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LEGACY OF THE

The very first five-shot group I fired with a McMillan Legacy and the Federal 175-grain Gold Medal loading of the .308 Winchester measured 0.299 inch. And I really wasn't trying all that hard.

When testing a new rifle, I usually start the program by firing five

barrel-fouling rounds before getting down to business, and I had quickly sent four Sierra MatchKings down-range before noticing how close they had clustered on the target. That got my attention, and after carefully squeezing off my fifth shot, I was pleased to see it snuggle inside its mates with no increase in group size. What a pleasant way to kick off the evaluation of a new rifle!

I was impressed by the tiny size of that group, but I was by no means surprised by the accuracy of the rifle because the McMillan

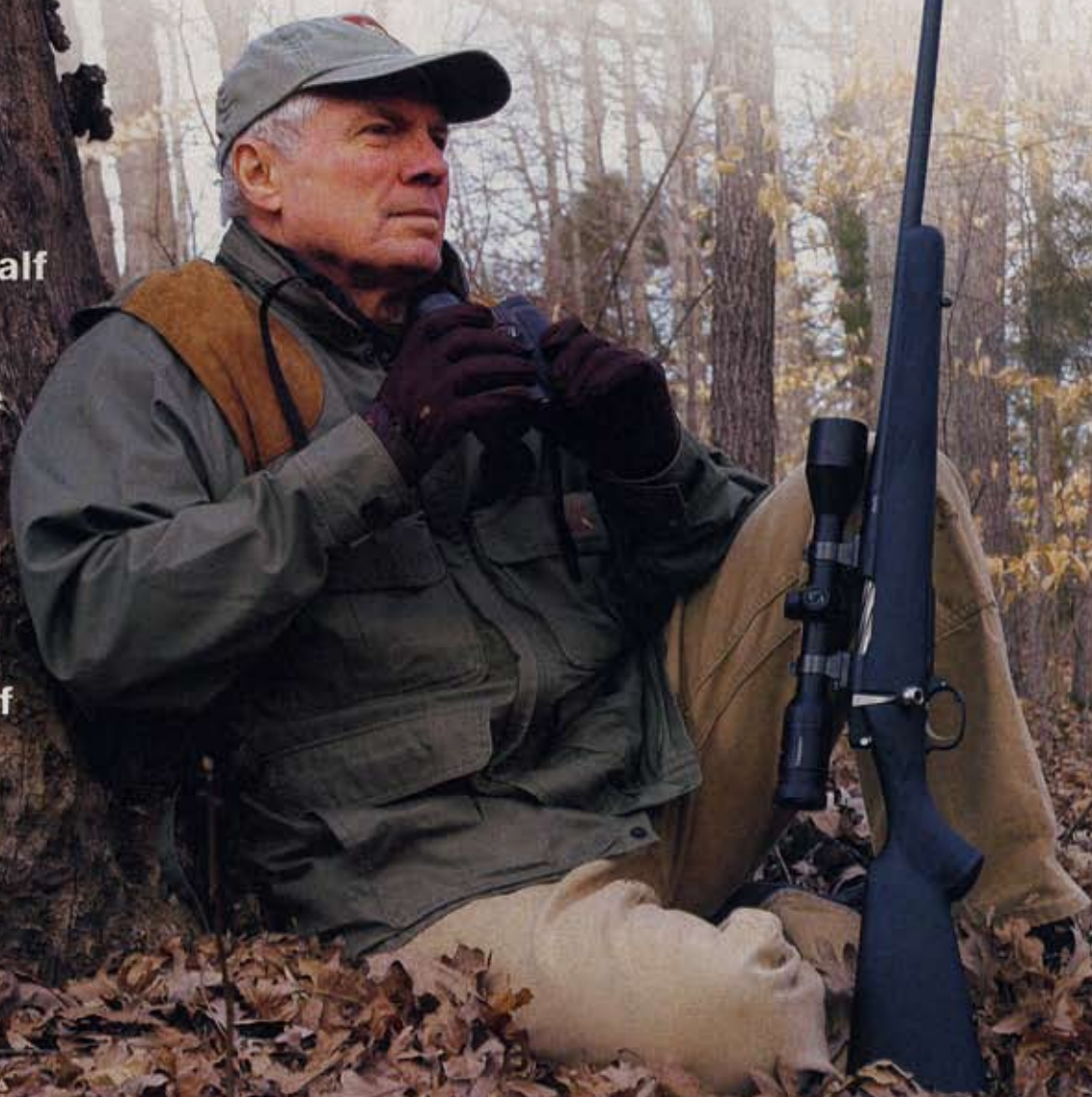
name has been associated with the accuracy world for a long time.

Brothers Mac, Pat, and Gale McMillan started handloading prior to World War II and became involved in informal benchrest shooting shortly after the war. They often traveled from their homes in Arizona to several other states in order to compete. This was quite a few years before registered benchrest competition as we know it today got started.

I first became aware of the

By Layne Simpson, Executive Field Editor

Three-and-a-half decades ago, a McMillan benchrest rifle shot the first registered perfect score. Today, the company's rifles carry on the tradition of above-par excellence.



PERFECT SCORE

McMillans about 35 years ago when reading about a group shot by Mac in an NBRSA-sanctioned match at the Skunk Creek rifle range near Phoenix. The date was September 23, 1973, (Mac's 59th birthday) and he was shooting a 10.5-pound Light Varmint class rifle in .222 Remington. It was just about an all-McMillan rifle. Mac had built the action, and brother Pat had designed it. The rifle also had a barrel made by Pat and a fiberglass stock built by brother Gale. It wore a Leupold 12X scope that had been bumped to 24X by Wally Siebert. The dies used by Mac to make his 50-grain bullets from J4 jackets were also made by Pat. Mac's competition load consisted of Remington cases, 23.5 grains of Hodgdon BL-C (Lot No. 1), and a prototype primer that would soon thereafter be introduced by CCI as the BR-4.

A five-shot group fired by Mac during that 100-yard event was measured by match officials with a dial caliper modified by the addition of a clear plexiglass plate containing a .22-caliber reticle. All five of his shots fit inside the reticle for an incredible group-size measurement of 0.000 inch. For the first time in recorded history, the perfect group had been shot!

Shortly thereafter, the group was measured with a special 60X microscope capable of accuracy to 0.0001 inch, and it still came out at 0.000 inch. The target was then mailed around to seven members of the NBRSA records committee (who each measured it with less sophisticated instruments), and they came up with an average measurement of 0.009 inch. Other shooters

who were there when Mac shot the match were convinced that it was indeed the perfect group and were disappointed to see it grow in size a bit when officially measured, but it all turned out to be moot since as far as I know, the record continues to stand today as the smallest five-shot group ever fired in registered benchrest competition.

Specifications

Model:	Legacy
Manufacturer:	McMillan Firearms Mfg., LLC 623-582-9635 www.mcmillanusa.com
Type:	Bolt-action repeater
Caliber:	.308
Magazine capacity:	4 rounds, hinged floorplate
Barrel:	22 in., rifling: six grooves, 1:12 RH twist
Overall length:	41.75 in.
Weight, empty:	6.75 lbs.
Stock:	McMillan Edge graphite, 0.75-in. recoil pad, sling swivel studs
Length of pull:	13.75 in.
Finish:	Guncote metal, black stock
Sights:	None, receiver drilled and tapped for scope mounts
Trigger:	Jewell adjustable
Safety:	Two position
Price:	\$4,295

Pat eventually sold his barrel-making business, and Gale went from making a few fiberglass stocks in his garage for his benchrest shooting buddies to founding a company called McMillan Fiberglass Stocks in 1973. During those early years, the company mainly produced stocks for benchrest shooting, but in 1975 a contract was received from the U.S. Marine Corps for stocks to be used in building M40A1 sniper rifles. A

similar stock known as the GPH (General Purpose Hunting) was soon offered to hunters and varmint shooters in the private sector.

The McMillan's built their first custom rifles sometime in the 1960s, and after specializing in benchrest rifles for awhile, they started putting together hunting rifles, most of them on the Remington Model 700 action. Impressed with how easy it was to build a super-accurate rifle around that action, they pretty much copied it when eventually making the decision to fabricate an action of their own, and they even called it the MCRT for McMillan Remington Type. During the early 1990s, the Signature Action was introduced, and while it remained very much like the Remington Model 700 action, it had two ejectors: the Remington plunger type and the blade style of the Pre-'64 Winchester Model 70 action. Gale passed away in 2000, and no one I talked to while I was writing this report seemed to know for certain why he chose to go with dual ejectors. Both designs have their advocates, so perhaps it was his way of making sure hunters and shooters on both sides of the argument were happy.

During the next few years the company went by different names, and in 2007 McMillan Brothers became the present McMillan Firearms. During that same year the rifle was also given the new name of G30 in honor of the late Gale McMillan who was born in 1930. The G30 is presently a member of McMillan's Custom Collection of hunting rifles, which is comprised of six variations called Legacy,



Designed by Gale McMillan, the G30 action is machined from 17-4 stainless steel, utilizes a precision-ground recoil lug that is sandwiched between the face of the receiver and the barrel shank, and accepts the same scope-mounting bases as the Rem. Model 700.

Dynasty, Outdoorsman, Prodigy, Heritage, Prestige, and Tactical Hunter.

Depending on the model, caliber options are .243 Winchester, .270 Winchester, .270 WSM, 7mm Remington Magnum, .308 Winchester, .30-06, .300 WSM, .300 Winchester Magnum, .300 Remington Ultra Mag, .30-378 Weatherby Magnum, .375 Holland & Holland Magnum, and .416 Remington Magnum. Other chamberings are available on special order.

The various models differ mainly in weight, barrel length, and the styles of their synthetic stocks. The lightest, at a nominal 6.75 pounds, is the Legacy in .308 Winchester with its classical stock styling. The heaviest is the Heritage in .375 H&H and .416 Rem. Mag. with its Monte Carlo-style stock; it weighs in at 8.25 pounds. Barrel lengths range from 22 inches for the .308 Win. to 24 inches for standard cartridges such as .30-06 and .270 Winchester to 26 inches for the .30-378 Weatherby Magnum.

The Heart Of The Rifle

The heart and soul of any rifle is its action, and

McMillan builds the G30 in three lengths—short for short cartridges, such as the .308 Win. and .300 WSM; long for cartridges ranging in length from the .30-06 to the .375 H&H; and extra-long for the .30-378 Weatherby. The latter action would also handle the .416 Rigby, .378 Weatherby, and .460 Weatherby should McMillan management choose to offer them as well.

Cylindrical in shape, the G30 receiver is shaped very much like the Remington Model 700 receiver and accepts the same scope-mounting

base. (A Talley two-piece base is supplied with the rifle.) Also like the Model 700, a washer-style recoil lug is sandwiched between the face of the receiver and the barrel shank. One of the things a gunsmith does when “blueprinting” the Model 700 action is replace its stamped recoil lug with a precision-ground lug, and that’s the type used on the McMillan action.

The G30 receiver is precision-machined from 17-4 stainless steel, which is said to be tougher and more corrosion resistant than the 4000 series stainless more com-

monly used in the firearms industry. It is surface-hardened to 43 on the Rockwell chart.

The fluted body of the bolt is made of even tougher Type 9310 steel with a surface hardness of more than 60 RC. The straight bolt handle with its hollow knob is within easy reach, even when wearing gloves, yet it hugs the stock closely enough to make the

The push-feed bolt has a Sako-style extractor and two ejectors: a Remington Model 700 plunger type (left) and a slot (right) for passage of a blade-type ejector that is attached to the inner floor of the receiver bridge, as on the Winchester Model 70.





The firing pin is easily removed from the bolt for cleaning without the use of tools.



The Legacy's magazine floorplate release is located inside the trigger guard, as it should be on a hunting rifle.

rifle ideal for carrying in a saddle scabbard. The bolt of the G30 action inherited the dual ejectors of McMillan's earlier Signature action, something I have never seen on any other rifle. The bolt release, located on the left side of the receiver bridge, is easy to operate and quite nice in appearance.

I am impressed by many things about this rifle, including how easily the firing pin and its spring can be removed from the bolt for cleaning without tools. To disassemble, simply hold the body of the bolt with your left hand and use your right hand to twist the bolt shroud away from you in a clockwise direction. Then pull the firing pin assembly from the bolt body. To install, orient the assembly until its retention lug is aligned with the slot in the bolt body, push it inward, and twist the shroud counterclockwise.

Removing the cocking piece and spring from the firing pin is also quite easy, but it does require a small Allen wrench. Everything about the action, including

the absence of tool marks and the way the bolt glides to and fro in the receiver, exudes levels of quality and precision found only in custom work.

The G30 action is made in the so-called push-feed version—where the extractor does not grasp the rim of a cartridge until it is chambered—as well as a controlled-feed version—where the extractor engages the rim of the cartridge as the bolt pushes it from magazine follower to chamber. Both have the same Sako-style extractor, but a section of the counterbore wall at the face of the controlled-feed bolt is cut away to allow the rim

of a cartridge to slip beneath the extractor during chambering. The controlled-feed action also has a three-position, Model 70-type safety lever on its bolt shroud whereas the push-feed action has a two-position lever positioned at the right-hand side of its receiver tang.

The push-feed bolt is standard on all models except the Prestige in .375 H&H and .416 Rem. Mag., which has the control-feed bolt. The three-position safety and the controlled-feed bolt are available on other models but only as extra-cost options. And for those who prefer to build their own rifle, or have

it built by their favorite gunsmith, both styles of the G30 action alone are available.

Depending on caliber, the benchrest-grade barrel is made by Shilen, Lilja, or Schneider, chrome-moly on the Prestige and stainless steel on all other models. Some of my personal rifles wear barrels from these three makers, and believe me when



The fully adjustable Jewell trigger is considered by many to be the very best available.

I say none are better.

Same goes for the fully adjustable Jewell trigger, with its crisp, butter-smooth movement and finger-friendly fingerpiece. The trigger on the Legacy I shot broke at a crisp 3.25 pounds with a pull-to-pull variation of only 2 ounces and no detectable creep or overtravel. You've got to pull a Jewell trigger to believe how good it really is.

The bottom metal on the Outdoorsman in .30-378 Weatherby is an all-steel unit from Sunny Hill, while those on the other models are machined of aluminum in the McMillan shop. The floorplate release button is located inside the front of the trigger bow, and upon request it will be pinned on the Prestige rifle to prevent accidentally dumping cartridges from the magazine while in the close presence of a hungry Alaskan brown bear, an irritated lion, or a Cape buffalo making tracks in your direction.

The stainless-steel magazine box is pure Remington Model 700, and the one in the Legacy action holds four .308 cartridges. Interior length is 2.870 inches.

The two hex-head action bolts are also stainless steel. All metal is coated with a non-reflective (and quite attractive) black baked-on finish called Guncote.

McMillan has long been the industry leader in producing top-quality synthetic stocks, and the company continues to hand-build them by laminating layers of woven fiberglass cloth under pressure with epoxy resin. The receiver area of the stock is filled with solid fiberglass, while the fore-end contains epoxy-bonded glass beads. The only hollow area is the buttstock, from the rear of the grip to 2 inches from the butt, and it is filled with urethane foam to deaden sound and to absorb vibration.

The type of stock worn by the entire family of McMillan hunting

McMillan Legacy Accuracy		
Factory Load	Velocity (fps)	100-Yard Accuracy (Inches)
.308 Winchester		
Remington 150-gr. C-L Ultra	2784	1.10
Federal 165-gr. Fusion	2677	1.54
Black Hills 168-gr. A-Max	2633	1.26
Federal Gold Medal 168-gr. MatchKing	2587	1.18
Federal Gold Medal 175-gr. MatchKing	2562	0.62
NOTES: Accuracy is the average of five, five-shot groups fired from a sandbag benchrest. Velocity is the average of 25 rounds measured 12 feet from the gun's muzzle.		

rifles is called the Edge, and its construction differs from the standard stock by the use of graphite cloth rather than fiberglass cloth for a slight reduction in weight. According to my postal scale, the stock on the Legacy weighs 26 ounces, and that includes a 0.75-inch recoil pad, steel quick-detach sling swivel posts, and a pair of aluminum bedding pillars.

The complete rifle weighed 6.75 pounds, and the addition of a Zeiss scope and Talley two-piece mount increased its heft to exactly 8 pounds. No sheep mountain would be too high or too steep to climb with this rifle.

Fit, Function & Accuracy

As is typical of all McMillan stocks I have examined, fit, finish, and checkering are top-drawer. Most of the synthetic-stocked custom rifles in my battery wear McMillan stocks, and I have yet to experience a single problem with either, and that includes a Weatherby Mark V in .416 Weatherby that has been there and back in the land of hard knocks more times than I can count.

In order to be consistently accurate with a variety of loads, all component parts of the barreled action of a rifle have to be concentric and in perfect alignment with each other, and the Legacy gets a

very high grade in that department as well. Upon receiving the rifle, I used a Talley two-piece mount to attach a Zeiss 3.5-10X Conquest scope and headed to the range without bore-sighting it. The center of the first five-shot group I fired was only 1.25 inches high and to the right of my aiming point. That

also speaks highly for the concentricity of the Talley mount and the Zeiss scope.

In addition to being more accurate than any big-game rifle has to be, the Legacy functioned without a hitch, with all cartridges feeding from magazine to chamber like they were coated with grease. I also tried single-feeding the rifle by tossing cartridges through its port without pressing them into the follower, and the bolt shoved each one home without a hitch. Just as important to those who take pride in the rifles they own, the Legacy looks and feels as nicely as it shoots.

Considering the price of a McMillan rifle, few of us could afford to own a battery of them, but for those who prefer to do it all with just one rifle, any member of the Custom Collection of hunting rifles would be an excellent choice. Overall quality, workmanship, and class are almost without peer. **57**

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