

GUNSMITHING

DANIEL DEFENSE  
DDM4VTP

# RETRO RIFLES

M16A1, EARLY AR-10  
REPLICAS AND MORE



**M27**  
USMC'S NEW RIFLE

JIM SULLIVAN'S  
314 GUN PATENTS

FAST AND FURIOUS  
SAVAGE'S MSR-15 VALKYRIE

LONG-RANGE  
ELK HUNT

6mm CREEDMOOR





ELIMINATE RECOIL  
WITH A BARREL FROM  
SPECIAL OPS TACTICAL.

STAFF REPORT  
PHOTOS BY JEFF JONES

# SIPHON AGP BARRELS

## SIPHON AGP BARRELS



WE RECENTLY EMBARKED UPON A BUILD FOR PRACTICAL

Rifle competition, an event that requires nimble handling, rapid shooting and precise engagements at distance. In this competition, split seconds determine winner and loser, so the main focus was eliminating enemy No. 1 — recoil.

Recoil can be cut in many ways. A heavy rifle will soak up recoil like a sponge but makes for an awkward firearm. Bullet weight and velocity can be shed, but then ballistics suffer or ammunition becomes costly or time consuming. We settled on a lightweight build chambered in 5.56 NATO and searched for the perfect barrel. After all, the steel tube is the heart of any AR and determines weight distribution, handling, ballistics, accuracy and recoil impulse.

The barrel needed to be short, 14½ to 16 inches; thick enough in profile to shift the balance point forward and better handle heat from long shot strings; and feature the longest gas system possible to minimize recoil. For these purposes, the Siphon AGP barrel from Special Ops Tactical (SOT) seemed almost too good to be true.



The Siphon AGP barrel is available in four lengths to suit any build.

### SPECIAL OPS TACTICAL

SOT, located in Apopka, Florida, is staffed by a handful of passionate employees — CNC machinists, aerospace engineers, etc. — who love to tinker with the AR. Two years ago, these brainiacs embarked upon a quest to build the world's shortest barrels using standard-length gas tubes. After all, what good is a barrel if it requires proprietary parts?

According to Garrett Potter, president and head tinkerer of SOT, the project wasn't easy.

"We began with a pistol-length barrel," said Potter. "We got down to 5.9 inches, short enough that the gas block almost touched the threads. However, due to the low gas port pressure, getting it to run was challenging, so we kept drilling into the gas port to open it up. We got it to work, but the bolt carrier was slamming violently backward."

SOT went back to the drawing board and kept tinkering. The solution was to abandon the traditional 90-degree gas port and drill the gas port at an angle, hence the "Angled Gas Port." Unlike Kalashnikov's AK that uses a 45-degree gas port angled toward the muzzle, SOT's gas port angles toward the receiver.



"AGP" stands for angled gas port, as seen here with a rod protruding from the port.

Potter said that this not only increases dwell time (the time the gas system is pressurized), it also provides higher pressure gas to operate the system. One byproduct of this angled gas port was streamlined gas flow, or what Potter refers to as "laminar."

A traditional AR barrel requires the gas to make two 90-degree turns to cycle the action. Right angles are anything but smooth. The Siphon AGP barrel, on the other hand, splits the journey into two 45-degree turns and one 90-degree turn. The resulting flow is more efficient, which equates to more consistent cycling and a lessened recoil impulse.

Rather than release the barrels to the public, SOT spent the past year and half perfecting the

### SIPHON AGP BARREL

Length	5.9, 9.2, 14.8, 16 in.
Cartridge	5.56, .300 BLK
Material	4150 chromoly vanadium
MSRP	\$185-\$210
Manufacturer	Special Ops Tactical <a href="http://specialopstactical.com">specialopstactical.com</a>

### FIRESTORM 14-IN. M-LOK

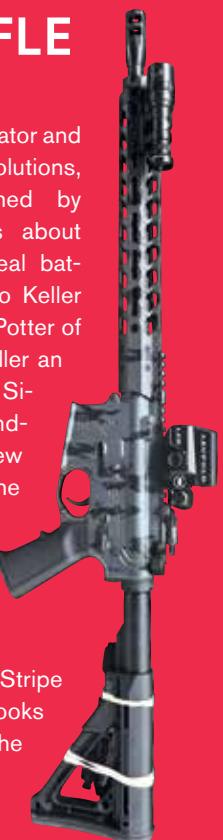
Type	Free-float handguard
Material	Anodized aluminum
Weight	7.4 oz.
MSRP	\$205
Manufacturer	Special Ops Tactical <a href="http://specialopstactical.com">specialopstactical.com</a>



## BOB KELLER SIGNATURE RIFLE

**B**ob Keller, an elite operator and owner of Gamut Resolutions, has been approached by countless companies about partnering on the ideal battle rifle. Most were gimmicky, so Keller passed. However, when Garrett Potter of Special Ops Tactical handed Keller an SOT carbine with the 14.8-inch Siphon AGP barrel, he was astounded by the lack of recoil and knew that he had to take the plunge. The collaboration resulted in the Bob Keller signature rifle, a 6-pound 5.56 that recoils like a 9mm. With a pinned barrel and brake, Firestorm 14-inch M-LOK handguard and Tiger Stripe Cerakote paint job, the rifle looks great and is priced even better. The MSRP is just \$1,674.

[specialopstactical.com](http://specialopstactical.com)  
[gamutresolutions.com](http://gamutresolutions.com)



# SIPHON AGP BARRELS

Siphon AGP system for pistol-length, carbine-length (9.2 inch) and rifle-length (14.8 inch) barrels. (The mid-length Siphon AGP is noticeably absent because 12 inches isn't a popular length for pistols or short-barreled rifles).

"We do so much engineering up front and so much testing," said Potter. "We'd rather deal with the gremlins up front than have a customer receive a product and have problems."

Due to SOT's proximity to a premier military outfit, the Siphon AGP barrels have been tested extensively by some of the most elite operators in the world, shooters who have tried every conceivable rifle imaginable.

"Every shooter notices the smoothness of the Siphon AGP barrels," said Potter. "Even if it's only 5 to 10 percent softer, they notice. Several guys have been running these barrels for eight months and have nothing but the highest regard. They've been a big hit. And reliability isn't a concern, even with the 5.9-inch barrel."

## SMOOTH OPERATOR

We aren't operators, but we do like easy-shooting, reliable carbines. For testing, we received a Siphon AGP 14.8-inch barrel with a permanently attached SOT Micro Brake. This was assembled on a slick-side upper with SOT's 7.4-ounce Firestorm 14-inch M-LOK handguard. This upper was installed on a GWACS Armory polymer lower with a Rock River National Match trigger.

The package was lean and attractive, but the green lower stood out, so the barrel was painted OD Green

To make legal length, an SOT Micro Brake was pinned and welded to the barrel.



## MI QD MOUNTS

Troy Storch of Midwest Industries is an unsung hero of innovation, improving seemingly every part he encounters. A great example is his line of quick-detach (QD) optic mounts, such as the Trijicon ACOG mount shown here. Featuring the smoothest QD lever on the market, these mounts utilize multifaceted adjustments to ensure they fit snugly on any rail surface. Made from anodized aluminum and weighing just 2.4 ounces, the MI QD mounts come with a lifetime warranty, return to zero perfectly and cost just \$82.50. Trijicon ACOGs deserve the finest mounts available, and these are it.

[midwestindustries.com](http://midwestindustries.com)

to match. The two-tone theme was finished off with a green polymer dustcover.

How does the barrel perform? Very well. Everyone that fires it says the same thing: "Wow, there's no recoil." Follow-up shots are effortless, and the sights don't leave the target. Plus, the balance is ideal; the lithe carbine swings with ease yet stops on a dime.

Buttery smooth, attractive, accurate and reliable, the Siphon AGP barrel runs like a dream with everything tested, including 250 rounds of pathetic reloads. In short, SOT's barrel performs exactly as we had hoped.

Time will tell how this build does in Practical Rifle matches, but one thing is certain: Results won't be the fault of the rifle. Wins and losses will be squarely on the shoulders of whoever is running the trigger. ☀