bolt release are retained with a threaded pin rather than a roll pin, and the lower can be assembled without a hammer and punch! I'll let that sink in for a moment, for those of you armorers reading this.

### UPPER SPECS

The upper is machined from 7075 billet, and features M4 feedramps, and flared side walls to protect the bolt release latch from

getting hit. Modularity is the name of the game with the Compressor and it offers a great deal of rail-estate for just such a purpose.

### Accuracy Tests

Define accurate. Would you say that a rifle delivering sub MOA shots at 100 yds is accurate? Of course, MOA is the standard, sub MOA demonstrates excellence. Would you expect that sort of accuracy from a rifle with a barrel measuring only 7.5" in length? Not usually. However, the Compressor delivers sub MOA accuracy from its Lothar Walther LW-50 1/8" polygonal right hand twist stainless steel barrel. The key to these barrels is in the conspicuous omission of the chrome linings. Chrome while being great at staving off corrosion is an accuracy-wrecker. Lothar Walther barrels actually get tighter and more accurate with proper use and care. And yes, the maintenance of a non chrome lined barrel is exactly the same as that of a chromed barrel, so that argument is dead too. Coincidentally this is the same barrel that Spike's Tactical uses in their 18" dedicated SPR sniper rifles, but that's a conversation for another day. The point is that with the Compressor you're getting a rifle with a pedigree of accuracy and ruggedness. During testing I was able to deliver sub MOA shots with the Compressor in relatively high wind from the 100 yard line. The Compressor delivers accuracy in spades.

## Compressor

**Price:**

\$1,600

**Caliber:**

5.56mm

**Gas System:**

Direct Impingement

**O.A. Length:**

26 inches with stock collapsed

**Weight:**

6lbs tare weight

**Cyclic Rate:**

Variable, based on S.T.A.B. setting.





Closing Thoughts

With exceptional accuracy and body armor defeating capabilities all rolled into a rifle only 26" in length and only 6 pounds in weight the

Compressor is a real problem solver. The final point that needs to be made is that we chose wholeheartedly to make the Compressor a direct impingement gun as opposed to a piston driven system. The Choice was equally Tom's and mine. We both have a fair amount of piston experience and while they've come a long way, they still have an even longer way to go before they can be fully trusted to run in compact ARs. The Compressor has been tested in silt and grit and has continued to function flawlessly.

When comparing patrol rifles it's always a bit of a problem when you present a custom rifle to an agency and they say "...but we can buy XYZ-Brand for \$700 dollars!" To that I say "go right ahead." You have to understand the Compressor before you can even begin

talking about cost. The Compressor sells for \$1600-\$1800 depending on options. This is a daunting price tag until you look at the specs sheet on one and see that it far exceeds anything currently in the LE patrol rifle market. I have absolutely no financial affiliation with Spike's Tactical, I get no royalties or fees. I'm a cop who thought of a better way to build a cop's rifle, and was lucky enough to find a manufacturer that would listen. The Compressor from its inception was designed to be high speed, and low drag. It has proven, without a doubt, that big things do indeed come in small packages.

