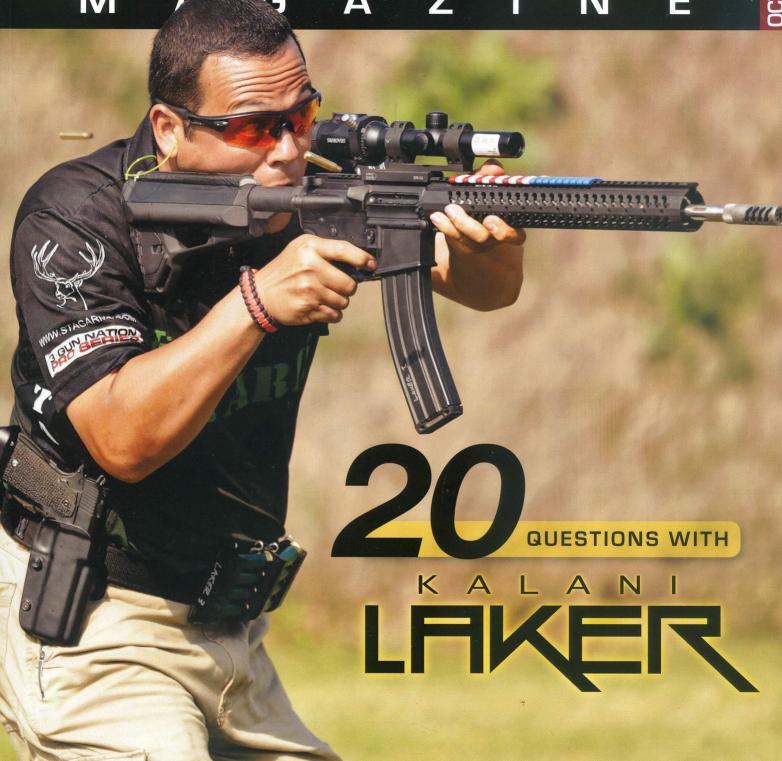
AR15.COM / ROCKCASTLE PRO-AM TIMNEY REVIEW | RIFLE FUNDAMENTALS | PRO SERIES WRAP-UP



OCT/NOV 2013





# 25 // Anatomy Of A Modular Trigger

The sport of 3-Gun requires speed and accuracy; a poor trigger can have a negative effect on both.



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## 20 // The 3-Gun Ferarri

The JP-15 is the manufacturer's "entry level" option, but that's like saying an "entry level" Ferarri, because with JP Enterprises, the entry level picks up where a lot of other gun makers end off.

# 60 // 20 Questions With Kalani

3GN caught up with the "Hawaiian Jedi" recently to discuss his family, his drive to compete, and if he can unleash his "Beast Mode" to carry him to the toughest title in all of 3-Gun.

# 16 // Mom's On The Hunt

Lena Miculek attempts to pair Pro Series dominance with a divisional crown. Standing in her way is her mother, Kay Miculek.

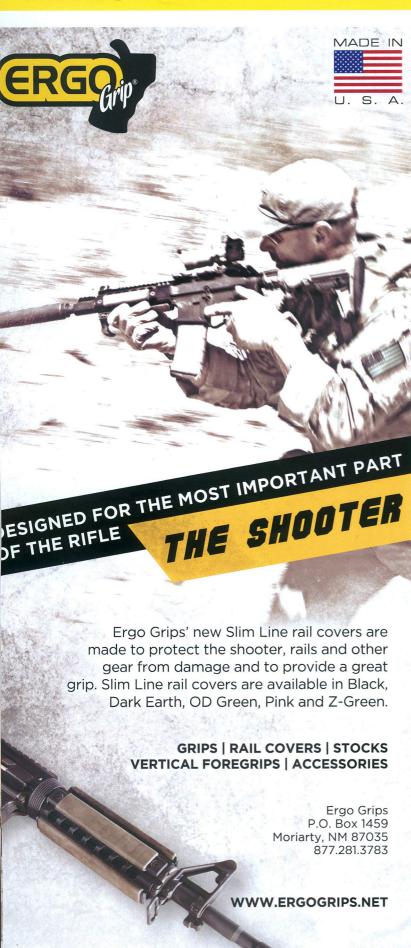
# 68 // Shotgun Summer

My year-at-a-glance calendar indicated that the second week in April I was competing in the Benelli Tactical Shotgun Championship at Rockcastle Shooting Center. This two-day, 18-stage match was challenging to the shooter and physically tough on the body.



# DON'TS MISS E

**46 "Tulsa III** One has to assume Keith Garcia intended to put the entire 3GN Pro Series field on notice in Tulsa. The reigning 3GN Champion led the final 3GN Pro Series match of the season, wire-to-wire, holding off a solid challenge by Greg Jordan and Taran Butler to win his second 3GN Pro Series match in two years.



The sport of 3 Gun requires speed and accuracy; a poor trigger can have a negative effect on both. Long trigger pulls, heavy weight and excessive over-travel have been the downfall of many newcomers to the action shooting sports. A bad trigger will require more movement, strength and effort. The end result is more gun movement, slower follow-up shots, and a greater chance of missing the intended target. Most shooters start with stock guns and suffer through learning to manage poor triggers. During the police academy I shot a stock Beretta 92F. It felt fine at the time because I had nothing to judge it against. When a friend introduced me to a custom 1911 trigger I immediately saw the advantage of a short, crisp trigger with very little pre-travel and over-travel. I shot it faster and more accurately then my Beretta right from the start. Once I had the taste of a custom trigger I did not want to go back.

Fine handgun triggers require a gunsmith to fit multiple moving parts together by hand and make minor adjustments until the trigger is perfect. The perfect handgun trigger is often very hard to obtain and can cost a significant amount of money.



Luckily the same is not true for a fine rifle trigger. A great rifle trigger can be dropped into your AR-15 or AR-10 rifle in just minutes. Drop-in match triggers come in two styles; modular and component designs. Modular triggers live in a self-contained unit with the hammer, trigger

shoe, disconnector, and springs attached to a metal body. Component triggers are replacement parts made to tighter tolerances and altered geometry to achieve better trigger pulls over the stock Mil-Spec parts.

There are two advantages that a modular design offers. The first is ease of installation. Since the modular trigger drops into the receiver as one unit, the installer simply needs to add the trigger pins to hold the unit into place. Component triggers are more of a challenge to install because the springs want to push the trigger parts out of the receiver during installation.

Not all receivers are built alike! There are lots of companies out there making AR-15s, and not all of them are built to the same quality as say JP Enterprises or Cot The result can be some slight deviations in the location of the trigger pin holes in the lower receiver. Another

# ANATOMY OF A MODULAR TRIGGER

WRITTEN BY KEITH GARCIA

2013 3-GUN NATION CHAMPION

advantage to the modular trigger is that the parts are held into place by bushings built into the trigger housing that provide the bearing surface for the hammer and sear. The relationship between the hammer and sear is held constant by the bushings, not the trigger pins. If a component trigger is installed into a receiver with deviations in the location of the trigger pins, the relationship between the hammer and sear can be compromised. Because the component trigger has tighter tolerances, the different trigger pin position can affect the performance of the trigger.

For these reasons I prefer a modular trigger. My modular trigger of choice is produced by Timney Manufacturing of Phoenix, AZ.

Founded in 1946, Timney makes triggers for more than 100 models of rifles ranging from .22 caliber to all the major sporting rifles and AR-10/15 variants. Using Wire EDM technology, Timney is able to produce triggers with extremely tight tolerances. For the modular AR trigger design Timney uses S-7 shock resisting steel for the hammers and A-2 steel for the trigger and disconnector. All steel trigger parts are hardened to a Rockwell hardness of 60. Timney tests each trigger before they leave the factory, and the parts have a lifetime warranty.

For the AR platform there are two types to choose from—"skeletonized" or "competition." The main difference between the two is the shape of the trigger shoe. The competition version is straighter then the standard Mil-Spec trigger. The skeletonized version has more of a curve than the competition model. The AR modular triggers come in three styles, with a 3-, 4- or 4.5-pound trigger pull. If you happen to shoot military-grade ammunition with hard primers, Timney offers a heavier hammer and spring combination to alleviate light primer strikes.

For 3-gun competition I use a Timney "skeletonized" 3-pound modular trigger. The 3-pound model is light enough that I can shoot fast without disturbing the sights, but stiff enough to ensure safe handling. The Timney trigger has almost no pre-travel and requires very little movement to reset. This is ideal for 3-gun where speed is King!

On the range I can regularly run .12-second splits between shots on close-range targets without getting sloppy and not allowing the trigger to reset before pulling it again, causing trigger "freeze." I credit the Timney's short, crisp and fast resetting trigger for that advantage.

My Timney trigger has helped me become a better rifle shooter. Try one and turn your rifle into a winner!



# BUILD IT RIGHT BUILD IT LIGHT

BORROW FROM THE PROS TO HAVE A GREAT CLUB SERIES RIFLE



The light rifle, as chronicled in these pages last issue, has been the hottest rifle trend on the 2013 3GN Pro Series Tour. Early on this season I checked out several from our top competitors, and across the board each rifle shared many common traits with the rest. This class of rifle was light and lively, transitioned amazingly fast between targets, and was a beast on the fast, bay-type stages common on the Pro Tour. And while watching our guys tear it up, it finally occurred to me, for many, this is also the perfect 3GN Club Series rifle as well.

So we commissioned our own light rifle build, using the parts and accessories used by the Pros that would most readily apply to competitors in the 3GN Club Series. To complete the build, we sought out Keith Pitts and Accurate Armory, who sponsors 3GN Pro Series competitor Steve Griffin.

Accurate Armory is a small shop compared to FN, Stag or DoubleStar. But Pitts' quality is outstanding, and his successful

"This rifle is lighter, delivers higher performance, and is quick for multiple back-up shots," Pitts said. "It is easy handling, can be suppressor fitted, and with less recoil it's great for youth-oriented shooting."

The heart of any good gun is the barrel. For this project Pitts recommended a Government profile 14.5-inch, with a chromelined barrel and chamber and a 1:7 twist. It features an M4 feed ramp and barrel extension, while the exterior is manganese phosphate finished. His barrels are high pressure tested (HPT) and magnetic particle inspected (MPI) for flaws. Rugged and well-built, Pitts said we could expect a lifetime of up to 40,000 rounds through this bore.

I chose the barrel to be fitted with SureFire's SFMB-556 Muzzle Brake, which also serves as a mating surface for the SureFire SOCOM Supressor (see page 26 for more on SureFire). After timing, the brake is pinned, enabling our rifle to meet the minimum 16-inch-legal requirement to avoid SBR paperwork.

I chose the SureFire for a couple of reasons. One, the brake is one of the best out there. The Titan, Miculek, Cooley, even the Seekins is getting strong reviews—they're all solid, and so is this one. But you can't attach a SureFire SOCOM suppressor to the rest. A short, light rifle such as this one, while built for 3-gun, can easily serve multiple roles - home defense gun, pig slayer, taking my young kids shooting. A SureFire suppressor on the end only enhances those pursuits.

necessary. Simply drop it in and immediately feel the upgrade a major enhancement - the same trigger Keith Garcia ran on his way to the 2012-2013 3GN Championship.

Staying with fire control, the selector switch was upgraded to an ambidextrous unit-the Battle Arms Development Safety Selector Switch (BAD A.S.S.). The left-side paddle delivers solid purchase, and has a tactile feel with serrations. The opposite, or ambi, side, though I seldom use it, provides a solid visual cue to the condition of the safety, further decreasing the chances of getting DQ'd in a match.

For the fore-end, I chose the Samson Evolution 12.37-inch freefloat tube. The Evolution has proven to be extremely popular in 3-gun, and this model served as an excellent complement to our lightweight theme, weighing just 11.5 ounces. Aside from the weight, the Evolution also

features a smaller outside diameter.

WRITTEN BY CHAD ADAMS

With the shorter barrel comes a shorter gas system, this one mid-length, which spreferred over using a carbine-length gas system for a cut-down 3-gun rifle. A PRI Mounts low-profile gas block, featuring a Melonite

gas tube, gets the gas to the bolt carrier, this one a

standard Mil Spec version.

S

um

The receivers are from Accurate Armory, a forged upper and lower machined in-house to exact tolerances for a precise fit — Pitts' work borders on custom when it comes to fit and finish. He once sold some "blemished" guns to local shooters at a discount, and we examined the rifles for a long time looking for the so-called imperfection. The receivers are anodized in black, and custom, aser engraving is an option. Can you say 3GN logo on the receiver-I will soon.

for the trigger, I went with a Timney AR15 Competition. I've long been a fan of Timney Triggers in bolt guns, and its competition model is equally impressive. A true drop-in unit, installation is a breeze. With its preset weight of 3 pounds, no adjustments are

1.8-inches, perfect for applying the "C-Clamp" support-hand grip so prevalent in 3-gun today. The Evolution also excels in its ease of

installation. No special tools are required, as the thermal bushing (which Samson claims reduces heat transfer) attaches right to the standard GI barrel nut. Add in Samson's unique 2and 4-inch rail kits, and all manner of slings, lights, etc., can be attached to this rail, adding to the multi-purpose nature of this rifle.

A Magpul MOE grip is a nice upgrade of a standard GI version, with a rubber overmold around the polymer grip, the ergonomics are certainly improved. For those who love cramming batteries or spare extractors and the like inside their guns, the MOE features a storage well within. Sticking with Magpul, the Enhanced Trigger Guard again improves upon the standard version. You get the improved clearance, and it eliminates the "gap," but for many its more an improvement in form as much as function.

One of the more interesting features of this rifle is the Enertrols SNARD AR-15-FS Carbine Recoil Buffer, which reduces bolt impact recoil and suppresses bolt bounce. The company spends most of its time manufacturing shocks, hydraulic dampers and gas springs, and has applied the principles of hydraulics to the buffer. Buffer Technologies and other companies have manufactured similar products.

Now the counter-argument for a device such as this on a 3-gun rifle is that you're actually slowing down the cyclic rate of fire. But the gain should be less wear on your rifle, less perceived recoil and theoretically faster follow-up shots. While I don't have any equipment to measure delivered foot-pounds and the like, all I can say is that I'm loving how this gun feels in the shoulder thus far.

The buttstock is the Ti-7 from Tactical Intent. This is the first time I've ran this stock and I like it. It features flared surface areas for the cheek weld, along with a straight comb on top. The Ti-7 contains two wells for batteries, etc, and is adjustable for length-

too much, as 3-gun throws so many looks at you, so far so good on the utilitarian aspects of this lightweight little accessory.

For competition, I mounted a Leupold Prismatic I had on-hand, putting me in the Tactical Iron category in the 3-Gun Nation Club Series. I've never shot TI before, but this rifle just begged for the lightest, nimblest 1X optic I could find. The Prismatic is an excellent choice.

Unlike most red dots, this is really a rugged, 1X scope. It features an etched reticle, while the red dot feature can be turned on, superimposing over the etched reticle. I called 3GN Pro James Casanova for a bit of a tutorial, as he runs the Prismatic better than anyone in the land. That chat led to a 200-yard zero, a ridiculous amount of torque pressure applied to the mount's screws (to avoid a walking zero), and a realization I had the wrong reticle for shooting long-range very effectively. Mine, the tactical



of-pull. In use, I feel as though it delivers a consistent cheek weld when mounting the rifle. I'd like to tell you I picked the stock for these performance concerns, but I'd be lying. Pitts has his stocks infused with designs by A. Breon Customs, and I couldn't resist the Stars & Stripes on one side, the Marine Corps Eagle, Globe & Anchor on the other. For other tastes, they have several different designs to choose from, though the U.S. flag models are tough to beat. Yeah, I picked it 'cause it looked badass, but I feel lucky how this stock feels when I shoulder the rifle.

A final touch, one I wasn't sure about, is the Impact Weapons Components Mount-N-Slot Hand Stop. Since we practice the forward grip in 3-gun, though I'm not way out there, a hand stop on a cut-down rifle makes sense. This one delivers the dual benefit of serving as a little hook out on the end of the fore-end. I was able to lock that hand stop into a barricade on one occasion for a rock-solid mount, pushing it through the port and pulling the rifle back toward me, the hand stop applying pressure to the outside of the barricade. While you can't depend on that scenario

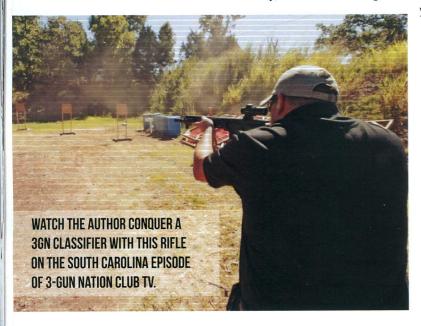
model, has the Illuminated Circle Plex, where Casanova uses the hunting version, with its Illuminated DCD reticle, which has a finer dot.

However, for the 3GN Club Series matches in which I've competed, this rifle-scope combination has been a remarkable setup. For years Taran Butler, who runs a very lightweight setup, has described his rifle as just a big pistol. He drives the gun hard and is furious on the trigger—Taran likes to "hose," and few are better.

This rifle excels on the short-range paper targets presented at most club matches. I used this setup on 3GN Classifier Times 223, which features six paper targets from two shooting areas, with a required magazine change in-between. I ran that stage in 9.4 seconds, which is near the top end of my skill set. While shooting the stage, my second array of paper seemed to have much faster splits than my first, as I got on the trigger much better. The rifle mounted fast and drove hard. The Pros run this

stage in six seconds and change, so at my level I was very happy with that run.

Later in the same match, we had some steel out to just under 200 yards. We were standing and had support against a Cowboy Town wall, and I had little trouble making those shots. Typically, I missed when I went too fast and didn't let the dot settle, and I hit when I broke a clean shot. More recently, I considered using



this rifle at FNH USA 3-Gun Championship and wimped out at the last minute, instead using an 18-inch rifle. I was worried about the 390-yard target in that match, then promptly missed it anyway—many times. Sigh. My 3-gun education continues.

Though I was probably correct in going with the more traditional 3-gun rifle at that match, there is nevertheless a place for a short, lightweight rifle in every 3-gunner's bag. If your club match doesn't have a lot of long-range targets, instead presenting numerous paper targets in the bays, this setup is ideal. For 3GN Classifier stages, this light rifle is absolutely on point. And with a stiff barrel and good position work, a well-built short rifle can

easily handle targets out to 300-400 yards—if you can hold it. This season the 3GN Pros have pushed the performance envelope in the Pro Series, driving short, lightweight rifles to the ragged edge, where every shot and every second counts. There a lot to learn from these amazing shooters.

So dig your old M4 out of mothballs, change out some parts, an head to a 3GN Club Series match near you. You'll be happy with your new ride.

# **BUILD SPECIFICATIONS**

3GN CLUB SERIES LIGHT RIFLE

Overall Length

111-1-1-1

Chambering(s)

Receiver(s)

Operation

Gas Block

Trigger

Muzzle Brake

Hariuguaru

Buttstock

Handgrip

MSRF

Contact

35.5 Inches (with stock fully extended)

6 Pounds

5.56mm NATO (.223 Rem.)

**Aluminum**, Forged Upper & Lower Black Anodized

Direct Impingement, Gas Operated

14.5 Inches, 1:7 Twist, Chrome Lined, Manganese Phosphate Finish

PRI Mounts Low Profile

Timney Triggers AR15 Competition (3lbs)

SureFire SFMB-556

Samson Evolution 12.37, Free Float

Tactical Intent Ti-7 (logo intused by A. Breon Customs

Magpul MOE

Approximately \$1,600.00 (with aftermarket access)

### **Accurate Armory**

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SPORTSMAN THURSDAYS @ 10:00 PM EST TUESDAYS @ 11:30 AM EST THURSDAYS @ 12:30 AM EST THURSDAYS @ 12:30 AM EST SATURDAYS @ 4:30 PM EST